Edexcel BTEC Levels 4 and 5 Higher Nationals specification in Art and Design

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Unit 1: Visual Communication in Art and Design

Unit code: J/601/6374
Level: 4
Credit value: 15

Aim
This unit aims to develop the necessary skills for artists, designers and craftworkers to communicate their ideas across specialist applications, both traditional and alternative.

Unit abstract
Learners will be expected to develop an understanding of the role and responsibilities of the artist, designer and craftworker in a commercial context and to acquire the ability to communicate ideas through drawing and other visual techniques and skills. Learners need to engage in integrated research to include analysis of the brief, preparation of initial ideas, market research, investigation and practical exploration into materials, processes and techniques.

Learners will need to explore the visual and tactile properties and characteristics of materials. They will also need to investigate contexts and demonstrate the ability to select and interpret research information through design development. This will necessitate practical first-hand experience in manipulating materials to meet requirements of briefs. It is important that a level of practical competence is shown in studio and workshop practice combined with evidence of an awareness of relevant safe working practice. Learners will need to gain a thorough understanding of design practice, relevant legislation, including health and safety, public liability and copyright law. Learners should keep records of all professional practice (meetings, attendance, punctuality, contracts etc) and provide evidence of the correct use of terminology and vocabulary in written and oral presentation.

It is important that learners gain a thorough understanding of contemporary professional practice and guest speakers, workshops, visits to design studios and appropriate exhibitions will contextualise practical studies.

Learning outcomes

On successful completion of this unit a learner will:
1. Be able to communicate ideas and concepts by researching visual techniques
2. Be able to select visual communication techniques to realise creative intentions
3. Be able to produce work which demonstrates the use of visual communication
4. Understand the potential for personal development through the application of new approaches to visual communication.
Unit content

1. **Be able to communicate ideas and concepts by researching visual techniques**
   
   *Communicate* ideas; concepts eg personal, corporate, commercial, commissioned, beliefs, convictions; to others eg clients, audience, individuals, demographic
   
   *Researching* sources; testing; against intentions; context

2. **Be able to select visual communication techniques to realise creative intentions**
   
   *Matching method to intention*: eg gestural, schematic, didactic, expressive, objective, analytical, tactile
   
   *Presentation formats*: size; form; shape; surface

3. **Be able to produce work which demonstrates the use of visual communication**
   
   *Components*: formal elements eg line, form, tone, texture, colour, contour
   
   *Application*: 2D; 3D; moving image
   
   *Material*: traditional eg graphite, pencil, paint, ink, dye, crayon, pastel, markers; digital; non-traditional

4. **Understand the potential for personal development through the application of new approaches to visual communication**
   
   *Review*: techniques; approaches; relate to outcomes; presentation format
   
   *Propose*: specific uses; specialist focus; cross-over applications; future development eg 2D, 3D, moving image
## Learning outcomes and assessment criteria

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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tbody>
</table>
| LO1 Be able to communicate ideas and concepts by researching visual techniques | 1.1 Research visual communication techniques  
1.2 Evaluate visual communication techniques |
| LO2 Be able to select visual communication techniques to realise creative intentions | 2.1 Identify creative intentions  
2.2 Select visual communication techniques to effectively realise creative intentions |
| LO3 Be able to produce work which demonstrates the use of visual communication | 3.1 Apply visual communication techniques to creative work  
3.2 Justify the visual communication techniques used in creative works |
| LO4 Understand the potential for personal development through the application of new approaches to visual communication | 4.1 Evaluate the use of visual communication in own work  
4.2 Propose new approaches to developing own work through the application of visual communication techniques. |
UNIT 1: VISUAL COMMUNICATION IN ART AND DESIGN

Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 1: Visual Recording in Art and Design
- Level 4:
  - Unit 49: Pattern Drafting in Fashion
  - Unit 88: Product Design
  - Unit 94: Visual and Personal Presentation
- Level 5:
  - Unit 23: Communication with Images in Art and Design
  - Unit 26: Typographic Ideas.

Links to National Occupational Standards

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.
Unit 2: Ideas Generation and Development in Art and Design

Unit code: F/601/5403
Level: 4
Credit value: 15

• Aim
Creative thinking and the ability to generate free flowing ideas are vital skills for all artists and designers. This unit aims to develop skills in generating and communicating ideas visually.

• Unit abstract
This unit introduces a number of idea-generating techniques to demonstrate that creative thinking is a skill that can be continually developed. Evidence of ‘thinking on paper’ may take the form of ‘open-ended’ idea sheets and visual/verbal ‘mind maps’. Learners will be encouraged to originate ideas which fulfil visual communication objectives. Learners will also be required to use mark-making techniques to express their ideas on paper and they should be able to identify the cultural contexts in which their ideas work. Selection, review and development of ideas should be evidenced in sketchbooks, design sheets, thumbnails or concept sheets. Learners should be encouraged to research the creation of graphic imagery and digital portfolio and be exposed to a broad cross section of good quality examples. In particular, the study of graphic and visual imagery in relation to different cultural contexts should be wide ranging and eclectic. Their study could include examples from contemporary youth and music culture to which material from other cultures can then be related. A series of progressively developed idea sheets and concept boards could culminate in clearly expressed ideas produced by learners to meet specific communication tasks.

Visual communication assignments should be inventive and stimulating, and, where possible, should have topical and/or contemporary cultural relevance. In addition, experimentation and risk taking should be encouraged. Discussion and criticism should concentrate on the potential and interest of ideas and this can be presented separately or in the form of annotations to visual ideas sheets, concept boards and collections of exemplar material.

• Learning outcomes

On successful completion of this unit a learner will:
1 Be able to exploit idea-generating techniques
2 Be able to implement complex ideas visually
3 Be able to express ideas using visual techniques
4 Understand the cultural contexts in which ideas are visually transmitted.
1 Be able to exploit idea-generating techniques

Ideas generation: techniques eg word, visual association, mind maps, visual mind-maps, mark-making, interpretation, drawing to music, illustrating words, emotions, drawing with alternative materials, making maquettes, using materials

Development of ideas: eg pairing, changing meaning, scale, interpretation, use of media, visual clues, use of colour

2 Be able to implement complex ideas visually

Communication: eg signs, symbols, pictograms, alphabetic signs, images

Purposes: eg to inform, persuade, convey subliminal meaning, enhance recognition, establish identity

Objectives: eg information design, advertising, packaging, corporate identity, narrative, storytelling

3 Be able to express ideas using visual techniques

Tools and media: 2D media eg, pencils, crayons, markers, ink, graphite sticks, felt tips, charcoal; digital media eg photographs, painting and drawing software

Presentation: eg thumbnails, roughs, idea sheets, concept drawings, concept boards, lettering, font, screen based, critique

4 Understand the cultural contexts in which ideas are visually transmitted

Cultural contexts: eg global, national, regional, ethnic, social, religious, age related, special interest related, fashion, trends, ecological, political, cultural, environmental, graffiti
Learning outcomes and assessment criteria

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<tr>
<td>LO1 Be able to exploit idea-generating techniques</td>
<td>1.1 Use idea-generating techniques to originate and develop diverse solutions</td>
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</table>
| LO2 Be able to implement complex ideas visually | 2.1 Produce effective visual outcomes to meet specific objectives  
2.2 Integrate complex ideas that encompass many influences to resolve a coherent portfolio |
| LO3 Be able to express ideas using visual techniques | 3.1 Direct media with control and confidence, expressing visual ideas with clarity, simplicity and economy  
3.2 Use appropriate professional presentation techniques effectively |
| LO4 Understand the cultural contexts in which ideas are visually transmitted | 4.1 Record and analyse how specific contexts interact with ideas. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 3: Ideas and Concepts in Art and Design
  - Unit 35: Words and Images in Graphic Design
  - Unit 56: Generating Fine Art Ideas

- **Level 4:**
  - Unit 17: Products, Marketing and Advertising Media

- **Level 5:**
  - Unit 8: Ideas in Context
  - Unit 19: Art Direction for Advertising
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

This unit can be delivered in a range of situations as learners only need to be encouraged to think freely and creatively.

Delivery should be in a stimulating environment where access to materials, resources, interactive whiteboards, the internet and visual sources are all available.
Employer engagement and vocational contexts

This unit can be combined with a live brief set by a client to encourage learners to generate ideas with a client or purpose in mind.
Unit 3: Contextual and Cultural Referencing in Art and Design

Unit code: D/601/6378
Level: 4
Credit value: 15

- **Aim**

The aim of this unit is to encourage an understanding of the social, psychological, cultural, historical and commercial factors which underpin all visual arts theory and practice across the spectrum of subject specialisms.

- **Unit abstract**

This unit develops learners' knowledge of the cultural history and social theory which informs current thought and debate across the visual arts. Emphasis is on research and study skills and on learners acquiring source material and knowledge.

For this unit learners will need to be familiar with a broad sweep of the historical and cultural developments which inform current thought and debate about art and design in general and their chosen specialism in particular.

Also presentation skills will be applied in a practical context. Notebooks and visual diaries should indicate that learners understand and develop information received from lectures and seminars. Oral presentations and illustrated assignments should form part of learners' practical work and can be linked to practical units.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Be able to undertake in-depth research
2. Understand influences on art and design activities and outcomes through the interpretation and analysis of information
3. Be able to assess, interpret and evaluate information
4. Be able to evaluate and present conclusions.
Unit content

1 Be able to undertake in-depth research

Digital sources: eg retrieval of computer-based data, internet, CD ROM, films, videos

Paper-based materials: eg use of libraries, learning resources centre, notes from lectures and group presentations, printed ephemera

Other sources: eg local and distant visits to collections, museums, original sources and personal life experiences

2 Understand the influences on art and design activities and outcomes through the interpretation and analysis of information

Historical and cultural histories: eg major historical movements, modern practitioners, relationship between modern practice and historical sources, current attitudes towards the arts, current cultural context, historical concepts and principles versus modern notions of moral and ethical practice, relevant sources from other academic disciplines

Making judgements: questioning; comparing; measuring; observing; rationalising

3 Be able to assess, interpret and evaluate information

Sources: personal research; primary; secondary

Synthesis: ideas; influences; observation; personal view

4 Be able to evaluate and present conclusions

Presentation forms: eg oral presentation, visual presentation, illustrated written study
## Learning outcomes and assessment criteria

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| LO1 Be able to undertake in-depth research | 1.1 Research a variety of areas of study using sources effectively  
1.2 Research a variety of external sources effectively |
| LO2 Understand the influences on art and design activities and outcomes through the interpretation and analysis of information | 2.1 Understand the interrelationship between the various strands of art and design activities within their historical development  
2.2 Demonstrate the relationship between historical development and modern practice and principles  
2.3 Show a questioning, rationalising approach to personal observations and evaluations of subject matter within a specialist area |
| LO3 Be able to assess, interpret and evaluate information | 3.1 Effectively research, evaluate and interpret secondary source material in a variety of media and applications  
3.2 Effectively research, evaluate and assess personal and primary information from a variety of sources  
3.3 Synthesise information from observations and personal or others’ ideas |
| LO4 Be able to evaluate and present conclusions | 4.1 Produce written illustrated studies to formal academic conventions  
4.2 Produce informal visual diaries throughout the programme which are used also for reference in other units  
4.3 Give live oral or digitally recorded presentations. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 13: Art and Design Specialist Contextual Investigation
- Level 5:
  - Unit 6: Critical Study in Art and Design.

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.
Unit 4: Professional Practice in Art and Design

Unit code: D/601/6381
Level: 5
Credit value: 15

• Aim
The aim of this unit is to extend learners’ knowledge of professional practices within their specialist area and to relate these to personal goals and career opportunities.

• Unit abstract
This unit serves to evaluate and assimilate learners’ skills to provide a coherent, creative and professional portfolio of work which can be used for subsequent interviews and presentations. Portfolios will be focused on individual career paths and should be in the most appropriate format, e.g., paper based, CD, website, blog, vlog, integrated media.

Learners will also prepare for their future, through participation in self-analysis and reflection, recognition of strengths and weaknesses, goal setting, practising interview techniques and making applications for jobs. Learners will be expected to research their intended career path and specific job role in order to be well informed of the strategies and knowledge needed to conduct successful interviews. Opportunities will be given to the development of a business database and the opportunity to formulate a long-term career plan or further study proposal. This will be supported by the creation and production of a self-promotional package, including an updated CV, business cards, web page and other appropriate promotional tools.

This unit will allow learners the time to reflect on the previous years of study and to assess their strengths and weaknesses. It will allow evaluation of their own progression, the contribution they have made to their subject and the broader critical debate surrounding their subject.

Learners will work in groups to help each other understand their strengths and weaknesses. Tutorials will be conducted throughout the unit with a formal in-house job interview and presentation critique at the end of the unit. The unit should be further enhanced by input from visiting practitioners from a selection of areas within the specialist subject. Learners should be encouraged to contact potential employers for interviews, work shadowing or work placement.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to place themselves and their work in the context of their selected discipline
2. Understand their specialist area and the career opportunities available
3. Be able to develop and present a professional portfolio in an appropriate format
4. Understand how to promote themselves and their work professionally.
Unit content

1 Be able to place themselves and their work in the context of their selected discipline

Goal setting: eg through SWOT analysis, Belbin questionnaire, self-reflection, brainstorming, decision trees, aspirations, needs, wants, transferable skills, action plans, business plan

Career direction: eg educational; employment; work experience; business start-up; freelance, part time, apprenticeship; new directions; gap year

Aspirations: eg creative, managerial, team working; autonomy, personal ethics eg causes; environmental, ecological, charitable, educational; short term, long term

Responsibilities: to agents; sponsors; clients; employers eg meeting deadlines, respecting confidentiality, settling bills; to consumers eg protection of consumers, supply of quality work; to self eg conscience, costing, salary, ethics, legal issues

2 Understand their specialist area and the career opportunities available

Research: through marketing information; interviews; collecting and collating data; past experiences; industry contacts

Considerations: qualities required eg visual competence, communication skills, confidence, team working skills, experience, empathy, resilience, hard work, negotiation skills; practical eg money, cost of living, distance to travel, family commitments, working conditions, potential colleagues, promotional prospects

Practicalities: eg personal and public liability, insurance, taxes, freelance, self employment, fees structures, negotiating, using agencies, copyright, intellectual property, contracts, working conditions

3 Be able to develop and present a professional portfolio in an appropriate format

Portfolio: format eg paper-based, CD, video, interactive media; supporting information eg focus, intentions, developmental, finished, research, evaluation

Organised: eg structured, clarity, cohesive, creative, chronological, descriptive

Supporting information: eg CV, business card, headed paper, personal statement, job application, references, named referees, work experiences endorsements
4 Understand how to promote themselves and their work professionally

Personal qualities: eg attitude, dress, manner, speaking, listening; strategic eg adjusting to situation, trouble shooting, varying circumstances

Presentation skills: eg formal, informal, oral, visual, finished, work in progress, interview techniques

Personal development: eg confidence, diplomacy, verbal communication, positive attitude

Promotional opportunities: eg exhibitions, trade fairs, competitions, displays, shows; events eg receptions/private views, film premieres, celebrity endorsement, trade publications; internet eg social networks, blogs; use of media eg editorial, interviews; personal promotion eg business cards; CV, personal statement, postcards, flyers
## Learning outcomes and assessment criteria

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<tr>
<td><strong>LO1</strong> Be able to place themselves and their work in the context of their selected discipline</td>
<td>1.1 Present a critical justification of own work in the context of the selected discipline</td>
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<td>1.2 Debate and justify choices and conclusions relating to proposed career directions</td>
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<td>1.3 Produce an outline career plan based upon targeted research and critical self-evaluation</td>
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<tr>
<td><strong>LO2</strong> Understand their specialist area and the career opportunities available</td>
<td>2.1 Demonstrate in-depth knowledge of the industry related to their specialist area through a personal database</td>
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<td>2.2 Identify key roles within the selected industry and the personal qualities required for success</td>
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<td></td>
<td>2.3 Identify and map own qualities and skills relating to career opportunities</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to develop and present a professional portfolio in an appropriate format</td>
<td>3.1 Present and support a portfolio of work that supports the proposed career direction</td>
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<td>3.2 Integrate supporting information into portfolio work in order to enhance and justify career direction</td>
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<td>3.3 Adapt and apply contemporary practices and technologies to enhance personal promotion</td>
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<td><strong>LO4</strong> Understand how to promote themselves and their work professionally</td>
<td>4.1 Analyse and develop a range of opportunities and strategies for self-promotion</td>
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<td>4.2 Produce a creative self-promotional campaign which includes written and visual marketing strategies</td>
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<td>4.3 Conduct themselves at interview in an appropriate, personable and professional manner.</td>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 17: Products, Marketing and Advertising Media
  - Unit 95: Marketing for 3D Design
- **Level 5:**
  - Unit 14: Business Practice in Art and Design
  - Unit 16: Employability Skills.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Space, facilities and equipment should be provided for learners to make professional presentations of their work at the final critique.
Employer engagement and vocational contexts

Learners should be encouraged to collaborate with their selected industry, either through work shadowing, interviews or a period of work placement. The following organisations may also be helpful.

- Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design, crafts and visual arts, has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
- Skillset (www.skillset.org) is the sector skills council for careers in interactive media, photography, fashion and textiles.
- The Prospects Work Bank (www.prospects.ac.uk) available through the graduate careers website is an online database of companies offering work experience.
- The National Council for Work Experience (www.ncwe.com) can assist with placements and produces a free guide ‘Focus on Work Experience’.
Unit 5: Project Design, Implementation and Evaluation

Unit code: L/601/0995
Level: 5
Credit value: 20

Aim
To develop learners’ skills of independent enquiry by undertaking a sustained investigation of direct relevance to their vocational, academic and professional development.

Unit abstract
This unit gives learners opportunities to develop skills in decision making, problem solving and communication, integrated with the skills and knowledge developed in many of the other units within the programme to complete a realistic project.

The unit requires learners to select, plan, implement and evaluate a project and present the outcomes, in terms of the process and the product of the project. It also allows learners to develop the ability to work individually and/or with others, within a defined timescale and given constraints to produce an acceptable and viable solution to an agreed brief.

If this is a group project, each member of the team must be clear about their responsibilities at the start of the project and supervisors must ensure that everyone is accountable for each aspect of the work and makes a contribution to the end result.

Learners must work under the supervision of programme tutors or work-based managers.

Learning outcomes

On successful completion of this unit a learner will:

1. Be able to formulate a project
2. Be able to implement the project within agreed procedures and to specification
3. Be able to evaluate the project outcomes
4. Be able to present the project outcomes.
Unit content

1  Be able to formulate a project

Project selection: researching and reviewing areas of interest; literature review; methods of evaluating feasibility of projects; initial critical analysis of the outline specification; selection of project option; initiating a project logbook/diary; estimating costs and resource implications; identifying goals and limitations; value of project; rationale for selection; agree roles and allocate responsibilities (individually with tutor/supervisor and within project group if appropriate)

Project specifications: developing and structuring a list of requirements relevant to project specifications eg costs, timescales, scale of operation, standards, legislation, ethics, sustainability, quality, fitness-for-purpose, business data, resource implications

Procedures: planning and monitoring methods; operating methods; lines of communication; risk analysis; structure of groups and collaborative working eg learner groups or roles and responsibilities within a work-based project; targets and aims

Project plan: production of a plan for the project including timescales; deliverables; milestones; quality assurance systems and quality plans; monitoring progress

2  Be able to implement the project within agreed procedures and to specification

Implement: proper use of resources; working within agreed timescale; use of appropriate techniques for generating solutions; monitoring development against the agreed project plan; maintaining and adapting project plan where appropriate

Record: systematic recording of relevant outcomes of all aspects and stages of the project to agreed standards

3  Be able to evaluate the project outcomes

Evaluation techniques: detailed analysis of results; conclusions and recommendations; critical analysis against the project specification and planned procedures; use of appropriate evaluation techniques; application of project evaluation and review techniques (PERT); opportunities for further studies and developments

Interpretation: use of appropriate techniques to justify project progress and outcomes in relation to the original agreed project specification

Further consideration: significance of project; application of project results; implications; limitations of the project; improvements; recommendations for further consideration

4  Be able to present the project outcomes

Record of procedures and results: relevant documentation of all aspects and stages of the project

Format: professional delivery format appropriate to the audience; use of appropriate media
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Be able to formulate a project</td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>1.1 Formulate and record possible outline project specifications</td>
<td></td>
</tr>
<tr>
<td>1.2 Identify the factors that contribute to the process of project selection</td>
<td></td>
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<tr>
<td>1.3 Produce a specification for the agreed project</td>
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</tr>
<tr>
<td>1.4 Produce an appropriate project plan for the agreed project</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to implement the project within agreed procedures and to specification</td>
<td>2.1 Match resources efficiently to the project</td>
</tr>
<tr>
<td>2.2 Undertake the proposed project in accordance with the agreed specification</td>
<td></td>
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<tr>
<td>2.3 Organise, analyse and interpret relevant outcomes</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to evaluate the project outcomes</td>
<td>3.1 Use appropriate project evaluation techniques</td>
</tr>
<tr>
<td>3.2 Interpret and analyse the results in terms of the original project specification</td>
<td></td>
</tr>
<tr>
<td>3.3 Make recommendations and justify areas for further consideration</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to present the project outcomes</td>
<td>4.1 Produce a record of all project procedures used</td>
</tr>
<tr>
<td>4.2 Use an agreed format and appropriate media to present the outcomes of the project to an audience.</td>
<td></td>
</tr>
</tbody>
</table>
Guidance

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.
Unit 6: Critical Study in Art and Design

Unit code: L/601/5419
Level: 5
Credit value: 15

Aim
The aim of this unit is to extend knowledge and understanding of the research, analysis and application of historical and contextual skills to a selected field of study.

Unit abstract
This unit gives learners an opportunity to investigate selected references within the context of their own work, through encouraging independent selection and analysis of historical, contextual and contemporary sources. Learners will be encouraged to investigate factors which determine cultural and creative influences in art and design. These will not only include the influences of artists and designers, but also the social, aesthetic, technological, ecological and economic global forces which can shape modern thinking and direction.

The unit will investigate textual analysis and historical understanding in the context of contemporary art and design practice. Learners will be encouraged to use this analysis to develop an understanding of themselves and their work within their selected areas of interest. Debate and discussion will form an important part of this unit, with learners working in small study groups as well as independently.

Learners will be expected to show a high level of personal initiative and an inquisitive mind to meet the unit outcomes. Study should complement learners’ chosen vocational routes and lead to self-awareness from a historical, contemporary and commercial perspective. Formal delivery should concentrate on research and presentation skills followed by systematic seminars and tutorial sessions on a group or individual basis.

Learning outcomes
On successful completion of this unit a learner will:

1. Understand the historical evolution and visual characteristics of the work of artists and designers
2. Understand and apply appropriate methods of research and analysis
3. Be able to apply the influences of historical, contemporary and contextual factors to own practice
4. Be able to synthesise research and present a professional and personal written study.
Unit content

1 **Understand the historical evolution and visual characteristics of the work of artists and designers**

   Definitions: key movements eg Bauhaus, Constructivism, Realism, Impressionism, Modernism, Post-Modernism, Symbolism, Arts and Crafts, Surrealism, Art Deco, Art Nouveau, Pop Art

   Chronology: timelines eg key movements, styles, influences, world events

   Comparisons: relevant to pathway eg key artists, designers, craftspeople, styles, movements

   Visual and textual sources: eg paintings, architecture, landscapes, nature, historical references, ancient traditions, visual language, ornament, decoration, events, world travel, scientific discoveries, poems, stories, narratives, locations, achievements

   Techniques, processes and interpretation: relevant to pathway eg in own work, selection, compilation, visual language, application, evaluation, reflection, reworking

2 **Understand and apply appropriate methods of research and analysis**

   Research: sources eg library, reference systems, abstracting, electronic, museums, galleries, study centres, exhibitions, workshops, interviews, questionnaires

   Methods: research eg field research, desk research, primary sources, secondary sources

   Extracting information: relevant to pathway eg practising professionals, visual language, techniques, creative contexts, cultural sources, ethnic, world art, cinema, graphics, advertising, textiles, national dress, music

3 **Be able to apply the influences of historical, contemporary and contextual factors to own practice**

   Influences: economic; political; social eg urban migration; environmental; technological eg developing digital applications, installation, video, popular culture; philosophical eg ethics, aesthetics, values, choices, justice, free will, feminism, freedom, determinism, causality, manipulation

   Styles: current practice eg European, Asian, African, international; ethnicity eg English folk traditions, Celtic; historical practice

   Interrelationships: eg art, craft, design, literature, music, photography, graphics, ceramics, fashion, film, artists, art movements

4 **Be able to synthesise research and present a professional and personal written study**

   Drawing conclusions: eg comparative study, personal debate, critical analysis, interpretations, quotations, conclusion, evaluation, creating argument

   Personal view: eg opinions, arguments, defending ideals, verification of argument, originality of viewpoint
# Learning outcomes and assessment criteria

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<th>The learner can:</th>
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</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Understand the historical evolution and visual characteristics of the work of artists and designers</td>
<td>1.1 Analyse textual and visual sources and apply these in the context of own work</td>
<td>1.2 Recognise and record influential factors and their impact on creative and aesthetic evolution</td>
</tr>
<tr>
<td><strong>LO2</strong> Understand and apply appropriate methods of research and analysis</td>
<td>2.1 Identify and apply effective methods of research and information retrieval from a range of sources</td>
<td>2.2 Assimilate and apply a personal, reflective record of contemporary criticism and references from primary and secondary source materials</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to apply the influences of historical, contemporary and contextual factors to own practice</td>
<td>3.1 Evaluate the creative, cultural, political, economic and social contexts which impact on own practice</td>
<td>3.2 Apply influences to inform own thinking and practice</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to synthesise research and present a professional and personal written study</td>
<td>4.1 Synthesise a body of personal research into cohesive and written conclusions, presenting insight and understanding of contextual influences</td>
<td>4.2 Present a body of written work to a professional standard and critically evaluate and review conclusions relating to own practice.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 3: Contextual and Cultural Referencing in Art and Design
- Level 5:
  - Unit 22: References and Sources in Art and Design
  - Unit 58: Cultural Understanding in Fashion.

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Work should be presented as an extended written study of 3,500 words which should integrate all historical and contextual referencing. An appendix citing evidence of study skills and research methods should accompany the work to provide evidence for learning outcome 2.

Learners will be expected to present their work professionally and should therefore have access to associated print and page layout software. Learners will need access to primary sources such as local and national galleries, exhibitions, artists/designers’ studios and workshops.
Employer engagement and vocational contexts

As this unit is essentially an academic exercise, there will be minimum employer engagement although learners will be encouraged to visit practising artists and designers for interview and information purposes. Discussions with artists about the way their work is presented from a critical standpoint is an important factor for this unit. In a vocational context, the ability to present and defend a personal viewpoint is an invaluable skill which will be used throughout professional life.
Unit 7: Professional Studies in Art and Design

Unit code: F/601/5417
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ understanding of professional practice through research, analysis and implementation of factors that influence art and design professionals including ethics, social and environmental responsibility.

• Unit abstract
The focus of this unit is on enabling learners to put practical studies in art and design in a professional context. Learners should explore legislation affecting designers and develop their understanding of professional ethics and responsibilities.

The unit requires learners to examine business organisations and to compare job roles of artists, designers and craftspeople working in different kinds of organisations. This can be done through case studies, studio visits, seminars, independent research and by interviewing professionals in the chosen aspect of research. Learners are expected to investigate the ethics and responsibilities of artists, designers and craftspeople in relation to society and the environment.

To ensure theory is put into practice, parts of this unit can be delivered alongside units that define each learner’s discipline, by means of cross-unit assignments or as a stand-alone research project.

Most of the evidence for this unit could be presented as a file of notes, collated printed material, summarised case studies and personal commentary written by the learner. Audio or visual material could also be submitted, giving learners flexibility as to how they present their findings.

• Learning outcomes
On successful completion of this unit a learner will:
1. Understand the types of legislation affecting designers
2. Understand the need for professional ethics and responsibility in design
3. Understand environmental and social responsibility in design
4. Understand the relationships between business organisations and job roles of designers.
Unit content

1 **Understand the types of legislation affecting designers**

Legislation: copyright law; intellectual property; consumer protection; equal opportunities; Disability Discrimination Act

Regulations: Health and Safety eg Control of Substances Hazardous to Health regulations (COSHH), electricity at work regulations (portable appliance testing), working with VDUs (display screen equipment) regulations, Health and Safety at Work Act (1974)

Insurances: protection eg product liability, professional indemnity, public liability, employers liability

2 **Understand the need for professional ethics and responsibility in design**

Codes of ethics: personal eg punctuality, honesty, integrity, conscientiousness, respect for others; corporate eg professional bodies’ codes of practice, company policies and charters, regulation, quality assurance

Professional responsibilities of designers: professional working relationships eg agents, sponsors, clients, employers, employees, contractors; reliability eg meeting deadlines, confidentiality, payment, completing work to the required brief; safety of consumers and the general public eg protection of consumers, avoidance of the public display or sale of discriminatory or offensive products, images or messages, not to promote or advertise products or events which may cause distress, harm or incite criminal acts

3 **Understand environmental and social responsibility in design**

The environment: sustainability eg ‘green’ issues, recycling, use of natural resources, renewable sources; disposal of waste products eg during manufacture, life-cycle of products and packaging

The consumer society: visual meaning eg use of style, image, durability, efficiency of products, culture, lifestyle, globalisation, upward mobility, aspiration

The secular society: social eg politics, economics, science, technology, socio-economic groups

Moral issues: respecting individuals eg religion, ethnic groups, poverty, gender, sexuality, spirituality
4 Understand the relationships between business organisations and job roles of designers

Businesses and organisations in which designers work: types eg sole trader, Limited Company, Partnership, Limited Liability Partnership, Limited Liability Company, not-for-profit, charity, trust, social enterprise, agency, in-house, consultancy; purpose eg advertising, media, public relations (PR), communications, press, packaging, design, product design, web design, marketing; structures of organisations

Business practice: employment eg freelance, short term contract, fixed term contract, permanent contract, contractor, hot desk, agency, consultant

Job roles: types of roles eg runner, junior, Mac Operator, page layout, proof reader, designer, editor, senior designer, art director, picture editor studio manager, design manager, creative director
## Learning outcomes and assessment criteria

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</tbody>
</table>
| LO1 Understand the types of legislation affecting designers | 1.1 Research and follow legislation affecting designers  
1.2 Demonstrate a clear understanding of the effects of legislation on the work of designers |
| LO2 Understand the need for professional ethics and responsibility in design | 2.1 Investigate codes of ethics developed by companies and professional bodies  
2.2 Prioritise a personal code of ethics  
2.3 Evaluate the need for professional responsibility in design |
| LO3 Understand environmental and social responsibility in design | 3.1 Evaluate environmental responsibility in design  
3.2 Evaluate the social responsibilities of designers |
| LO4 Understand the relationships between business organisations and job roles of designers | 4.1 Research and evaluate the types and purposes of businesses and organisations in which designers work  
4.2 Research and evaluate the structures of different types of businesses and organisations in which designers work. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 9: Professional Practice in Art and Design
  - Unit 10: Personal and Professional Development in Art and Design
  - Unit 11: Freelance Work in Art and Design
- Level 4:
  - Unit 10: Design Method
  - Unit 11: Design Principles
  - Unit 17: Products, Marketing and Advertising Media
- Level 5:
  - Unit 14: Business Practice in Art and Design.
  - Unit 19: Art Direction for Advertising

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

This unit is a research and theory unit and so learners will need access to industry reports and practitioners in relevant pathways. Delivery should be a combination of seminar, lecture, case study, interview and independent research.
Employer engagement and vocational contexts

Learners should develop employer engagement through direct contact, eg seminars, lectures, guest speakers, workshops where they can ask questions and find out information or indirect, eg interviews, questionnaires, case study, reviews of business literature.
Unit 8: Ideas in Context

Unit code: T/601/5415
Level: 5
Credit value: 15

- **Aim**

This unit aims to develop learners’ personal creative potential for generating ideas in a relevant specialist discipline within the visual arts.

- **Unit abstract**

This unit extends and develops the generation of ideas. Learners are required to generate ideas to fulfil complex visual arts objectives involving social, cultural and commercial considerations. Learners will evolve and adapt ideas to suit a range of different applications in their specialist areas. They will work independently and with others in generating and developing ideas. Learners must also prepare ideas for professional presentation.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Be able to independently generate ideas to fulfil complex visual arts objectives
2. Be able to devise complex ideas to suit specific art and design applications
3. Be able to work with others in generating, developing and communicating ideas
4. Be able to plan and design a presentation and communicate ideas effectively.
Unit content

1 **Be able to independently generate ideas to fulfil complex visual arts objectives**

   Visual arts objectives: eg personal agenda, private, public and commercial commissions across the range of vocational specialisms

   Social, cultural and commercial constraints: eg social and cultural sensitivities, budgets, codes of practice of regulatory bodies, legal requirements, clients’ requirements

   Evaluation: eg fitness for purpose, originality, aesthetic appeal, social or commercial response

2 **Be able to devise complex ideas to suit specific art and design applications**

   Art and design applications: eg products produced which differ in terms of scale, media, materials, aesthetic, conceptual and functional imperatives, target audience

   Techniques for sequentially adapting ideas: idea-generating techniques eg formal analysis, lateral thinking, transference from other applications; criteria for testing viability of ideas eg questionnaires, actuarial analysis

3 **Be able to work with others in generating, developing and communicating ideas**

   Thinking techniques used by teams: eg creative lateral thinking, structured team interaction, recording, evaluation

   Creative teams: eg informal networks, formal structured studio or office peer groups, mixed professional teams, internet teamwork

4 **Be able to plan and design a presentation and communicate ideas**

   Visual presentation forms: eg freehand, digital and conventionalised visuals, storyboards, 3D mock-ups, audio-visual presentations

   Visual presentation methods: eg portfolios, mounting, display, photocopies, transparencies, publications, digital presentation techniques
### Learning outcomes and assessment criteria

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</table>
| LO1 Be able to independently generate ideas to fulfil complex visual arts objectives | 1.1 Identify and evaluate visual arts objectives  
1.2 Evaluate and quantify the social, cultural and commercial agenda embedded in visual arts objectives  
1.3 Identify and evaluate the overall efficacy of the art and design proposals defined in the project or client brief |
| LO2 Be able to devise complex ideas to suit specific art and design applications | 2.1 Evaluate and respond to the functional, conceptual and aesthetic imperatives in the visual arts applications defined by project or client briefs  
2.2 Determine and evaluate the appropriate techniques of the specialist subject for developing and adapting ideas |
| LO3 Be able to work with others in generating, developing and communicating ideas | 3.1 Evaluate the structure, complexion and operation of creative teams in the visual arts  
3.2 Determine and apply the methods and strategies involved in promoting an efficient creative team working environment |
| LO4 Be able to plan and design a presentation and communicate ideas | 4.1 Work independently and within a visual arts team to plan, develop, communicate and present ideas using appropriate forms and methodologies. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 3: Ideas and Concepts in Art and Design
- **Level 4:**
  - Unit 2: Ideas Generation and Development in Art and Design
  - Unit 3: Contextual and Cultural Referencing in Art and Design
- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 9: Research Project.

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Learners will need exposure to others work and ideas. They will also need time and a conducive environment for intellectual debate and personal reflection.
Unit 9: Research Project

Unit code: K/601/0941
Level: 5
Credit value: 20

- **Aim**

To develop learners’ skills of independent enquiry and critical analysis by undertaking a sustained research investigation of direct relevance to their Higher Education programme and professional development.

- **Unit abstract**

This unit is designed to enable learners to become confident in using research techniques and methods. It addresses the elements that make up formal research including the proposal, a variety of research methodologies, action planning, carrying out the research itself and presenting the findings. To complete the unit satisfactorily, learners must also understand the theory that underpins formal research.

The actual research depends on the learner, the context of their area of learning, their focus of interest and the anticipated outcomes. The unit draws together a range of other areas from within the programme to form a holistic piece of work that will make a positive contribution to the learner’s area of interest. Learners should seek approval from their tutors before starting their research project.

- **Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand how to formulate a research specification
2. Be able to implement the research project within agreed procedures and to specification
3. Be able to evaluate the research outcomes
4. Be able to present the research outcomes.
Unit content

1 **Understand how to formulate a research specification**

   Research formulation: aims and objectives; rationale for selection; methodology for data collection and analysis; literature review; critique of references from primary sources eg questionnaires, interviews; secondary sources eg books, journals, internet; scope and limitations; implications eg resources
   Hypothesis: definition; suitability; skills and knowledge to be gained; aims and objectives; terms of reference; duration; ethical issues
   Action plan: rationale for research question or hypothesis; milestones; task dates; review dates; monitoring/reviewing process; strategy
   Research design: type of research eg qualitative, quantitative, systematic, original; methodology; resources; statistical analyses; validity; reliability; control of variables

2 **Be able to implement the research project within agreed procedures and to specification**

   Implement: according to research design and method; test research hypotheses; considering test validity; reliability
   Data collection: selection of appropriate tools for data collection; types eg qualitative, quantitative; systematic recording; methodological problems eg bias, variables and control of variables, validity and reliability
   Data analysis and interpretation: qualitative and quantitative data analysis eg interpreting transcripts; coding techniques; specialist software; statistical tables; comparison of variable; trends; forecasting

3 **Be able to evaluate the research outcomes**

   Evaluation of outcomes: success or failure of the research project eg planning, aims and objectives, evidence and findings, validity, reliability, benefits, difficulties, conclusion(s)
   Future consideration: significance of research investigation; application of research results; implications; limitations of the investigation; improvements; recommendations for the future, areas for future research

4 **Be able to present the research outcomes**

   Format: professional delivery format appropriate to the audience; use of appropriate media
## Learning outcomes and assessment criteria

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<td><strong>1.1</strong> Formulate and record possible research project outline specifications</td>
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<td><strong>1.2</strong> Identify the factors that contribute to the process of research project selection</td>
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<td></td>
<td><strong>1.3</strong> Undertake a critical review of key references</td>
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<td></td>
<td><strong>1.4</strong> Produce a research project specification</td>
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<tr>
<td></td>
<td><strong>1.5</strong> Provide an appropriate plan and procedures for the agreed research specification</td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to implement the research project within agreed procedures and to specification</td>
<td><strong>2.1</strong> Match resources efficiently to the research question or hypothesis</td>
</tr>
<tr>
<td></td>
<td><strong>2.2</strong> Undertake the proposed research investigation in accordance with the agreed specification and procedures</td>
</tr>
<tr>
<td></td>
<td><strong>2.3</strong> Record and collate relevant data where appropriate</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to evaluate the research outcomes</td>
<td><strong>3.1</strong> Use appropriate research evaluation techniques</td>
</tr>
<tr>
<td></td>
<td><strong>3.2</strong> Interpret and analyse the results in terms of the original research specification</td>
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<tr>
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<td><strong>3.3</strong> Make recommendations and justify areas for further consideration</td>
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<tr>
<td><strong>LO4</strong> Be able to present the research outcomes</td>
<td><strong>4.1</strong> Use an agreed format and appropriate media to present the outcomes of the research to an audience.</td>
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Guidance

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.
Unit 10: Design Method

Unit code: A/601/6386
Level: 4
Credit value: 15

• Aim

This unit aims to give learners opportunities to develop skills and knowledge in the development of new products or services in design pathways.

• Unit abstract

This unit focuses on understanding and applying the design development cycle when creating a new product or improving an existing product or service. The design development cycle encompasses the process from initial concept through to design and production, including reviews at various stages. Learners will explore the stages and methodology relating to design methods and apply them to their own work. Learners will be encouraged to develop an analytical and methodical approach and to use evaluation and review to develop work. Design methods used to develop products or services should be innovative and could involve a new product, an improvement to an existing product or the application of new technology or materials.

Learners will be expected to apply the fundamentals of design methods when developing their own product and to develop resourceful and innovative design solutions to a brief. Rigorous review and testing of ideas should be used to encourage debate and development of ideas. Production methods should be researched and learners should show an understanding of the relationship between design and the creation of outcome. The commercial context of the work should be considered and this can be achieved through working to a brief, considering costings, the needs of end users, the environment and issues of sustainability.

• Learning outcomes

On successful completion of this unit a learner will:

1 Know the phases of the design development cycle
2 Be able to plan a project using the design development cycle
3 Be able to use imagination and innovation in the development of a product
4 Be able to propose design improvements to the production process.
Unit content

1. **Know the phases of the design development cycle**
   
   Brief: eg identify client requirements, identify problem, produce proposal
   
   Research: eg materials, context, past solutions, other designers, processes, costings, environmental issues, sustainability
   
   Develop ideas: eg materials, research alternative solutions, produce models, prototypes, review, test ideas, communication
   
   Produce: eg prototype, finished solution, evaluation, improvement

2. **Be able to plan a project using the design development cycle**
   
   Project brief: planning eg identify problem, specifications, constraints, end user, production costs, materials, techniques
   
   Research: eg competition, ideas, theoretical investigations, materials, processes, market drivers, problem solving
   
   Costs: budget eg materials, making costs, alternatives eg cheaper materials, lean manufacturing

3. **Be able to use imagination and innovation in the development of a product**
   
   Designing: eg innovation, alternative solutions, preferred options, ideas generation, product development, experimentation, selection, modification, ergonomics
   
   Design responsibility: health and safety; legislation; safe manufacture; product life span; sustainability
   
   Developing: eg roughs, visuals, testing of ideas, working designs, samples, maquettes, selection

4. **Be able to propose design improvements to the production process**
   
   Product: eg packaging, vessel, object, service, graphic product, functional item, decorative object, garment, accessory, COSHH compliant, ecologically sound
   
   Production: eg making skills, one-off, small batch production, rapid prototyping, design for industry, manufacturing, construction, process, production costs, product liability, product life span
   
   Evaluation: eg testing, measure performance, analyse feedback, function, fitness for purpose, use of skills, self-analysis, time management, organisation, work, quality, work rate, teamwork, research, communication, effectiveness, employability, career development
   
   Commercial context: eg market place, client, end user, price, costs, production methods, competitors
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1 Know the phases of the design development cycle</td>
<td>1.1 Research and record the phases of design development cycle</td>
</tr>
<tr>
<td>LO2 Be able to plan a project using the design development cycle</td>
<td>2.1 Apply the design development cycle in own project work</td>
</tr>
<tr>
<td>LO3 Be able to use imagination and innovation in the development of a product</td>
<td>3.1 Apply imagination and innovation to the development of a specified product</td>
</tr>
</tbody>
</table>
| LO4 Be able to propose design improvements to the production process | 4.1 Evaluate design improvements to the production process  
4.2 Estimate the value of the design development cycle in a commercial context. |
Guidance

Links

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 11: Design Principles
  - Unit 88: Product Design
- Level 5:
  - Unit 4: Professional Practice in Art and Design
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
  - Jewellery
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Learners need access to a workshop with equipment they need for their area of design specialism. Sources for research include access to relevant manufacturing and production processes, specialist publications, galleries, exhibitions and practitioners.

The focus of this unit is design development and learners will need access to appropriate materials and workshops in order to complete samples and prototypes.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to help them to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:


Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 11: Design Principles

Unit code: M/601/5414
Level: 4
Credit value: 15

- **Aim**
  
The aim of this unit is to enable learners to develop knowledge and understanding of the issues that have informed debate on the purposes and processes of design.

- **Unit abstract**
  
  In this unit learners will develop an understanding of how the attitudes of designers, makers and end-users influence the appearance and function of design solutions. These attitudes are informed by the changing values of society and the cultural context within which designers work.

  The unit encourages learners to question the roles of form, function, culture, context and concept in relation to materials, techniques and processes and to reflect on their own distinctive approach to design. Work produced for this unit should be in the learner’s own design specialism and may take the form of case studies, critical essays and practical projects that demonstrate an understanding of these issues and develop personal interpretations of them. Learners will find that in practice, these areas are not always distinct from each other and that one can interweave another eg an investigation of the relationship between form and function might raise issues around truth to materials. This is a realistic reflection of the ever-shifting emphasis that design has in a socio-cultural context that is constantly being reinvented by technological advances, globalisation, mass media and the emergence of internet-based communities that straddle the traditional place, language and ethnicity.

- **Learning outcomes**

  **On successful completion of this unit a learner will:**

  1. Understand the relationship between form and function
  2. Understand the principles of cultural and contextual association
  3. Be able to develop concepts through the exploration of materials, techniques and processes
  4. Be able to develop concepts by the analysis of the needs of end-users.
Unit content

1 **Understand the relationship between form and function**

- **Contexts**: modernism; industrialisation; Arts and Crafts, abstraction; de Stijl; the Bauhaus; Surrealism; Dada; streamlining; post modernism; deconstruction; punk; commerce eg globalisation; the consumer society; media and technology eg personal computers, the iPod, the internet, web-based media, mobile connectivity

- **Artists, architects and designers**: eg William Morris, Louis Sullivan, Gropius, Klee, Duchamp, Buñuel, McQueen, Le Corbusier, Raymond Loewy, Philip Johnson, Robert Venturi, Frank Gehry, Issey Miyake, Vivienne Westwood

- **Form**: eg two-dimensional, three-dimensional, composition, layout, symmetrical, asymmetrical, regular, irregular, ordered, deconstructed, geometric, organic, ephemeral

- **Formal qualities**: appearance eg finish, texture, lustre, sheen, colour, surface decoration, pattern, tactile qualities, harmony, discord, avant-garde

- **Function**: eg ergonomics, user-friendliness, comfort, protection, personal mobility; communication of information eg persuasion, propaganda, corporate needs, individual requirements, symbolic, utilitarian, entertaining, extending personal capabilities

2 **Understand the principles of cultural and contextual association**

- **Contexts**: eg online communities, social networking, religious and ethnic loyalties, tribes, sport loyalties; sub-cultures eg goths, punks, new romantics

- **Visual images**: semiotics eg symbols, signs, meanings, messages; cultural implications eg religion, politics, ecological, ethical; environmental; patterns and codes eg motifs, typography, marks, decorations, stamps, seals, graffiti

- **Style**: historical eg art nouveau, pop art, post modern, naive, primitive; contemporary influences eg sub-cultures, music, art, theatre, politics, world events, sport

- **Symbolic value**: eg quality, class, wealth, exclusivity, disposable income, ethnicity

- **Aesthetic values**: individual users; groups; target markets; attitudes to beauty; taboos

3 **Be able to develop concepts through the exploration of materials, techniques and processes**

- **Contexts**: eg truth-to-materials, designer-as-maker, learning-by-doing, craft, serendipity

- **Materials use**: properties and qualities eg aesthetic, protective, decorative, functional, resilience, flexibility, durability, texture, warm, smooth, cold; emotional effects eg soothing, exciting, questioning, visually challenging, aesthetically pleasing, genuine, faux

- **Media exploration**: methods and technologies eg sketching, drawing, painting; lens-based eg digital photography; randomness, modification eg moodboard, stylesheet, trial-and-error, storyboard, film, video, projected, text

- ** Appropriateness**: fitness-for-purpose eg packaging, advertising, illustration, moving-image, communication design, storytelling, narrative
4 Be able to develop concepts by the analysis of the needs of end users

Contexts: eg fitness-for-purpose, client needs analysis, design brief: design development cycle, design process, design method, design agencies eg Pentagram, Fitch, Seymour-Powell

Design needs: qualities eg safe, useful, fit-for-purpose, performs to specification, quality; cost-effective; laboursaving; life saving; emotional needs eg inspiring, pleasing, humorous, relaxing, stimulating, creative

Environmental: eg aesthetically pleasing, sustainable; ethically responsible eg reusable, recyclable, low-maintenance
## Learning outcomes and assessment criteria

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<tr>
<td><strong>LO1</strong> Understand the relationship between form and function</td>
<td>1.1 Examine the relationship between form and function in own discipline</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate and record the identified relationship between form and function in own and others’ work</td>
</tr>
<tr>
<td><strong>LO2</strong> Understand the principles of cultural and contextual association</td>
<td>2.1 Examine the relationship between design and its cultural context</td>
</tr>
<tr>
<td></td>
<td>2.2 Evaluate and record the identified relationship between design and cultural context in own and others’ work</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to develop concepts through the exploration of materials, techniques and processes</td>
<td>3.1 Develop concepts by the exploration of materials, techniques and processes</td>
</tr>
<tr>
<td></td>
<td>3.2 Evaluate the creative and commercial potential of the concepts developed</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to develop concepts by the analysis of the needs of end users</td>
<td>4.1 Develop concepts by the analysis of the needs of end users</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate effectiveness of design concepts against the needs analysis.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 8: Design Principles in Art and Design
- Level 4:
  - Unit 10: Design Method
- Level 5:
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Interpret graphic design requirements
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Learners will require access to a design studio and general workshops. Staffing and technical expertise sufficient to support a range of two and three dimensional studies must be available.
Employer engagement and vocational contexts

Interviews with designers and the public in relation to the design projects in this unit should be considered in order to provide realistic market opinion. These would also give the learner an insight into the professional practice of design. Live projects or client-led briefs may also be used to provide sufficient opportunities to experience design principles in practice. Advantage should be taken of any relevant design exhibitions or events suited to learners’ specialist pathways. These may be useful in providing a suitable case study or project scenario against which to pose the questions which relate to the key principles of design.

- **Brand Republic** ([www.brandrepublic.com](http://www.brandrepublic.com)) – Premier site for all information in advertising, graphics and branding.
- **Skillset** ([www.skillset.org](http://www.skillset.org)) – Industry body which supports skills and training for the UK creative media industries.
- **Association of Illustrators** ([www.theaoi.com](http://www.theaoi.com)) – Illustration information and resources for commissioners and practitioners.
Unit 12: Personal and Professional Development

Unit code: T/601/0943
Level: 5
Credit value: 15

● Aim
This unit aims to help the learner become an effective and confident self-directed employee. This helps the learner become confident in managing their own personal and professional skills to achieve personal and career goals.

● Unit abstract
This unit is designed to enable learners to assess and develop a range of professional and personal skills to promote personal and career development. The unit also aims to develop learners’ ability to organise, manage and practice a range of approaches to improve their performance as self-directed learners in preparation for work or further career development.

The unit emphasises the needs of the individual but within the context of how the development of self-management corresponds with effective team management in meeting objectives.

Learners will be able to improve their own learning, be involved in teamwork and be more capable of problem solving through the use of case studies, role play and real-life activities.

● Learning outcomes

On successful completion of this unit a learner will:
1. Understand how self-managed learning can enhance lifelong development
2. Be able to take responsibility for own personal and professional development
3. Be able to implement and continually review own personal and professional development plan
4. Be able to demonstrate acquired interpersonal and transferable skills.
Unit content

1 **Understand how self-managed learning can enhance lifelong development**

   **Self-managed learning**: self-initiation of learning processes; clear goal setting eg aims and requirements, personal orientation achievement goals, dates for achievement, self-reflection

   **Learning styles**: personal preferences; activist; pragmatist; theorist; reflector eg reflexive modernisation theory; Kolb’s learning cycle

   **Approaches**: learning through research; learning from others eg mentoring/coaching, seminars, conferences, secondments, interviews, use of the internet, social networks, use of bulletin boards, news groups

   **Effective learning**: skills of personal assessment; planning, organisation and evaluation

   **Lifelong learning**: self-directed learning; continuing professional development; linking higher education with industry, further education, Recognition of Prior Learning, Apprenticeships, Credit Accumulation and Transfer Schemes

   **Assessment of learning**: improved ability range with personal learning; evidence of improved levels of skill; feedback from others; learning achievements and disappointments

2 **Be able to take responsibility for own personal and professional development**

   **Self-appraisal**: skills audit (personal profile using appropriate self-assessment tools); evaluating self-management; personal and interpersonal skills; leadership skills

   **Development plan**: current performance; future needs; opportunities and threats to career progression; aims and objectives; achievement dates; review dates; learning programme/activities; action plans; personal development plan

   **Portfolio building**: developing and maintaining a personal portfolio

   **Transcripts**: maintaining and presenting transcripts including curriculum vitae

3 **Be able to implement and continually review own personal and professional development plan**

   **Learning styles and strategies**: types of styles; awareness of own personal style; impact of personal style and interactions with others

   **Learning from others**: formal learning and training; observation; mentoring; supervision; tutorials; informal networks; team members; line managers; other professionals

   **Evaluation of progress**: setting and recording of aims and objectives; setting targets; responding to feedback; re-setting aims and targets; establishing and recognising strengths and weaknesses; directions for change; cycles of activity (monitoring, reflecting and planning)
4 Be able to demonstrate acquired interpersonal and transferable skills

Transferable skills: eg personal effectiveness (ability to communicate effectively at all levels, initiative, self-discipline, reliability, creativity, problem solving)

Verbal and non-verbal communication: effective listening; respect for others’ opinions; negotiation; persuasion; presentation skills; assertiveness; use of ICT

Delivery formats: ability to deliver transferable skills using a variety of formats

Working with others: team player; flexibility/adaptability; social skills

Time management: prioritising workloads; setting work objectives; using time effectively; making and keeping appointments; reliable estimates of task time
Learning outcomes and assessment criteria

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</tbody>
</table>
| **LO1** Understand how self-managed learning can enhance lifelong development | 1.1 Evaluate approaches to self-managed learning  
1.2 Propose ways in which lifelong learning in personal and professional contexts could be encouraged  
1.3 Evaluate the benefits of self-managed learning to the individual and organisation |
| **LO2** Be able to take responsibility for own personal and professional development | 2.1 Evaluate own current skills and competencies against professional standards and organisational objectives  
2.2 Identify own development needs and the activities required to meet them  
2.3 Identify development opportunities to meet current and future defined needs  
2.4 Devise a personal and professional development plan based on identified needs |
| **LO3** Be able to implement and continually review own personal and professional development plan | 3.1 Discuss the processes and activities required to implement the development plan  
3.2 Undertake and document development activities as planned  
3.3 Reflect critically on own learning against original aims and objectives set in the development plan  
3.4 Update the development plan based on feedback and evaluation |
| **LO4** Be able to demonstrate acquired interpersonal and transferable skills | 4.1 Select solutions to work-based problems  
4.2 Communicate in a variety of styles and appropriate manner at various levels  
4.3 Evaluate and use effective time management strategies. |
Guidance

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.
Unit 13: Managing a Creative Business

Unit code: A/601/1673
Level: 4
Credit value: 15

• Aim

The aim of this unit is to enable learners to manage a small business in the creative arts sector by examining the personal and professional skills required.

• Unit abstract

Arts businesses tend to be small or medium enterprises with a large number of arts professionals being self-employed sole traders. This unit looks into the skills required to enable a small businesses to flourish in the contemporary arts world. Learners have the opportunity to assess their own skills needs and to investigate how creative enterprises may be structured, funded and managed.

• Learning outcomes

On successful completion of this unit a learner will:
1 Understand the structures of small businesses in the arts sector
2 Understand sources of funding and support available to small businesses
3 Be able to apply financial administration techniques important to small business enterprises
4 Understand management issues relevant to small business enterprises.
Unit content

1 **Understand the structures of small businesses in the arts sector**

   **Structures**: business structures; sole traders; partnerships; concept of unlimited and limited liability; limited companies

   **Role of small business**: small businesses in the arts and their inter-relationships in the industry; niche; expertise

   **Personal structures**: role and responsibilities of sole traders; partners; directors of small limited liability companies

   **Personal skills**: time management; financial and market awareness; commitment; assertiveness; communication; planning; target setting; problem solving and decision-making

2 **Understand sources of funding and support available to small businesses**

   **Start-up funding**: loans; overdrafts; government grants and loan schemes; start-up schemes; local and regional variations

   **Ongoing sources**: special project funding; lottery funding; Arts Councils; European sources; other specialist sources; employment subsidies

   **Supporting relevant organisations**: RABs; local, regional and governmental departments; Arts Councils; local authorities; unitary authorities; public organisations; sponsorship

   **Role of relevant organisations**: services offered; clients; aims and objectives

3 **Be able to apply financial administration techniques important to small business enterprises**

   **Recording financial transactions**: simple systems for recording financial transactions in a small business environment

   **Income tax, National Insurance (NI) and VAT**: liabilities in respect of tax, NI and VAT; calculating likely contributions/demands; documentation relating to tax, NI and VAT; implications of self-assessment

   **Credit control**: recognising the importance of credit control; simple credit control techniques relevant to small business; cash-flow forecast

4 **Understand management issues relevant to small business enterprises**

   **Use of time**: time management; demands

   **Limits to growth**: availability of personnel; implications for employing personnel; limitations of market; budgetary constraints; complying with legislation

   **Financial forecasts**: role; cash-flow forecasts; the value of targets and associated strategies; business planning; marketing; business development; target markets/audiences
# Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong> Understand the structures of small businesses in the arts sector</td>
<td>1.1 Explain the structures of businesses in the arts</td>
</tr>
<tr>
<td></td>
<td>1.2 Explain the roles and responsibilities of sole traders, partners and directors</td>
</tr>
<tr>
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<td>1.3 Explain how small businesses inter-relate with businesses, large and small</td>
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<td></td>
<td>1.4 Analyse the importance of small businesses to the arts sector</td>
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<tr>
<td></td>
<td>1.5 Evaluate personal levels of existing competence of enterprise skills</td>
</tr>
<tr>
<td><strong>LO2</strong> Understand sources of funding and support available to small businesses</td>
<td>2.1 Research appropriate sources of funding for ongoing business needs, through relevant case studies</td>
</tr>
<tr>
<td></td>
<td>2.2 Evaluate sources of funding for new small business enterprises</td>
</tr>
<tr>
<td></td>
<td>2.3 Research the various organisations which may support small business enterprises in the arts sector</td>
</tr>
<tr>
<td></td>
<td>2.4 Evaluate the support which these organisations might provide</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to apply financial administration techniques important to small business enterprises</td>
<td>3.1 Set up systems for the recording of financial transactions</td>
</tr>
<tr>
<td></td>
<td>3.2 Calculate likely liabilities in respect of tax, NI and VAT</td>
</tr>
<tr>
<td><strong>LO4</strong> Understand management issues relevant to small business enterprises</td>
<td>4.1 Explain the demands likely to be made of small business proprietors in the arts sector</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate the potential impact of identified external factors on small business development</td>
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<td></td>
<td>4.3 Evaluate business plans relevant to small businesses in the arts</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 5:
  - Unit 4: Professional Practice in Art and Design
  - Unit 14: Business Practice in Art and Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

Learners should be encouraged to gain experience in their selected industry, either through work shadowing, interviews or a period of work placement. The following organisations may also be helpful.

- Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design, crafts and visual arts, has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
- Skillset (www.skillset.org) is the sector skills council for careers in interactive media, photography, fashion and textiles.
- The Prospects Work Bank (www.prospects.ac.uk) available through the graduate careers website is an online database of companies offering work experience.
**Unit 14: Business Practice in Art and Design**

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>H/601/6849</th>
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<tbody>
<tr>
<td>Level:</td>
<td>5</td>
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<tr>
<td>Credit value:</td>
<td>15</td>
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</table>

- **Aim**

This unit aims to develop learners’ skills and understanding of business practice related to art and design, as they prepare for the transition from study to employment or freelance work.

- **Unit abstract**

This unit focuses on understanding different types of business and essential basic business administration for employees, freelance and self-employed professionals in the art and design sector. This core understanding should be contextualised and made more relevant to learners through live briefs, working with a client or an enterprise project. It can be delivered as one project or a series of live briefs which develop confidence in working with clients and of working as a professional.

Learners should investigate different types of business models and relate this to creative industries. They should also demonstrate that they understand the nature of freelance work and modes of employment particular to art and design, e.g., hot desking, freelance, short-term contracts, fixed-term contracts, self-employment, agency working.

Learners should be able to research, plan and produce outcomes for an enterprise project or live assignment and if this is done as group work or teamwork, each learner must demonstrate they have played an active and measurable role in the project and submit independent work. Their participation, success and understanding can be measured through their evaluation of the project and evaluation of the extent to which business skills are relevant to success as a creative practitioner.

- **Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand the principles of business practice
2. Be able to plan an effective creative enterprise project in art and design
3. Be able to produce art and design outcomes for a creative enterprise project
4. Be able to evaluate business practice in art and design.
Unit content

1 **Understand the principles of business practice**

Business practice: business models eg self-employed; sole trader; employee; Limited Company; Limited Liability Company (LLC); Partnership; Limited Liability Partnership (LLP); freelance; agency worker; contractor; working styles eg hot desking, freelance, shift work, piece work, contract, outsourcing

Business start-up: stages eg market research, product development, staffing resource planning, finance, location, SWOT analysis, business plan, cash-flow forecast, marketing, finding customers, registering the business

Intellectual property: ownership eg publishing rights, licence for use, copyright, right of title

Financial controls: budgets eg cash flow, book keeping, invoicing, statements, accounting, profit and loss records, estimates, quotes, pricing

Tax liabilities: PAYE; income tax; VAT; National Insurance; Corporation tax

Legalities: adhere to current legislation and protection eg Health and Safety at Work Act, professional indemnity insurance, public liability insurance, employers liability insurance, Companies House

2 **Be able to plan an effective creative enterprise project in art and design**

Costing: estimating costs eg time, materials, overheads, contingency, outlay, market factors, labour, outsourcing costs (printing)

Resource planning: plan of work; human resources eg labour, specialists, staff, contractors, freelancers; specialist resources eg hiring equipment, facilities; materials; sources of help eg funding, knowledge, support, professional associations

3 **Be able to produce art and design outcomes for a creative enterprise project**

Produce outcome: outcome eg campaign, marketing materials, packaging, point of sale, give-a-ways, product, promotional items, TV/radio advert, moving image, presentation, brochure, postcard, poster, booklet, images, installation, event

4 **Be able to evaluate business practice in art and design**

Business practice: research; resource planning; costing; business models

Outcome: extent to which the outcome(s) were successful

Professional practice: roles and responsibilities; communication; level of service
## Learning outcomes and assessment criteria

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<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand the principles of business practice | 1.1 Analyse different business models  
1.2 Construct effective business administration documents  
1.3 Adhere to current legislation relevant to creative businesses |
| LO2 Be able to plan an effective creative enterprise project in art and design | 2.1 Produce costings and estimates for work to be produced  
2.2 Research and develop a plan of work including budget and deadlines  
2.3 Plan effective outcomes |
| LO3 Be able to produce art and design outcomes for a creative enterprise project | 3.1 Produce effective outcomes for a creative enterprise project |
| LO4 Be able to evaluate business practice in art and design | 4.1 Evaluate the requirements of business practice in art and design  
4.2 Evaluate the success of the enterprise project  
4.3 Evaluate project management in terms of professional practice. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 17: Products, Marketing and Advertising Media
  - Unit 18: Advertising Campaigns
  - Unit 29: Corporate Identity in Graphic Design
- Level 5:
  - Unit 4: Professional Practice in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.
Essential requirements

Learners will require access to information about business practice through a variety of information sources. These can be from professional bodies and associations relevant to their specialisms, for example the Arts Council, the Design Council, Design and Art Directors Association, International Society of Typographic Designers and Chartered Society of Designers; from the internet, from visiting professionals, organisations and journals. Banks are a good source of free information for starting a company and keeping business records including writing a business plan and cash-flow forecasting.

Useful websites which have templates and case studies available to download are:

- www.businesslink.gov.uk
- www.prospects.ac.uk/startup
- www.workexperience.org
- www.britishchambers.org.uk

Employer engagement and vocational contexts

Centres should develop links with local businesses and support organisations including, RDAs (Regional Development Agencies), CIDA (Creative Industries Development Agencies), professional bodies (Chartered Society of Designers), local incubation and start-up facilities. The NCWE (National Council for Work Experience) and all Sector Skill Councils have websites with areas dedicated to work experience and business start-up information. This unit would work well as a live assignment or an enterprise project where the learners prepare outcomes for a client or to be presented in a commercial environment.

Learners should be encouraged to collaborate with their selected industry, either through work shadowing, interviews or a period of work placement. The following organisations may also be helpful.

- Creative and Cultural Skills (www.ccskills.org.uk), the Sector Skills Council for design, crafts and visual arts, has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
- Skillset (www.skillset.org) is the Sector Skills Council for careers in interactive media, photography, fashion and textiles.
- The Prospects Work Bank (www.prospects.ac.uk), available through the graduate careers website, is an online database of companies offering work experience.
- The National Centre for Work Experience (www.ncwe.com) can assist with placements and produces a free guide ‘Focus on Work Experience’.
Unit 15: Work-based Experience

Unit code: D/601/0998
Level: 5
Credit value: 15

• Aim
This unit aims to enable learners to experience the scope and depth of learning which may take place in a work-based context by planning, monitoring and evaluating the work experience.

• Unit abstract
A significant amount of learning can be achieved through carrying out practical activities in a workplace. Learning may be enhanced by taking a more formal approach to work-based activities – by planning and carrying out the activities and reflecting on the benefits of the activities for the business and to the learner.

This unit is designed to allow flexibility of study for part-time and full-time learners. It is expected that learners will be supervised in the workplace and by their academic supervisor.

Learners will have the opportunity, supported by their supervisors, to negotiate and perform activities which will allow them to meet the assessment criteria for this unit. They will recognise the scope of what they have achieved by recording evidence from carrying out the activities. They will also gain maximum benefit by reflecting on and evaluating the work they undertake.

• Learning outcomes
On successful completion of this unit a learner will:
1. Be able to negotiate industry experience
2. Understand the specific requirements of the placement
3. Be able to undertake work experience as identified
4. Be able to monitor and evaluate own performance and learning.
Unit content

1 Be able to negotiate industry experience

Suitable organisation and location: types of establishments for placement eg industry-related work for a client brief at college, existing work environment, different department within current employer’s business

Negotiation: methods of contacting organisations; methods of undertaking negotiations

Nature of duties: type of undertaking eg routine duties and tasks, project work, development of new procedures/protocol

Supervisors: roles and responsibilities of academic and industrial mentors

Expectations of learning: aims eg proficiency in new tasks and procedures, time management and problem-solving skills, reflection, discuss progress with others, teamwork

Business constraints: consideration of possible limitations eg need to be fully trained, adherence to quality systems, health and safety considerations, supervision time, workload, customer satisfaction, limited staffing, cost of materials

2 Understand the specific requirements of the placement

Tasks: details of activities eg specific hourly, daily, weekly routine and non-routine tasks; breakdown of a project into stages; new procedures/protocol

Prioritise: reasons for rationalisation of the order of tasks; methods of prioritising work

Plan for the work experience: methods used to develop detailed plan with schedule of tasks, proposed dates for reviews, expected input from supervisors

Benefits to organisation and learner: advantages to business eg allowing more routine tasks to be carried out, allowing procedures/techniques to be developed, increasing responsiveness, identifying cost saving measures; advantages to learner eg understanding how a business operates, understanding importance of teamwork, learning new techniques, development of problem-solving and time management skills

3 Be able to undertake work experience as identified

Carry out the planned activities: realisation eg carrying out tasks and project work according to relevant legislation, training and codes of practice; developing new procedures or protocol

Record activities in the appropriate manner: systematic and appropriate recording of relevant activities eg logbook, diary, portfolio, spreadsheets, databases; list of resources

Revise the initial plan as required: methods used to review activities at the appropriate time to see if they meet requirements, make alterations as needed
4 Be able to monitor and evaluate own performance and learning

Evaluation of the quality of the work undertaken: meeting industry standards and evaluating own performance against original proposal; comments/testimony from supervisors

Account of learning during the work experience: details of experience gained eg new procedures, interpersonal skills, time management, problem solving, teamwork; details of evidence eg portfolio of evidence, scientific report, management report

Recommendations on how the learning experience could have been enhanced: alternative ideas eg different location, different brief, different time period, more/less support, better time management, better preparation
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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</tbody>
</table>
| **LO1** Be able to negotiate industry experience | **1.1** Research and evaluate suitable organisations that could provide industry experience  
**1.2** Negotiate with work and academic supervisors a proposal for the work experience  
**1.3** Recognise the business constraints on the work experience offered |
| **LO2** Understand the specific requirements of the placement | **2.1** Agree and prioritise the tasks and responsibilities involved in the work experience  
**2.2** Produce a plan for the work experience  
**2.3** Analyse the benefits of the proposed activities to the business and the learner |
| **LO3** Be able to undertake work experience as identified | **3.1** Fulfil specified requirements of placement conforming to all related codes of practice  
**3.2** Produce systematic records of work undertaken  
**3.3** Revise the initial plan as required  
**3.4** Make suggestions for improvement and review these with appropriate supervisor |
| **LO4** Be able to monitor and evaluate own performance and learning | **4.1** Monitor progress against original proposal  
**4.2** Evaluate the quality of own performance  
**4.3** Analyse the learning which has taken place during the work experience using suitable reflections  
**4.4** Make recommendations on how the experience could have been enhanced |
Guidance

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.
Employer engagement and vocational contexts

Centres should develop links with local businesses and support organisations including, RDAs (Regional Development Agencies), CIDA (Creative Industries Development Agencies), professional bodies (Chartered Society of Designers), local incubation and start-up facilities. The NCWE (National Council for Work Experience) and all Sector Skill Councils have websites with areas dedicated to work experience and business start up information. This unit would work well as a live assignment or an enterprise project where the learners prepare outcomes for a client or to be presented in a commercial environment.

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.

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- The Prospects Work Bank (www.prospects.ac.uk), available through the graduate careers website, is an online database of companies offering work experience.

- The National Centre for Work Experience (www.ncwe.com) can assist with placements and produces a free guide ‘Focus on Work Experience’.
Unit 16: Employability Skills

Unit code: A/601/0992
Level: 5
Credit value: 15

• Aim

This unit provides learners with the opportunity to acquire honed employability skills required for effective employment.

• Unit abstract

All learners at all levels of education and experience require honed employability skills as a prerequisite to entering the job market. This unit gives learners an opportunity to assess and develop an understanding of their own responsibilities and performance in, or when entering, the workplace.

It considers the skills required for general employment, such as interpersonal and transferable skills, and the dynamics of working with others in teams or groups including leadership and communication skills.

It also deals with the everyday working requirement of problem solving which includes the identification or specification of the 'problem', strategies for its solution and then evaluation of the results through reflective practices.

• Learning outcomes

On successful completion of this unit a learner will:
1. Be able to determine own responsibilities and performance
2. Be able to develop interpersonal and transferable skills
3. Understand the dynamics of working with others
4. Be able to develop strategies for problem solving.
Unit content

1. Be able to determine own responsibilities and performance

   **Own responsibilities**: personal responsibility; direct and indirect relationships and adaptability, decision-making processes and skills; ability to learn and develop within the work role; employment legislation, ethics, employment rights and responsibilities

   **Performance objectives**: setting and monitoring performance objectives

   **Individual appraisal systems**: uses of performance appraisals eg salary levels and bonus payments, promotion strengths and weaknesses, training needs; communication; appraisal criteria eg production data, personnel data, judgemental data; rating methods eg ranking, paired comparison, checklist, management by objectives

   **Motivation and performance**: application and appraisal of motivational theories and techniques, rewards and incentives, manager’s role, self-motivational factors

2. Be able to develop interpersonal and transferable skills

   **Effective communication**: verbal and non-verbal – awareness and use of body language, openness and responsiveness, formal and informal feedback to and from colleagues; ICT as an effective communication medium; team meetings

   **Interpersonal skills**: personal effectiveness; working with others; use of initiative; negotiating skills; assertiveness skills; social skills,

   **Time management**: prioritising workload; setting work objectives; making and keeping appointments; working steadily rather than erratically; time for learning; reliable estimate of task time

   **Problem solving**: problem analysis; researching changes in the workplace; generating solutions; choosing a solution

3. Understand the dynamics of working with others

   **Working with others**: nature and dynamics of team and group work; informal and formal settings, purpose of teams and groups eg long-term corporate objectives/strategy; problem solving and short-term development projects; flexibility/adaptability; team player

   **Teams and team building**: selecting team members eg specialist roles, skill and style/approach mixes; identification of team/work group roles; stages in team development eg team building, identity, loyalty, commitment to shared beliefs, team health evaluation; action planning; monitoring and feedback; coaching skills; ethics; effective leadership skills eg setting direction, setting standards, motivating, innovative, responsive, effective communicator, reliability, consistency
4 Be able to develop strategies for problem solving

Specification of the problem: definition of the problem; analysis and clarification

Identification of possible outcomes: identification and assessment of various alternative outcomes

Tools and methods: problem-solving methods and tools

Plan and implement: sources of information; solution methodologies; selection and implementation of the best corrective action eg timescale, stages, resources, critical path analysis

Evaluation: evaluation of whether the problem was solved or not; measurement of solution against specification and desired outcomes; sustainability
## Learning outcomes and assessment criteria

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</table>
| **LO1** | **1.1** Develop a set of own responsibilities and performance objectives  
**1.2** Evaluate own effectiveness against defined objectives  
**1.3** Make recommendations for improvement  
**1.4** Review how motivational techniques can be used to improve quality of performance |
| Be able to determine own responsibilities and performance |  
**2.1** Develop solutions to work-based problems  
**2.2** Communicate in a variety of styles and appropriate manner at various levels  
**2.3** Identify effective time management strategies |
| **LO2** |  
Be able to develop interpersonal and transferable skills |  
**3.1** Explain the roles people play in a team and how they can work together to achieve shared goals  
**3.2** Analyse team dynamics  
**3.3** Suggest alternative ways to complete tasks and achieve team goals |
| **LO3** |  
Understand the dynamics of working with others |  
**4.1** Evaluate tools and methods for developing solutions to problems  
**4.2** Develop an appropriate strategy for resolving a particular problem  
**4.3** Evaluate the potential impact on the business of implementing the strategy |
| **LO4** |  
Be able to develop strategies for problem solving |
Guidance

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.
Employer engagement and vocational contexts

Centres should develop links with local businesses and support organisations including, RDAs (Regional Development Agencies), CIDA (Creative Industries Development Agencies), professional bodies (Chartered Society of Designers), local incubation and start-up facilities. The NCWE (National Council for Work Experience) and all Sector Skill Councils have websites with areas dedicated to work experience and business start up information. This unit would work well as a live assignment or an enterprise project where the learners prepare outcomes for a client or to be presented in a commercial environment.

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Unit 17: Products, Marketing and Advertising Media

Unit code: K/601/5413
Level: 4
Credit value: 15

• Aim

This unit aims to develop knowledge and understanding of the relationships between products, markets and the media.

• Unit abstract

The success of a product can be strategically enhanced by the way it is presented to potential consumers. This can be achieved through the application of a range of promotional strategies that include targeted marketing, branding and advertising.

Brands are created and developed through a range of communication and promotional techniques. Learners will investigate categories and characteristics of product promotion and learn how branding is created through the identification of target markets, analysis of demographic factors and the use of classification systems.

By examining the role of products, market research and investigating advertising media, learners will develop an understanding of the business context in which advertising operates.

• Learning outcomes

On successful completion of this unit a learner will:

1. Understand the marketing of products using advertising media
2. Know about target markets
3. Understand the factors influencing product development
4. Understand the business context in which advertising operates.
Unit content

1 **Understand the marketing of products using advertising media**
   
   Categories of products: eg consumer durables, built-in obsolescence, retail, services, financial
   
   Properties of products: eg features, benefits, advantages, shelf life, competition
   
   Brands: eg brand development, brand identity, brand names, positioning

2 **Know about target markets**
   
   Demographic factors: eg age, sex, social grade, region, employment, living circumstance, culture, religion, family and social relationships
   
   Classification systems: eg readership surveys, classification of social grades, alternative systems devised by individual advertising agencies

3 **Understand the factors influencing product development**
   
   Quantitative research: eg sales statistics, market share of product, effectiveness of marketing
   
   Qualitative research: eg surveys, consumer profiles, investigating key brands, analysis of results
   
   Purpose of research: eg business decisions, marketing objectives, advertising objectives, advertising strategies, product growth, reaching a wider audience, sales promotion, increasing sales, advertising placement

4 **Understand the business context in which advertising operates**
   
   Media: eg newspapers, magazines, editorials, advertorials, posters, television, radio, cinema, websites
   
   Sales promotion media: eg direct mail, point of sale, e-marketing, guerrilla marketing, public relations
   
   Factors influencing choice of advertising media: eg audience, cost, characteristics
   
   Media planning: eg decision making, scheduling
# Learning outcomes and assessment criteria

<table>
<thead>
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</tr>
<tr>
<td>LO1 Understand the marketing of products using advertising media</td>
<td>1.1 Identify the factors informing the marketing of selected products</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate the application of advertising media to product promotion</td>
</tr>
<tr>
<td>LO2 Know about target markets</td>
<td>2.1 Analyse factors which influence target customers</td>
</tr>
<tr>
<td>LO3 Understand the factors influencing product development</td>
<td>3.1 Analyse the function of market research</td>
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<td></td>
<td>3.2 Evaluate the factors influencing the marketing mix for a specific product</td>
</tr>
<tr>
<td>LO4 Understand the business context in which advertising operates</td>
<td>4.1 Analyse the relationship between marketing, branding and advertising in the promotion of products.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4
  - Unit 18: Advertising Campaigns
- Level 5
  - Unit 7: Professional Studies in Art and Design
  - Unit 19: Art Direction for Advertising
  - Unit 20: Copywriting for Advertising
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, Regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 18: Advertising Campaigns

Unit code: F/601/6504
Level: 4
Credit value: 15

• Aim

This unit aims to develop learners’ understanding of the function of graphic design within advertising campaigns and to develop skills in using graphic design as part of an advertising campaign.

• Unit abstract

This unit is about the production of advertising. Learners will study the operations and functions of advertising agencies, learn how advertising objectives are defined and gain an understanding of the process of developing advertising strategies. By devising advertisements in response to advertising briefs, learners will develop an understanding of how advertising campaigns work.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand roles and functions within an advertising agency
2. Understand advertising campaigns
3. Be able to develop an advertising strategy
4. Be able to create advertisements for print and digital media.
Unit content

1 **Understand roles and functions within an advertising agency**

Types of agencies: eg international, local, full service, general, direct, creative consultancy

Functions of departments in agencies: eg research, account planning and management, media planning, creative, traffic, production

Roles of people in agencies: eg researcher, account executive, group head, media planner, media buyer, creative director, art director, copywriter

Agency jargon and terminology: billings; blue chip accounts; account managing

2 **Understand advertising campaigns**

Planning of campaigns: eg budgets, deadlines, media strategy

Components of campaigns: eg concepts, straplines, headlines, images

Creative strategies: eg information, persuasion, comparison, humour, shock, emotive, testimonials, demonstrations

3 **Be able to develop an advertising strategy**

Marketing objectives: marketing strategy; marketing mix; sales targets; brand share

Advertising objectives: eg customer, cultural and ethical awareness, attitudes, perceptions, and responses

Products: properties; benefits; advantages

Markets: research trends; customer perceptions; responses eg to ethical issues

Terms and definitions: eg Unique Selling Point (USP), brand eg image, personality, positioning, status, promise, creative strategy summary

Advertising briefs: components; structure; style

4 **Be able to create advertisements for print and digital media**

Product: categories; properties

Markets: demographic groups; classification systems

Advertisements: campaigns; creative strategies

Presentation of advertisements: eg rough concepts, visuals, storyboards, scripts
## Learning outcomes and assessment criteria

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</table>
| LO1 Understand roles and functions within an advertising agency | 1.1 Evaluate the function of an advertising agency  
1.2 Analyse the different roles of people working in advertising agencies |
| LO2 Understand advertising campaigns | 2.1 Evaluate examples of existing advertising campaigns  
2.2 Analyse own advertising campaigns |
| LO3 Be able to develop an advertising strategy | 3.1 Identify and plan to meet the objectives for an advertising strategy  
3.2 Develop solutions for an advertising strategy |
| LO4 Be able to create advertisements for print and digital media | 4.1 Identify the needs of specified audiences and their responses to advertisements  
4.2 Create print and digital media advertisements for specified audiences. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4
  - Unit 2: Ideas Generation and Development in Art and Design
  - Unit 3: Contextual and Cultural Referencing in Art and Design
  - Unit 17: Products, Marketing and Advertising Media
- Level 5
  - Unit 7: Professional Studies in Art and Design
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.
Employer engagement and vocational contexts

Centres should develop links with local businesses and support organisations including, RDAs (Regional Development Agencies), CIDA (Creative Industries Development Agencies), professional bodies (Chartered Society of Designers), local incubation and start-up facilities. The NCWE (National Council for Work Experience) and all Sector Skill Councils have websites with areas dedicated to work experience and business start up information. This unit would work well as a live assignment or an enterprise project where the learners prepare outcomes for a client or to be presented in a commercial environment.

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- The National Centre for Work Experience (www.ncwe.com) can assist with placements and produces a free guide ‘Focus on Work Experience’.

The following organisations may also be helpful:

- Images online (www.imagesonline) – Image and photography resources
- The Image File (www.theimagefile.com) – Image and photography resources
- Association of Illustrators (www.theaoi.com) – Illustration information and resources for commissioners and practitioners
## Unit 19: Art Direction for Advertising

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>D/601/5411</th>
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</thead>
<tbody>
<tr>
<td>Level:</td>
<td>5</td>
</tr>
<tr>
<td>Credit value:</td>
<td>15</td>
</tr>
</tbody>
</table>

### Aim

This unit focuses on developing skills and understanding in working within creative teams to generate visual concepts for advertising using visual communication and typographical skills.

### Unit abstract

This unit develops learners’ ability to work collaboratively to solve problems and generate solutions. Learners will work in creative teams which mirror industrial practice. The unit also requires learners to produce visual concepts for advertising using typographic and visual design skills.

In addition learners should practise directing the work of others in developing and producing visual concepts for advertising. Case studies of advertising campaigns, visiting speakers, off-site visits and a critical approach to reviewing current and historical advertising campaigns should be used to enable learners to deconstruct and understand the process of art directing in advertising.

Delivery should be based on a combination of set and learner-identified advertising briefs, supported by workshop sessions dealing with specific content and skills. At this stage, learners should also be working with some independence to compile their portfolios or sketchbooks with a view to progression.

This unit may require evidence in the form of roughs, concepts, visuals and storyboards produced by the learner in response to advertising briefs. These may be compiled in the form of a portfolio or sketchbook of examples representing individual work and identifying the work of the creative team. Learners can provide evidence of directing the development and production of visual concepts through examples of the completed work directed, and through records of communication between the learner and people working in other creative disciplines.

### Learning outcomes

**On successful completion of this unit a learner will:**

1. Understand the roles and working methods of creative teams in advertising
2. Be able to produce complex concepts for visual advertising media
3. Be able to manage the development and production of a visual concept for advertising
4. Be able to evaluate the effectiveness of a visual concept in meeting a brief.
Unit content

1 **Understand the roles and working methods of creative teams in advertising**

   Creative teams: collaboration eg copywriters, art direction, designers, media partners, contractors; roles and responsibilities of teams eg feedback, critique, work plan, project management, working to deadlines, budgets, communication, identity, agenda setting

   Ideas generation: subject eg set briefs, client brief, self-generated briefs, advertisements, campaigns, media; approach eg verbal, visual, lateral thinking; brainstorming

   Professional standards and codes of practice: Advertising Standards Authority; British Code of Advertising Practice

2 **Be able to produce complex concepts for visual advertising media**

   Advertising products: materials eg newspapers and magazines, posters, television, cinema, direct mail, point of sale, press advertisements, posters, storyboards, direct mail, press release, web campaign, viral, give away, coupon, sample, brochure, postcard

   Advertising messages: communication eg information, persuasion, comparison, moods and feelings, narrative, symbolism, visual analogies, humour, branding, values

   Applications of typographic design skills: text eg typographic layout, headlines, strap-lines, body copy

3 **Be able to manage the development and production of a visual concept for advertising**

   Development and production: starting point eg issue, theme, idea, message, audience, media; development eg research, justification, back story, work plan, budget, experimentation, channel of communication; visual development eg storyboards, plans, characters, text

   Creative teams: collaborative partners eg artists, designers, illustrators, photographers, typographers, television and film producers, actors, stylists, researchers, runners

4 **Be able to evaluate the effectiveness of a visual concept in meeting a brief**

   Evaluation criteria: response to direction; communication of messages; technical quality; aesthetic appeal; originality

   Client: meeting their needs; work to plan; feedback eg consumer panel, audience feedback, survey, response, understanding
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research and evaluate the working methods of creative teams in advertising</td>
</tr>
<tr>
<td>Understand the roles and working methods of creative teams in advertising</td>
<td>1.2 Work effectively as part of a creative team to devise verbal and visual ideas for advertising</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Devise relevant, imaginative and effective responses to advertising briefs</td>
</tr>
<tr>
<td>Be able to produce complex concepts for visual advertising media</td>
<td>2.2 Verify that complex concepts have been communicated effectively</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Direct the work of others from a range of creative disciplines</td>
</tr>
<tr>
<td>Be able to manage the development and production of a visual concept for advertising</td>
<td>3.2 Use sensitivity and judgement in realising own objectives through the work of others</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Evaluate the visual concept in terms of technical quality, aesthetic appeal and meeting the needs of the client</td>
</tr>
<tr>
<td>Be able to evaluate the effectiveness of a visual concept in meeting a brief</td>
<td>4.2 Evaluate the overall effectiveness of the visual concept.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 41: Words and Images in Graphic Design
  - Unit 42: Design for Advertising
  - Unit 48: Narrative Image Making
- Level 4:
  - Unit 1: Visual Communication in Art and Design
  - Unit 2: Ideas Generation and Development in Art and Design
  - Unit 21: Personal Style in Graphic Design
- Level 5:
  - Unit 20: Copywriting for Advertising
  - Unit 25: Advanced Typographic Design.

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements
This unit should be delivered in a design studio or clean working space and learners may need access to computer suites. Learners will need space to be able to work in teams and will benefit from collaborating with learners from different groups or pathways.
Employer engagement and vocational contexts

Off site visits to design studios or relevant creative businesses will enable learners to understand the vocational context of this unit. Engagement with employers can be through guest speakers, externally set briefs, case studies, placements or workshops.
Unit 20: Copywriting for Advertising

Unit code: Y/601/5410
Level: 5
Credit value: 15

Aim
This unit focuses on developing learners’ skills at writing copy for advertising, working individually and in creative teams to meet the needs of advertising briefs.

Unit abstract
The unit requires learners to produce text and write copy for advertising and develop typographic and visual design skills. The unit also develops learners’ skills at working collaboratively to solve problems and generate solutions. Learners will work in creative teams which mirror industrial practice.

Learners should examine trends and formats for writing copy and explore types of language and meaning used in advertising. Learners should develop a critical awareness of how words and meaning are used in advertising in order to develop successful outcomes. Case studies of advertising campaigns, visiting speakers, off-site visits will deepen the vocational content of this unit.

Delivery should be based on a combination of set and learner-identified advertising briefs, supported by workshop sessions dealing with specific content and skills. At this stage, learners should also be working with some independence to compile their portfolios or sketchbooks with a view to progression.

This unit may require evidence in the form of roughs, concepts, visuals and storyboards produced by the learner in response to advertising briefs. These may be compiled in the form of a portfolio or sketchbook of examples representing individual work and identifying the work of the creative team.

Learning outcomes
On successful completion of this unit a learner will:
1. Understand the roles and working methods of creative teams in advertising
2. Be able to produce writing skills to produce copy for advertising purposes
3. Be able to evaluate advertising copy.
Unit content

1 **Understand the roles and working methods of creative teams in advertising**

Creative teams: collaboration eg copywriters, art direction, designers, media partners, contractors; roles and responsibilities of teams eg feedback, critique, work plan, project management, working to deadlines, budgets, communication, identity, agenda setting

Ideas generation: subject eg set briefs, client brief, self-generated briefs, advertisements, campaigns, media; approach eg verbal, visual, lateral thinking; brainstorming; copy eg strap-lines, headlines, body text, information

Professional standards and codes of practice: Advertising Standards Authority; British Code of Advertising Practice

2 **Be able to produce writing skills to produce copy for advertising purposes**

Skills: literacy eg grammar, punctuation, spelling, language; structure eg organising writing, developing an argument, layout, word count

Personal approach: eg general knowledge, research skills, reading, curiosity, use of language, audience, market

Style: communication eg tone of voice, matching style to audience, creating moods and images, emotion, meaning, message, context

3 **Be able to evaluate advertising copy**

Evaluation criteria: response to direction; communication of messages; technical quality; aesthetic appeal; originality

Client: meeting their needs; work to plan; feedback eg consumer panel, audience feedback, survey, response, understanding
## Learning outcomes and assessment criteria

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<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research and evaluate the working methods of creative teams in advertising</td>
</tr>
<tr>
<td>Understand the roles and working methods of creative teams in advertising</td>
<td>1.2 Work effectively as part of a creative team to devise effective copy for advertising</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Use techniques effectively to write imaginative copy for different audiences</td>
</tr>
<tr>
<td>Be able to produce writing skills to produce copy for advertising purposes</td>
<td>2.2 Produce writing which is technically accurate</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Evaluate the copy writing in terms of technical quality, aesthetic appeal and meeting the needs of the client</td>
</tr>
<tr>
<td>Be able to evaluate advertising copy</td>
<td>3.2 Evaluate the overall effectiveness of the advertising copy.</td>
</tr>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 41: Words and Images in Graphic Design
  - Unit 42: Design for Advertising
  - Unit 48: Narrative Image Making
- Level 4:
  - Unit 1: Visual Communication in Art and Design
  - Unit 2: Ideas Generation and Development in Art and Design
  - Unit 21: Personal Style in Graphic Design
- Level 5:
  - Unit 20: Copywriting for Advertising
  - Unit 25: Advanced Typographic Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image.

Essential requirements

This unit should be delivered in a design studio or clean working space and learners may need access to computer suites. Learners will need space to be able to work in teams and will benefit from collaborating with learners from different groups or pathways.

Employer engagement and vocational contexts

Off-site visits to design studios or relevant creative businesses will enable learners to understand the vocational context of this unit. Engagement with employers can be through guest speakers, externally set briefs, case studies, placements or workshops.
Unit 21: Personal Style in Graphic Design

Unit code: D/601/6512
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ understanding of personal style in graphic design, through research. The unit also aims to develop skills in communicating a personal style.

• Unit abstract
Learners should already have investigated a particular specialisation with an individual style of expression and visual imagery. Learners will explore a broad range of media to communicate a wide range of messages using historical and contemporary examples. Learners will be encouraged to experiment and explore the limits of their preconceived ideas and abilities. Contemporary styles in visual communication will be seen in context and learners will be encouraged to look towards their continuous progression in design.

Learners need a supportive and enthusiastic environment in which their preconceived ideas about their personal style might be challenged. In a world where new means of communicating are constantly developing and an increasingly sophisticated audience demands new approaches, the development of style should be seen as a continuous activity. It is important that learners experiment with different media to test their enthusiasm for a particular style.

At the conclusion of the unit a learner should have a sequential portfolio of work that demonstrates a willingness to experiment with different media. Learners should also test their own convictions of the style they favour and an ability to use it to communicate a wide range of messages to different audiences.

• Learning outcomes
On successful completion of this unit a learner will:
1. Understand the historical and contemporary origins of the chosen personal style
2. Be able to select media to develop personal style
3. Be able to communicate using a personal style
4. Be able to evaluate personal style.
Unit content

1 **Understand the historical and contemporary origins of the chosen personal style**

Influences: historical; contemporary; recent past and current work of artists and illustrators; influences from other fields eg design, fine art, photography, 3D design, moving image, fashion

Factors affecting personal style: influences (social, cultural) eg personal influences, peer-group influences, social, political, economic; media; technology eg computer aided, internet, time-based; style; content; technique

Referencing: copyright; plagiarism eg use and misuse creative commons license, legitimate quotations, transfer from other media, ownership, right of title, open source

2 **Be able to select media to develop personal style**

Experiment with media: media eg 2D, 3D, time-based, traditional, non-traditional, review, analyse findings, develop ideas and applications

Select: develop criteria eg fitness for purpose, audience needs, creative intention

Context: location eg environment, outdoors, image placement, audience, communication channel, production method, scale, response, advertisement, TV, video, multimedia, print, web

Personal style: approach eg technique, media, interpretation, attitude; originality; innovation

3 **Be able to communicate using a personal style**

Visual communication: personal criteria; meaning eg message, opinion, fact, information, narrative, effect, scale, subject, relationship to text or location

Personal style: approach eg technique, media, interpretation, attitude

Industry: market eg age groups, book work, advertising, editorial, magazine, multi-media, web based, interactive, press, print

Context: location eg environment, outdoors, image placement, audience, communication channel, production method, scale, responses

Information: level eg simple, complex, direct, indirect, dependent eg on time, sequence, understanding, age, language

4 **Be able to evaluate personal style**

Evaluate personal style: challenge eg preconceptions, stereotypes, orthodoxies; experimentation; use of media and materials; execution; criteria; integrity eg originality, approach, rationale, critically review, debate,

Effective communication: understanding eg messages, meaning, audience response, feedback loops
## Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research historical and contemporary examples of illustration and graphic design</td>
</tr>
<tr>
<td>Understand the historical and contemporary origins of the chosen personal style</td>
<td>1.2 Analyse research to reach conclusions</td>
</tr>
<tr>
<td></td>
<td>1.3 Evaluate factors influencing personal style</td>
</tr>
<tr>
<td></td>
<td>1.4 Adhere to professional referencing conventions</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Select media effectively to develop personal style</td>
</tr>
<tr>
<td>Be able to select media to develop personal style</td>
<td>2.2 Present a coherent portfolio of imaginative and experimental work</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Develop a personal style of visual communication</td>
</tr>
<tr>
<td>Be able to communicate using a personal style</td>
<td>3.2 Communicate effectively using a personal style</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Evaluate personal style in terms of communicating effectively to different audiences</td>
</tr>
<tr>
<td>Be able to evaluate personal style</td>
<td>4.2 Evaluate the development of personal style against previously identified criteria.</td>
</tr>
</tbody>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3**
  - Unit 38: Mixed Media Image Making
  - Unit 41: Words and Images in Graphic Design
  - Unit 45: Graphic Image Making
  - Unit 48: Narrative Image Making
- **Level 4**
  - Unit 1: Visual Communication in Art and Design
  - Unit 3: Contextual and Cultural Referencing in Art and Design
  - Unit 17: Products, Marketing and Advertising Media
  - Unit 18: Advertising Campaigns
- **Level 5**
  - Unit 19: Art Direction for Advertising
  - Unit 22: References and Sources in Art and Design.
  - Unit 23: Communication with Images in Art and Design

Links to National Occupational Standards

- **CCSkills Sector Skills Council**
  - Design.

Essential requirements

Learners must have design studio spaces where they are encouraged to critically debate their work with each other and interact and share ideas and develop their own personal approach. Learners must experiment with and source a wide range of materials and media to extend their investigation and new approaches.
Employer engagement and vocational contexts

Contact with a range of professionals working in different aspects of graphic design will broaden the learner’s understanding of the different requirements and the need for creativity, flexibility and personal flair. Input can come from various pathways, eg children's book illustration, advertising, fashion illustration, publishing and journalism. Talks, workshops, competitions, exhibitions, externally set projects, tutorials and seminars are all valuable ways to engage learners with employers and to recognise the vocational scope of this unit. Learners should be encouraged to keep their contemporary and historical knowledge up to date through visits to exhibitions, galleries, illustrated talks and studios at a local and national level.
Unit 22: References and Sources in Art and Design

Unit code: J/601/5399
Level: 5
Credit value: 15

• Aim
The aim of this unit is to extend and develop learners’ knowledge and understanding of visual reference materials through the sourcing, editing and manipulation of visual imagery.

• Unit abstract
This unit is designed to encourage expertise and professionalism in the critical and practical activities involved in image research, selection, evaluation and production. Learners will be expected to source information from relevant primary and secondary sources, applying both traditional and digital techniques to convey ideas and messages. The resulting visual communication will be expected to convey a range of outcomes from literal and descriptive image making, through to metaphor, allegory and abstraction.

This unit will be delivered most effectively through practical project work in different disciplines. A combination of set and self-directed briefs should be used. Project briefs should require learners to explore a wide range of sources and produce substantial amounts of experimental imagery before progressing to their final work.

The unit should focus on developing critical selection, original ideas generation and the evaluation of imagery as a persuasive and valid method of communication. More importantly learners will be encouraged to expand their approach to the selection, production and use of visual imagery to a more challenging and thoughtful level, both in terms of the images themselves and the skills and technologies used to generate them.

Evidence for this unit should take the form of a portfolio of examples generated through practical activity. These will include image making produced by the learner, together with imagery collated from a wide range of secondary sources. This imagery should range from the abstract to the literally descriptive. Evidence for the unit should confirm that the learner has researched, selected, edited and manipulated visual imagery to convey a range of ideas and messages, and the final presentation of two- and three-dimensional work should support this.

Learners should demonstrate critical and evaluative skills through a personal presentation which should confirm clear understanding of the sourcing, selection and production of appropriate referencing in art and design.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to research visual information from different sources
2. Understand the application of visual information in different applications and contexts
3. Be able to manipulate visual imagery to convey ideas and messages
4. Understand the different contexts for production, manipulation and application of imagery.
Unit content

1 **Be able to research visual information from different sources**

   **Primary sources**: eg the human form, still-life, natural forms, environment eg landscapes, architecture, urban, rural, deserted, populated, space, the seas, the skies

   **Secondary sources**: imagery created by others eg books, magazines, posters, illustrations, photographs, advertisements, television, film, video, picture libraries, digital images; places eg galleries, exhibitions, events, museums, collections

   **Personally generated**: eg dreams, ideas, fantasies, thoughts, literature, poetry songs, music

2 **Understand the application of visual information in different applications and contexts**

   **Evaluation criteria**: eg response to direction, communication of messages, technical quality, aesthetic appeal, fitness for purpose

   **Client and audiences**: meeting needs eg recipients, clients, consumers, customers, readers, viewers

   **Information**: level eg simple, complex, direct, indirect, dependent eg on time, sequence, understanding, age, language

3 **Be able to manipulate visual imagery to convey ideas and messages**

   **Ideas and messages**: contexts eg literal, metaphoric, subliminal, sensual, emotional, humorous, abstract

   **Manipulation**: of time and sequence eg flashbacks, changed meaning, surprise, suspense, revelation, future representation, pause; changes eg year, season, day, month, country, location, language

4 **Understand the different contexts for production, manipulation and application of imagery**

   **Abstract imagery**: non-representational eg signs, symbols, ideograms, pictograms, icons, patterns, devices, designs

   **Descriptive imagery**: representational eg drawings, photographs, prints, illustrations

   **Manipulation techniques**: re-interpretation eg through drawing, collage, photocopying, digital applications, destroying, deconstructing, reconstructing, disguising

   **Review and evaluate**: analyse eg critically review, fitness for purpose; listen to advice, suggest amendment; support aesthetic choices; identify further opportunities eg new directions, adaptations, applications

   **Visual signals**: eg transmitting, decoding, universally understood imagery, specific learned interpretations, empirical understandings
## Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research visual references from a variety of sources</td>
</tr>
<tr>
<td>Be able to research visual information from different sources</td>
<td>1.2 Originate imagery using a variety of references and sources</td>
</tr>
<tr>
<td></td>
<td>1.3 Evaluate original imagery in terms of effectiveness</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Apply imagery as a source of information and as a stimulus for ideas</td>
</tr>
<tr>
<td>Understand the application of visual information in different applications and contexts</td>
<td>2.2 Evaluate the effectiveness of imagery in terms of own ideas, contexts and media</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Edit imagery to convey ideas, specific information, moods, feelings and messages</td>
</tr>
<tr>
<td>Be able to manipulate visual imagery to convey ideas and messages</td>
<td>3.2 Apply a range of image manipulation techniques to convey meanings, ideas and messages effectively</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Critically evaluate own editing and manipulation of imagery in different contexts</td>
</tr>
<tr>
<td>Understand the different contexts for production, manipulation and application of imagery</td>
<td>4.2 Critically evaluate and review the use of imagery in terms of own work and future development.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 3: Contextual and Cultural Referencing in Art and Design
  - Unit 86: Digital Media in Art and Design
- Level 5:
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Learners will also need opportunities to produce their own imagery from primary sources such as the human form and the natural and built environments. Learners will need access to digital image libraries and digital image editing technology.
Employer engagement and vocational contexts

Learners would benefit from making field trips to museums and specialist libraries and collections (such as the National Newspaper Library for example) and through investigating broad commercial sources for gathering unique imagery. The unit would work well as a series of short projects aimed at different visual contexts, and to this end a collaborative or commercially related assignment would support the unit.

The following organisations may also be helpful:

- Skillset (www.skillset.org) – Industry body which supports skills and training for the UK creative media industries
- Images online (www.imagesonline) – Image and photography resources
- The Image File (www.theimagefile.com) – Image and photography resources
- Association of Illustrators (www.theaoi.com) – Illustration information and resources for commissioners and practitioners
Unit 23: Communication with Images in Art and Design

Unit code: T/601/5401
Level: 5
Credit value: 15

• Aim
The aim of this unit is to extend learners’ understanding of the potential of visual imagery as a means of communication, including the codes used in different cultures.

• Unit abstract
This unit requires learners to study visual communication codes used in a variety of situations, cultures and sub cultures. Learners will be expected to recognise the importance of style and genre in visual imagery and to examine the roles of time and sequence in visual communication.

Learners will consider elements of effective communication and information dissemination in its broadest sense, from simple juxtapositions, through to the manipulation of texts and images to develop their ability to be understood as a visual communicator.

Learners will be encouraged to work on several tasks, introducing communication theories and semiotics, which will combine in practical project work that demonstrates the ability to produce work which communicates intended messages to target audiences.

The unit should be supported by the use of traditional mediums and digital technologies enabling learners to develop technical conceptual and critical awareness. A combination of set and self-directed briefs should be used. Projects should encourage learners to communicate a wide range of meanings and messages to a variety of audiences and in different cultural contexts. Projects should also require learners to produce work incorporating elements of time and sequence, such as comic strips or storyboards.

Delivery should include tutor-led presentation and discussion of examples of visual communication drawn from a wide range of sources. Discussion should focus on the potential and limitations of communication through visual imagery in different cultural contexts and should include debate on image and metaphor, as well as headlining, structure and captioning.

Evidence for this unit will be based on a portfolio of examples generated through practical activity. This will be supported by notes and annotated collections of visual imagery which demonstrate the learner understands the possibilities and limitations of communicating through visual imagery alone. These should make reference to both abstract and descriptive imagery, and to a variety of cultures and sub-cultures. There should also be evidence that the learner has explored the roles of time and sequence in narrative and storytelling through studying time-based media and the production of sequential imagery.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the use of visual imagery in different cultures and sub-cultures
2. Understand the use of sequencing to communicate with a series of images
3. Be able to communicate meanings, messages and information using images
4. Be able to produce visual imagery aimed at different audiences.
## Unit content

1. **Understand the use of visual imagery in different cultures and sub-cultures**
   - Abstract imagery: meanings eg sign, symbols, ideogram, pictogram, icons, patterns, devices, designs
   - Descriptive imagery: eg drawings; photographs; prints; illustrations
   - Visual communication codes: body language eg gesture, attitude, facial expression, dress code, display, colour codes
   - Different cultures: iconography eg religious symbolism, political symbolism, secular preoccupations, global influences, perspective, viewpoint
   - Contemporary sub-cultures: eg youth, music, street-style, business, the internet, sport, advertising, the media, publishing, technology
   - Visual signals: eg transmitting, decoding, universally understood imagery, specific learned interpretations, empirical understandings
   - Style and genre: visual styles eg impressionism, expressionism, surrealism, realism, fantasy; storytelling genres eg comedy, tragedy, social realism, documentary, soap opera, musical, poetry, folklore

2. **Understand the use of sequencing to communicate with a series of images**
   - Narrative and storytelling: genre eg comic strips, cartoons, anime, manga, hieroglyphics, storyboards, reading eg images, texts
   - Time-based media: film; video; slide; flick books
   - Manipulation: of time and sequence eg flashbacks, changed meaning, surprise, suspense, revelations, future representation, pause; changes eg year, season, day, month, country, location

3. **Be able to communicate meanings, messages and information using images**
   - Meanings and messages: contexts eg cultural, literal, metaphoric, allegorical, subliminal, sensual, emotional, humorous, abstract, non representational, factual
   - Information: level eg simple, complex, direct, indirect, time dependent, sequence, understanding, age, language
4 Be able to produce visual imagery aimed at different audiences

Informal audiences: tutors; peer; passing public

Formal audiences: recipients eg clients, consumers, customers, readers, viewers

Present: support own work eg portfolio presentation, exhibition, PowerPoint, oral presentation, handouts, supporting notebooks, design development, artefacts, maquettes, web pages, audio visual, video, storyboards

Review: analyse eg critically review, fitness for purpose, listen to advice, suggest amendments, support aesthetic choices; identify further opportunities eg new directions, adaptations, applications
## Learning outcomes and assessment criteria

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</table>
| LO1 Understand the use of visual imagery in different cultures and sub-cultures | 1.1 Analyse the power of abstract imagery as a means of communication within different cultures  
1.2 Apply visual languages and codes as a means of communication within different cultures |
| LO2 Understand the use of sequencing to communicate with a series of images | 2.1 Apply time and sequence in narrative and storytelling  
2.2 Evaluate the uses of time and sequence in time-based media communications |
| LO3 Be able to communicate meaning and messages and information using images | 3.1 Evaluate meanings, messages and information communicated by visual imagery  
3.2 Apply visual imagery creatively to communicate meanings, messages and information cross-culturally |
| LO4 Be able to produce visual imagery aimed at different audiences | 4.1 Produce creative and imaginative visual communications aimed at a variety of audiences  
4.2 Present visual communication theory in own work using appropriate language  
4.3 Critically reflect on effectiveness of visual communication in own work and evaluate in terms of future development. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4
  - Unit 1: Visual Communication in Art and Design
- Level 5
  - Unit 22: Referencing and Sources in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillsset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Resources should be available to enable learners to gather imagery and texts from a wide range of published sources. There should also be resources to enable learners to study the roles of time and sequence in visual communication and to produce original work for this. As this unit aims to cover several specialist disciplines eg graphic design, illustration, packaging, advertising, web design, time-based design, it is essential that the staffing, technical support and resources for the unit reflect this. There must be sufficient access to audio visual and digital resources to enable learners to be aware of the range of possible presentation methods appropriate to their selected audience.
Employer engagement and vocational contexts

Visits to galleries, exhibitions, film reviews, plays, performance and live art, workshops, studios, design consultancies and advertising agencies could play an important role in supporting assignments for this unit. Alternatively, bringing in professional practitioners from art, design or media backgrounds to talk about their work could help learners with the evidence requirements for this unit.

- Brand Republic (www.brandrepublic.com) is the premier site for all information in advertising, graphics and branding
- Skillset (www.skillset.org) industry body which supports skills and training for the UK creative media industries
- Association of Illustrators (www.theaoi.com) illustration information and resources for commissioners and practitioners
- The Communication Advertising and marketing Education Foundation (www.camfoundation.com).
**Unit 24: Typographic Skills**

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>J/601/6519</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level:</td>
<td>4</td>
</tr>
<tr>
<td>Credit value:</td>
<td>15</td>
</tr>
</tbody>
</table>

**Aim**

This unit aims to develop learners’ understanding and skills in the application and of typography within interpreted norms and conventions, for print, digital and screen-based outcomes.

**Unit abstract**

This unit provides underpinning knowledge for the other typography units, and one in which the rules are learned and not broken but provide the flexibility to offer the potential for creative design. This unit is about further developing skills in the use of type and typography. Learners should understand traditional and current accepted norms in typographic terminology. Through research, learners should be able to decipher hierarchical categories/structures evident in printed, digital and screen based matter and express and understand typographic terminology relevant to current practice. Through analysis learners will acquire a greater understanding of the terminology and conventions used in typographic design and will be able to produce designs using type with an informed degree of subtlety and sophistication.

Theoretical knowledge should be demonstrated through the completion of practical tasks. These should require the learner to use grids, select suitable fonts etc. and produce work that is suitable for both an historical and contemporary context. It is important that learners apply knowledge gained from both Historical and Contemporary Knowledge and Critical Studies units, and projects set should reflect this.

**Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand current typographic practice and its application to print, digital and screen-based outcomes
2. Be able to apply current typographic practice in producing design work
3. Be able to select and use type to meet specific requirements.
Unit content

1 Understand current typographic practice and its application to print, digital and screen-based outcomes

Type terminology: body size; x-height; cap height; ascender; descender; stroke; bowl; counter; font; serif; sans-serif, weight; condensed; extended; italic; justified/unjustified setting; house styles

Measurement systems: point; metric; size; body; leading; grid structures

Production processes: composition (digital); printing (litho, screen, letterpress, gravure, digital); print finishing (binding, case, perfect, saddle-stitched, varnishing, foilblocking)

2 Be able to apply current typographic practice in producing design work

Apply: layout eg use of grids, use of space, margins, symmetrical, asymmetrical, compositional structures.

Typographic practice: associated technology and terminology (bitmap fonts, screen fonts, printer fonts, type manipulation applications).

Design work: eg magazine spreads, book covers, CD covers and inserts, websites, online, mass text applications

3 Be able to select and use type to meet requirements

Selection factors: function; legibility; aesthetics; influences eg historical, contemporary

Typographic style: application (purpose, meaning); methods of composition; symmetry/asymmetry; consistency; typographic styles; aesthetic success
<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1</td>
<td>1.1 Record and define typographic terminology</td>
</tr>
<tr>
<td>Understand current typographic practice and its application to print, digital and screen-based outcomes</td>
<td>1.2 Analyse and apply measurement systems and grid structures</td>
</tr>
<tr>
<td></td>
<td>1.3 Record, follow and evaluate production processes</td>
</tr>
<tr>
<td>LO2</td>
<td>2.1 Employ associated technology and terminology in the production of design work</td>
</tr>
<tr>
<td>Be able to apply current typographic practice in producing design work</td>
<td>2.2 Apply practice to meet requirements for a given context and readers</td>
</tr>
<tr>
<td>LO3</td>
<td>3.1 Produce typographic work that demonstrates flexibility of function, legibility, aesthetic values and meaning, as appropriate to specific requirements</td>
</tr>
<tr>
<td>Be able to select and use type to meet specific requirements</td>
<td>3.2 Utilise historical and contemporary influences to meet specific requirements</td>
</tr>
<tr>
<td></td>
<td>3.3 Evaluate own outcomes and propose refinements.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following titles in the BTEC Art and Design suite:

- Level 4
  - Unit 28: Editorial Design
- Level 5
  - Unit 25: Advanced Typographic Design
  - Unit 26: Typographic Ideas
  - Unit 27: Mass Text Application.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupation Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

This unit requires access to a well equipped studio with adequate resources for the production of typography, both hand rendered and computer generated.

Employer engagement and vocational contexts

When producing typographic work it is essential that the end user is engaged in the production process as communication is the key to its success. Where possible, it is recommended that the work produced to meet the needs of a broad range of end users. This might be tested during critique sessions with the intended audience.
Unit 25: Advanced Typographic Design

Unit code: K/601/6335
Level: 5
Credit value: 15

- **Aim**

This aim of this unit is to develop learners' skills and understanding in applying typographic knowledge to the sensitive integration of words and images.

- **Unit abstract**

This unit focuses on the application of typographic knowledge. Through theoretical research and practical briefs, learners will enhance understanding and apply typographic structures in the completion of a series of projects. These should allow the learner to explore how the intended applications and audiences have a direct bearing on choices made.

Working on the projects will stress the importance of typography and the wider applications of using type and imagery within a range of outcomes.

Working with typographic elements within given parameters gives learners the opportunity to manipulate space, shape and form using defined grid structures.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Be able to use letterforms as graphic images to produce innovative and imaginative designs
2. Understand how text and image can be combined to enhance communication
3. Understand how typographic choices enhance audience perception and commercial viability
4. Be able to produce work that persuades an identified and targeted audience.
Unit content

1 Be able to use letterforms as graphic images to produce innovative and imaginative designs

Letterforms: eg origins, historical, contemporary, relationship to application for current printing technology
Display faces and graphic images: eg symbols, logotypes, way finding systems, signage, size, direction, colour

2 Understand how text and image can be combined to enhance communication

Changing fashions: eg key historical movements, cultural and current technological influences
Structure: eg use of grids, relationship between text and image, space, balance, form, function, sequence, colour
Factors in decision making: eg design brief requirements, context, target audiences, production processes

3 Understand how typographic choices enhance audience perception and commercial viability

Design factors affecting legibility: eg weight, size, contrast, caps/lowercase, line length, word spacing, character spacing, digital kerning, placement, range left/right, justified
Applications: eg display applications (posters, signage systems), text applications (books, newspapers, technical data, annual reports, magazines), digital media applications, website design

4 Be able to produce work that persuades an identified and targeted audiences

Audience: eg demographics, gender, age, ethnic, business types
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1  
Be able to use letterforms as graphic images to produce innovative and imaginative designs | 1.1 Identify and record effectively how letterforms can be used as graphic images and devices  |
|                                                 | 1.2 Apply this knowledge in an innovative and creative way                                     |
| LO2  
Understand how text and image can be combined to enhance communication        | 2.1 Analyse and record how type and image can be used to enhance visual appeal for the target audience |
|                                                 | 2.2 Identify responses of the intended audience and client market to typographic designs    |
| LO3  
Understand how typographic choices enhance audience perception and commercial viability | 3.1 Analyse and present, with clear justification, intentions of creative typographic work for specific audiences |
|                                                 | 3.2 Analyse and present, with clear justification, examples of typographic work that demonstrate innovative design solutions |
| LO4  
Be able to produce work that persuades an identified and targeted audience     | 4.1 Create work that combines text and image for a specific audience                          |
|                                                 | 4.2 Evaluate the effectiveness of communication design and present outcomes in a professional manner. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 24: Typographic Skills
- Level 5:
  - Unit 26: Typographic Ideas
  - Unit 27: Mass Text Application.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

This unit requires access to a well-equipped studio with adequate resources for the production of typography and images, both hand rendered and computer generated. Therefore, computer hardware with appropriate software programmes is also essential, along with wet and dry mark-making media.

Employer engagement and vocational contexts

When producing typographic work it is essential that the end user is engaged in the production process as communication is the key to its success. Wherever possible, it would be recommended that the work produced is for a broad range of end users and applications meeting their needs. Using an industry based project, set and evaluated by the client, can form the basis for a well-devised assignment. This might be tested during critique sessions with the intended audience.
Unit 26: Typographic Ideas

Unit code: H/601/6334
Level: 5
Credit value: 15

● Aim

This unit aims to develop learners’ skills in exploiting typographic design and understanding of the relationships between design, communication and meaning.

● Unit abstract

Through practical work, learners will produce experimental design solutions which explore how typographic design can be used to alter or influence the meaning of words.

When using typography, readability is important, and in essence no amount of experimentation is going to restrict typography to a point beyond its primary function. But ‘readability’ and ‘communication’ are not the same things. There is a clear differentiation between typography that is used in book or magazine design which has an essential requirement for readability to that which communicates through an advertising message. Conveying and reflecting the message can be strengthened or weakened by the choice of typeface and how it is used.

● Learning outcomes

On successful completion of this unit a learner will:

1. Understand the form and function of typography
2. Be able to produce experimental design ideas to challenge current typographic practice
3. Be able to use typographic design to alter or enhance meaning in arranged words.
Unit content

1 Understand the form and function of typography

Historical and contemporary examples: eg Bauhaus typography, political propaganda, Swiss typography, London Transport designs, corporate identities, logotypes, traffic signs, alternative typography (graffiti, oriental typography), typographers (Neville Brody, David Carson, Bradbury Thompson, Herb Lubalin, Eric Gill, Wim Crouwel, Erik Speikerman)

Relationships: eg design, communication and meaning, words, phrases, aphorisms, poems, signs, symbols, logotypes

Alteration of meaning: eg size, scale, contrast, negative, positive, outline, inline, relationship

Alteration of meaning: eg William S. Burroughs, Brion Gysin

Typographic practice and conventions: eg typefaces, styles, use of capitals, lower case, line, word, character spacing; layout etc

2 Be able to produce experimental design ideas to challenge current typographic practice

Idea-generating techniques: eg lateral thinking, brainstorming, random association

Experimental design processes: eg electronic manipulation of typeforms, hand-drawn, painted or incised letterforms, constructed or 3D letterforms, collage, graffiti, repeat patterns, arrangements

3 Be able to use typographic design to alter or enhance meaning in arranged words

Processes: eg cut outs, altered books, hand drawn, computer generated

Typographic design solution: eg headlines, logotypes, signing systems, corporate identity schemes, posters, information graphics, mass text applications, digital application
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
</table>
| **LO1** Understand the form and function of typography | The learner can:  
1.1 Evaluate and record selected sources of typography  
1.2 Evaluate and record the leading typographic practitioners, both historical and contemporary  
1.3 Demonstrate the use of current typographic conventions |
| **LO2** Be able to produce experimental design ideas to challenge current typographic practice | 2.1 Form random associations to produce innovative outcomes  
2.2 Manipulate and experiment with typography to meet specific intentions |
| **LO3** Be able to use typographic design to alter or enhance meaning in arranged words | 3.1 Alter meaning and context of given words or letters to meet client expectations  
3.2 Emphasise meaning and context of given words or letters to meet client briefs. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 5:
  - Unit 23: Communication with Images in Art and Design
  - Unit 25: Advanced Typographic Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

This unit requires access to a well-equipped studio with adequate resources for image production using fine art techniques, computer hardware and appropriate peripheral devices.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to help them to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 27: Mass Text Application

Unit code: K/601/6318
Level: 5
Credit value: 15

Aim
This unit aims to develop learners’ understanding of and skills in exploring mass text designed for a range of situations and publications.

Unit abstract
In this information age, it is vital that users can understand and navigate through a variety of written material. From both the printed word and online sources, the written word is essential to transferring information. More often than not, this information has to cross cultural boundaries. With these and other factors in mind, learners will explore the problems associated with mass text and experiment with it in order to create balance, accessibility, legibility and incorporate visual imagery.

This unit includes informal experimentation with expressive media as well as the digital environment. With the advent of niche and style publications, mass text can be presented much more expressively than ever before. This unit provides the learner with knowledge of advanced pagination, planning, folding, and print finishing.

Learning outcomes

On successful completion of this unit a learner will:

1. Understand problems associated with mass text
2. Be able to experiment with mass text in order to create balance, accessibility, legibility and incorporate visual imagery
3. Be able to present mass text to meet specific requirements
4. Understand advanced pagination, planning, folding, and print finishing.
Unit content

1. **Understand problems associated with mass text**

   **Problems:** eg legibility, interrupted reading patterns, the patterns associated with placing illustration within mass text, visual balance and imbalance, decisions regarding environment and contexts, design solutions and aesthetic success of final mass text applications.

   **Environment:** eg books, encyclopaedias, reference books, computer manuals, novels, newspapers, instruction books, magazines; use and placement of text.

2. **Be able to experiment with mass text in order to create balance, accessibility, legibility and incorporate visual imagery**

   **Contexts:** referencing, indexing, search methods, access to information, who requires the information and why, eg academic, recreational, emergency, medicine, poetry.

   **Presentation of mass text:** eg design, reproduction, legibility, indexing, referencing, access, incorporation of images, visual communication of information, print and digital processes.

3. **Be able to present mass text to meet specific requirements**

   **Design solutions:** eg experimental, practical, presentation and legibility, access, print/reproduction constraints.

   **Style:** eg meaning, mood, niche-market considerations, expressive typography, legibility versus style.

4. **Understand advanced pagination, planning, folding, and print finishing**

   **Pagination planning and folding:** eg indexing and referencing, calculating/estimating, imposition planning, folding, cutting and binding considerations, reproduction process constraints.
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| **LO1** Understand problems associated with mass text | 1.1 Record, and evaluate legibility, interrupted reading patterns  
1.2 Record and evaluate problems associated with placing illustrations, visual balance and imbalance  
1.3 Record and evaluate different environments, contexts, indexing and referencing systems |
| **LO2** Be able to experiment with mass text in order to create balance, accessibility, legibility and incorporate visual imagery | 2.1 Produce work that shows balance and imbalance  
2.2 Produce work that demonstrates experimentation with the use of text and image  
2.3 Produce work that demonstrates legibility for identified audiences and contexts |
| **LO3** Be able to present mass text to meet specific requirements | 3.1 Produce work that is suitable for a niche market  
3.2 Produce work that is fit for purpose and meaning in relation to its application |
| **LO4** Understand advanced pagination, planning, folding, and print finishing | 4.1 Record, demonstrate and evaluate different systems of pagination  
4.2 Record, demonstrate and evaluate different systems of folding  
4.3 Record, demonstrate and evaluate different types of print finishing. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 24: Typographic Skills
- Level 5:
  - Unit 26: Typographic Ideas.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

This unit requires access to desktop publishing and image manipulation software and appropriate peripheral devices. Learners will need access to a well equipped studio with adequate resources for image production using fine art techniques and digital photographic equipment for the production and capture of primary images sources.

Employer engagement and vocational contexts

Delivery of this unit can be supported by seminars and workshops from industry professionals so that learners gain an understanding into the needs of the industry and the level of professionalism required. Externally set briefs, either live or simulated can give learners an insight into the type of work they may encounter in their career. Work placements, off site visits, guest speakers and practical workshops will enhance the vocational delivery of this unit.
Unit 28: Editorial Design

Unit code: Y/601/6315
Level: 5
Credit value: 15

• Aim

This unit focuses on developing learners’ skills and understanding in constructing editorial designs for graphic design briefs. Learners will develop solutions to creative design projects for the digital environment.

• Unit abstract

This unit will give learners experience in applying the fundamental principles of managing text, material and images; using traditional skills to complement and inform digital editorial design.

Learners should understand the conventions of editorial design and creatively explore ideas to structure and present material imaginatively. Learners should be able to produce solutions which communicate effectively in a variety of editorial design contexts. In addition learners should be able to use appropriate technical language fluently to discuss their work.

Some aspects of this unit may be delivered away from the computer, with learners working mainly with basic tools and materials. This could be useful in developing a sense of the rules of design and it could show the enormous number of options that can be used in the digital environment to enrich their design solutions.

Evidence will be based on solutions to creative design projects. This can be supported by a series of exercises in deconstructing and constructing design grids, with an exploration of text and image in the context of page layout. Learners should learn how to create different moods, emphasis and levels of message with different grids and use of text and images.

• Learning outcomes

On successful completion of this unit a learner will:
1 Understand the principles of editorial design
2 Understand methods of representing illustrated text material
3 Be able to produce ideas for page structuring and organisation
4 Be able to evaluate design solutions.
Unit content

1 **Understand the principles of editorial design**
   
   **Principles:** typography eg type size, type style, fonts, line length, line feed, headlines, subheadings, initial caps, inter-character space, word space, justification, alignments, hyphenation; layout eg paragraph breaks, colour, positioning, use of grids, integration of images, illustration, roughs, dummy text layout; conventions; formal elements

2 **Understand methods of representing illustrated text material**
   
   **Craft skills:** design rules and conventions; copyfitting; type specification; reprographic processes
   
   **Representing and rendering:** mark-making eg 2D media (pencil, marker, collage), typographic weights, mass emphasis
   
   **Illustrated text:** imagery eg illustrations, diagrams, photographic imagery, mass text

3 **Be able to produce ideas for page structuring and organisation**
   
   **Structuring:** conventions eg page sizes, gutters, constructing and breaking, grids, borders, text, image, positioning, tone and colour, legibility, style
   
   **Aesthetic decisions:** visual eg colour, shape, proportion, balance in creating moods, emphasis, levels of message
   
   **Practical decisions:** constraints eg size, scale, meaning, purpose, reprographic processes

4 **Be able to evaluate design solutions**
   
   **Contexts:** audience eg mass market, specialist consumption; message eg factual, esoteric, journalistic
   
   **Presentation of solutions:** rough working ideas; presentation sheets; final layout
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Understand the principles of editorial design</td>
<td>1.1 Research and evaluate the use of typography in editorial design</td>
</tr>
<tr>
<td></td>
<td>1.2 Analyse conventions of editorial layouts</td>
</tr>
<tr>
<td><strong>LO2</strong> Understand methods of representing illustrated text material</td>
<td>2.1 Produce imaginative and effective representations of illustrative, photographic and graphic imagery within page layouts</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to produce ideas for page structuring and organisation</td>
<td>3.1 Create rough ideas for design solutions using illustrations and mass text</td>
</tr>
<tr>
<td></td>
<td>3.2 Make decisions about designs based on aesthetic and practical considerations</td>
</tr>
<tr>
<td></td>
<td>3.3 Present fully finished effective design solutions</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to evaluate design solutions</td>
<td>4.1 Evaluate the effectiveness of ideas for page structuring in terms of visual effects and creative impact</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate the effectiveness and propose new design solutions in terms of context and communication of meaning.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 41: Words and Images in Graphic Design
  - Unit 47: Factual Writing in Art and Design
- **Level 4:**
  - Unit 11: Design Principles
  - Unit 17: Products, Marketing and Advertising Media
  - Unit 24: Typographic Skills
  - Unit 29: Corporate Identity in Graphic Design
- **Level 5:**
  - Unit 19: Art Direction for Advertising
  - Unit 25: Advanced Typographic Design
  - Unit 26: Typographic Ideas
  - Unit 27: Mass Text Application.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design.

Essential requirements

This unit should be delivered in a combination or design studio and computer suite so that learners can translate ideas in sketchbooks and using craft skills into computer aided designs. Learners will need access to editorial examples and should be encouraged to explore design principles and find relevant examples to illustrate their contextual understanding.

**Employer engagement and vocational contexts**

Delivery of this unit can be supported by seminars and workshops from industry professionals so that learners gain an understanding into the needs of the industry and the level of professionalism required. Externally set briefs, either live or simulated can give learners an insight into the type of work they may encounter in their career. Work placements, off site visits, guest speakers and practical workshops will enhance the vocational delivery of this unit.
### Unit 29: Corporate Identity in Graphic Design

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>L/601/6313</th>
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</thead>
<tbody>
<tr>
<td>Level:</td>
<td>5</td>
</tr>
<tr>
<td>Credit value:</td>
<td>15</td>
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</tbody>
</table>

#### Aim

This unit aims to progress understanding about the underlying social and cultural nature of corporate identity and to develop graphic design skills in its commercial projection.

#### Unit abstract

In this unit learners will gain an understanding of the social, cultural, commercial and historical contexts in which corporate identity has evolved and is currently defined. Learners will also gain practical experience in developing and applying creative and effective solutions through the use of visual methodologies to present a corporate message. Through these activities, learners will develop their understanding of the ways a symbol or logotype can transcend or be limited by cultural, ethical and commercial factors.

#### Learning outcomes

**On successful completion of this unit a learner will:**

1. Understand the historical origins of corporate identity
2. Be able to produce visual images to communicate corporate messages
3. Be able to identify and communicate the core values of an organisation through corporate identity
4. Understand the relationship between corporate identity and graphic design.
Unit content

1 **Understand the historical origins of corporate identity**
   
   Factors affecting corporate identity: eg ethnicity, gender, class, nationality, status, employment, culture, sub culture, social context
   
   Historical origins: eg symbolism, heraldry, religious and tribal utilitarianism, military

2 **Be able to produce visual images to communicate corporate messages**
   
   Visual statements: eg marks, devices, symbols, abstract and literal images
   
   Communication: using a variety of messages; symbolic, semiotics, semantics, corporate core values, mission statements
   
   Corporate message: eg corporate philosophy, values, mission statement, desired image, audience
   
   Problem solving in communicating corporate message: audience perceptions and cultural values versus organisations’ desired image versus designers’ intentions

3 **Be able to identify and communicate the core values of an organisation through corporate identity**
   
   Communication applications: different scenarios, contexts, media, scale, design applications eg advertising and promotional material, packaging, premises, equipment
   
   Corporate identity: expression of internal and external values held by an organisation
   
   Core values: service, innovation, customer satisfaction, mission, desired perceptions

4 **Understand the relationship between corporate identity and graphic design**
   
   In terms of: relevant factors, historical origins, communicating the application of the final corporate message and the aesthetic impact
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1</td>
<td>1.1 Determine and evaluate all the factors affecting corporate identity</td>
</tr>
<tr>
<td>Understand the historical origins of corporate identity</td>
<td>1.2 Explain the historic origins and manifestations of corporate identity</td>
</tr>
<tr>
<td></td>
<td>2.1 Identify the visual statements which can contribute to corporate identity</td>
</tr>
<tr>
<td></td>
<td>2.2 Communicate a variety of corporate messages</td>
</tr>
<tr>
<td>LO2</td>
<td>3.1 Identify and demonstrate how corporate identity is communicated through different applications</td>
</tr>
<tr>
<td>Be able to produce visual images to communicate corporate messages</td>
<td>3.2 Explain how the internal and external values of an organisation are demonstrated</td>
</tr>
<tr>
<td></td>
<td>3.3 Understand and discuss the manifestation of corporate core values</td>
</tr>
<tr>
<td>LO3</td>
<td>4.1 Understand and discuss the factors contributing to the overall effectiveness of corporate identity through graphic design.</td>
</tr>
<tr>
<td>Be able to identify and communicate the core values of an organisation through corporate identity</td>
<td></td>
</tr>
<tr>
<td>LO4</td>
<td></td>
</tr>
<tr>
<td>Understand the relationship between corporate identity and graphic design</td>
<td></td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 5: Contextual Influences in Art and Design

- Level 4:
  - Unit 3: Contextual and Cultural Referencing in Art and Design

- Level 5:
  - Unit 31: Cultural Interpretation in Graphic Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

This unit should be delivered in a design studio where learners have access to a broad range of media and materials for visual communication, with access to specialist resources such as computer suites, photography, moving image, 3D workshops.

Employer engagement and vocational contexts

Live assignments, client briefs, competitions, off-site visits and visiting speakers will all help to strengthen the vocational learning of this unit and prepare learners for the transition into employment.
Unit 30: Visual Communication in Graphic Design

Unit code: D/601/6395
Level: 4
Credit value: 15

• Aim

The aim of this unit is to develop learners’ skills and understanding of how meaning, messages and information can be communicated visually in graphic design products.

• Unit abstract

Learners will explore historical and contemporary graphic work to develop understanding of how visual language is used to communicate with an intended audience, purchaser or user. Tutor-led discussion of others’ use of visual language and analysis of the meanings and methods will be needed to encourage learners to develop and apply analytical skills at a suitable level. Critiques of work and peer review can provide a forum for considering the application of principles to practical work. Learners will apply their skill and understanding of visual language to create work that effectively communicates meaning to an intended audience. Learners will experiment with traditional and digital media in practical investigations which focus on making images in both a literal and abstract sense.

Experimental visual language can take any form suitable to the learners’ chosen area of specialism or interest, e.g., 2D drawing and illustration, CAD, montage, collage, moving image, 3D surfaces and outcomes.

Learners should be encouraged to identify the purpose of their communication, the meaning, message or information they wish to convey and the characteristics of their target audience, purchaser or user. Projects should, where possible, combine the analysis of others’ use of visual language with practical and experimental work. Learners should develop their own personal style and be able to create visually interesting graphic work in a range of styles.

• Learning outcomes

On successful completion of this unit a learner will:

1. Understand the visual communication methods used in graphic design
2. Be able to use experimental visual language to communicate meaning, messages and information
3. Be able to produce visual communication outcomes
4. Be able to evaluate use of visual communication in own graphic design.
Unit content

1 **Understand the visual communication methods used in graphic design**

   Methods: eg composition, experimentation, 2D media, 3D media, computer aided design, moving image, layering, composite, collage, montage, text, imagery
   Approaches: eg 2D, 3D, time-based, stylised, figurative, representational, realistic, explicit, implicit
   Conventions and systems: eg technical drawing, illustrative, use of perspective, colour conventions, universal symbols

2 **Be able to use experimental visual language to communicate meaning, messages and information**

   Visual language: traditional media eg 2D, 3D; digital eg time-based, photography; medium eg mark-making, illustration, mixed-media, drawing style, approach, convention
   Meaning, messages and information: eg semiotics, codes, symbols, signs, forms, textual, visual, implicit, explicit, logos, diagrams, propaganda, photo-journalism, advertising
   Others’ work: eg historical, modern, contemporary, specialist, cross-cultural

3 **Be able to produce visual communication outcomes**

   Visual communication outcomes: eg sketchbook, illustration, story board, narrative image, advertising product, illustrations, photographs, illustrative collage, signs, logos, packaging, books, magazine feature layouts, magazine advertising, poster advertising campaigns, TV advertisements, film and programme titles, 3D artefacts
   Audience, purchaser or user: eg gender, status, function, role, understanding, context

4 **Be able to evaluate use of visual communication in own graphic design**

   Effectiveness: communication eg meaning, messages and information, appropriateness of visual language, audience needs, purchaser or user, aesthetic appearance, audience feedback, consumer feedback, self-evaluation, critique, tutorial
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Understand the visual communication methods used in graphic design</td>
<td>1.1 Research methods used to communicate meaning, messages and information are communicated effectively in graphic design</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate communication methods used in graphic design</td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to use experimental visual language to communicate meaning, messages and information</td>
<td>2.1 Use traditional and digital media to produce experimental visual communication outcomes</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to produce visual communication outcomes</td>
<td>3.1 Produce experimental work showing diverse and creative use of visual language</td>
</tr>
<tr>
<td></td>
<td>3.2 Produce work which effectively communicates meanings</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to evaluate use of visual communication in own graphic design</td>
<td>4.1 Evaluate effective use of visual communication in own work.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 1: Visual Communication in Art and Design
  - Unit 36: Graphic Image Making
  - Unit 44: Narrative Image Making
- Level 5:
  - Unit 8: Ideas in Context
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image.

Essential requirements

This unit can be delivered in a design studio or a clean classroom where learners have access to a broad range of media and materials for visual communication. Delivery can be enhanced by access to specialist resources, eg computer suites, photography, moving image, 3D workshops, so that learners can develop flexible, transferable skills and be able to confidently use visual language to communicate ideas in innovative and creative ways. Learners may benefit from access to photographic studios and equipment to capture and develop imagery for visual communication.

Employer engagement and vocational contexts

Live assignments, client briefs, competitions, off-site visits and visiting speakers will all help to strengthen the vocational learning of this unit and prepare learners for the transition into employment.
**Unit 31: Cultural Interpretation in Graphic Design**

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>F/601/6311</th>
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<tbody>
<tr>
<td>Level:</td>
<td>5</td>
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<tr>
<td>Credit value:</td>
<td>15</td>
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</table>

- **Aim**

This unit aims to develop skills and understanding of the way in which aesthetic, social and cultural values underpin visual communication and their use by commercial visual communication.

- **Unit abstract**

In this unit learners are encouraged to explore the idea that visual communication is often about reconciling personal aesthetic ambitions with wider social, cultural and commercial considerations. Learners are encouraged to produce independent visual material that is free of restraints of a defined communications task, and then adapt the work to perform a communication task.

- **Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand the nature of aesthetically driven visual communication
2. Be able to utilise and manipulate imagery for a communication task
3. Understand the use of commercial visual communication.
Unit content

1 **Understand the nature of aesthetically driven visual communication**

Aesthetics: universal perceptual theories and visual arts practice applied to the formal elements; historical; cultural; manipulation; implied associations; manufactured; natural world

Visual communication: exploiting the potential and characteristics of media and materials; implicit and explicit meanings eg signs, symbols, semiotics, semantics

2 **Be able to utilise and manipulate imagery for a communication task**

Interpretation and adaptation: eg memory, impact, abstract and social meaning, interpretation and achieved meaning

Communication and manipulated message: eg corporate identity, emergence of brand, cultural placement

3 **Understand the use of commercial visual communication**

Commercial visual communications: eg corporate identity, advertising campaigns, packaging, editorial and typographic design

Current use of aesthetic manipulation: form; content; commercial; social; cultural; political; religious contexts

Evaluation: image interpretation; construction eg client, creativity, perceived audience
### Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| **LO1** Understand the nature of aesthetically driven visual communication | 1.1 Carry out research on the theoretical, historical, social and cultural concepts of aesthetics which inform and drive the visual arts  
1.2 Evaluate the potential of media and materials for exploiting implicit and explicit meaning in visual communication |
| **LO2** Be able to utilise and manipulate imagery for a communication task | 2.1 Interpret and adapt the meanings embedded in images  
2.2 Manipulate imagery to convey identified messages |
| **LO3** Understand the use of commercial visual communication | 3.1 Evaluate and discuss the imagery used in commercial visual communications  
3.2 Identify the use of aesthetic preferences in commercial visual communication  
3.3 Understand and evaluate the manipulation of imagery for targeted applications. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 13: Art and Design Specialist Contextual Investigation
- Level 4:
  - Unit 3: Contextual and Cultural Referencing in Art and Design
- Level 5:
  - Unit 23: Communication with Images in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.
Employer engagement and vocational contexts

Learners would benefit from making field trips to museums, galleries, specialist libraries and through investigating commercial sources. A collaborative or commercially related assignment would support the unit.

This unit can be combined with a live brief set by a client relevant to the pathway, to encourage learners to generate ideas with a client or purpose in mind.

Learners should be encouraged to collaborate with their selected industry, either through work shadowing, interviews or a period of work placement. The following organisations may also be helpful.

- Creative and Cultural Skills (www.ccskills.org.uk), the Sector Skills Council for design, crafts and visual arts, has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
- Skillset (www.skillset.org) is the Sector Skills Council for careers in interactive media, photography, fashion and textiles.

The following organisations may also be helpful:

- Images online (www.imagesonline) – Image and photography resources
- The Image File (www.theimagefile.com) – Image and photography resources
- Association of Illustrators (www.theaoi.com) – Illustration information and resources for commissioners and practitioners
Unit 32: Packaging in Graphic Design

Unit code: Y/601/6248
Level: 5
Credit value: 15

• Aim

This unit aims to develop learners’ skills and understanding in developing solution-focused approaches and innovative and creative packaging outcomes in graphic design.

• Unit abstract

In this unit learners should examine packaging as a starting point for gaining knowledge and confidence in producing new and innovative packaging solutions. Consideration of practical, aesthetic and environmental issues should be combined with awareness of the needs of current technology in packaging manufacturing. Understanding of the developments of packaging design and technology should be combined with a creative and practical exploration of materials and processes. The delivery of this unit should concentrate on the fundamental principles of packaging before turning to specific issues related to current practice. The learner needs to realise that packaging is a valid and powerful tool of communication.

Learners should explore and experiment with the origins of packaging (eg leaves to wrap food, grass to bind bundles of wood). Tutor-led examination of natural packaging (eg eggshells, fruit skins, chrysalis) can be used to look at the diversity in the natural and human environment. In researching packaging, consideration will need to be given to its transition from the utilitarian to the promotional.

To keep the learning current, an understanding of contemporary manufacturing technology is essential to ensure learners apply their knowledge to their design work. Where possible, learners should visit suitable companies to gain first-hand experience, backed up with access to trade press, exhibitions and company promotional material.

The final presentation of finished packaging should be assessed in the light of the original intention of the learner.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand the types and different styles of packaging
2. Understand the technology of current packaging manufacturing
3. Be able to produce design solutions to packaging problems
4. Be able to evaluate design solutions.
Unit content

1 Understand the types and different styles of packaging

Packaging: form; construction; function; life-cycle; disposal; materials eg natural, manufactured, recycled, bio-degradable, renewable, properties and characteristics; costs

Development: history eg traditional, modern, packaging in nature, technological developments, consumer needs, product characteristics eg solid, liquid, perishable

Practicalities: function eg containment, protection, information, storage, display, transportation, production, environmental, health and safety, point of sale, presentation, enhancement, visual argument, enticement, appeal, visual/tactile communication, target consumer/user

2 Understand the technology of current packaging manufacturing

Processes: manufacture eg cutting, folding, joining, filling, closing, labelling, handling, health and safety

Technology: tooling eg shrink-wrapping, foil packaging, type/image reproduction, injection moulding, printing, computer aided design, laser cutting, milling

3 Be able to produce design solutions to packaging problems

Design solution: design-brief based; problem solving eg product, market, development, innovation, consumer analysis, visual communication, text and image, material, form

Packaging problem: need eg transportation, point of sale, storage, advertising

Effective: fitness for purpose; cost effectiveness; renewable

4 Be able to evaluate design solutions

Evaluate: effectiveness eg research, materials, marketing, processes, technology, design solution with regards to practicality, effectiveness and creativity, communication, success of design, viability
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand the types and different styles of packaging | 1.1 Research and evaluate different types of packaging processes  
1.2 Collect and evaluate examples of current packaging  
1.3 Analyse current packaging materials in terms of printing, production and construction |
| LO2 Understand the technology of current packaging manufacturing | 2.1 Research and evaluate different packaging manufacturing processes |
| LO3 Be able to produce design solutions to packaging problems | 3.1 Create imaginative prototypes for experimental packaging  
3.2 Demonstrate a creative approach to packaging problems  
3.3 Present finished packaging design outcomes |
| LO4 Be able to evaluate design solutions | 4.1 Evaluate the design solution in terms of practicality, effectiveness and creativity. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 7: Design Methods in Art and Design
  - Unit 42: Design for Advertising
- Level 4:
  - Unit 2: Ideas Generation and Development in Art and Design
  - Unit 17: Products, Marketing and Advertising Media
  - Unit 24: Typographic Skills
- Level 5:
  - Unit 29: Corporate Identity in Graphic Design
  - Unit 101: Exhibition and Retail Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design.

Essential requirements

Learners will need access to computer suites with appropriate design software for creating 3D models of their packaging designs, in conjunction with design resources where they can produce mock-ups and prototypes. Visits to packaging manufacturers are essential if learners are to be able to put their thinking into context. Learners should be able to experience first hand the types of machinery, tooling and possibilities of packaging design on a large scale in order to understand the scope of this industry.

Employer engagement and vocational contexts

Visits to manufacturers and input from professional designers and industry professionals will help learners to gain understanding of the vocational nature of this unit. Live briefs, external projects, visits to factories, packaging trade fairs, competitions, seminars and workshops should be embedded in the delivery of this unit.
Unit 33: Art, Design and Media Practice within the Digital Environment

Unit code: A/601/5397
Level: 5
Credit value: 15

• Aim
This unit will enable learners to explore and work to a commissioned brief within the digital environment.

• Unit abstract
The digital environment has extended the scope of art, design and media practice within commercial and contemporary settings. Practitioners working in digital environments include designers and illustrators working on web-based applications, graphic communications and interactive products and artists exploring the potential offered by digital media. The digital environment also offers potential for practitioners to consider how they can use virtual scenarios or mass communication platforms to highlight their work.

In this unit learners can experiment with sourced or imposed imagery and change or add meaning to what might appear random choices. Sources of imagery are numerous, and should be determined by the scope of the commissioned brief. The management, both creative and practical, of a number of images in a variety of formats is challenging. Learners should manage the creative process from inception to completion, and present a completed outcome to a client. Learners may also reflect on their use of digital software, hardware and techniques employed in meeting the brief.

• Learning outcomes
On successful completion of this unit a learner will:
1. Be able to evaluate industry standard software packages for a specified brief
2. Be able to produce experimental work in the digital environment
3. Be able to use the digital environment to assist in completing a commission
4. Understand own use of industry-standard software packages.
Unit content

1 **Be able to evaluate industry standard software packages for a specified brief**

   Industry-standard software: 2D; image capture; image manipulation; bit mapped; vector based; still image; moving image; 3D; computer modeling; organic construction; 4D; web based; animation; stop motion; presentation

   Technological advances: attitudes; uses; capabilities; key developments; past; present

   Factors: purpose; cost; cross platform; format file eg vector, art, design, image still, moving image, PICT, JPEG, PDF, mov, gif; speed; size; user friendliness; simplicity; stability

   Context: industry applications eg performance, design, entertainment, business, communication

2 **Be able to produce experimental work in the digital environment**

   Access images: selection; source material; inputting; capturing; loading; storing; compressing; grabbing; downloading; sending

   Manipulate images: software eg distortion, emphasis, colour manipulation, levels, hue saturation, contrast, exposure, filters, collage, layering, simulated media techniques, on screen, through print process, messages, realism, surrealism

   Animated images: models eg characters, objects, environments; animation eg web based, intros, objects, timelines

   Experimental work: software tools; applications; colour; manipulation; collage; layering; sizing; combining eg traditional, digital; context; purpose; meaning; personal style; juxtaposition; realism; simulation

3 **Be able to use the digital environment to assist in completing a commission**

   Creative: approach; interpretation; intuition; imagination; methodologies; research; information; communication; ideas

   Outcome: format eg graphics, pattern design, web based, interactive media, 3D design, time-based presentation, installation, performance, illustration, film, animation

   Commission: client expectations; audience requirements; issues eg legal, ethical, copyright; user needs; context; reproduction; access; size; cost; time constraints; communication; technical requirements; format eg web, print; presentation to client
4 Understand own use of industry-standard software packages

Evaluate: planning; intuition; response; technological; communication; content; format; intentions; reaction

Terms: use of industry-standard software; manipulation; imagery used; experimental work; meeting client requirements; experimental work

Creative: opportunities; ideas generation; visuals; approaches eg chance, intuitive, possibilities

Technical considerations: formats; usability eg interface; systems; managing work flow; roles; tasks; specification; choices eg software, hardware
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
<th>The learner can:</th>
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</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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<td></td>
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</tbody>
</table>
| **LO1**  
Be able to evaluate industry standard software packages for a specified brief | 1.1 Analyse technological advances in digital image manipulation and creation software  
1.2 Identify technical factors to be considered when using software for a specified brief | |
| **LO2**  
Be able to produce experimental work in the digital environment | 2.1 Explore sources when accessing and manipulating images  
2.2 Develop digital images that show experimentation within the digital environment | |
| **LO3**  
Be able to use the digital environment to assist in completing a commission | 3.1 Analyse brief to determine potential for image manipulation  
3.2 Demonstrate a creative approach to interpreting a commission  
3.2 Present outcomes that fulfil the brief | |
| **LO4**  
Understand own use of industry-standard software packages | 4.1 Evaluate own technical use of industry-standard software packages and propose improvements  
4.2 Evaluate experimental work in terms of creativity. | |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 82: Computing Fundamentals
  - Unit 86: Digital Media in Art and Design
  - Unit 84: 2D, 3D and Time-based Digital Applications
- Level 5:
  - Unit 64: Interactive Media Web Authoring
  - Unit 65: Animation Techniques for Interactivity in Art and Design
  - Unit 70: Computer Interface Design Principles
  - Unit 125: Fine Art Digital Applications.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.
Essential requirements

Tutors should demonstrate mixing drawn, painted and crafted work with photography, animation or other images to encourage learners to start using the technology to the full. Discussions on the history and tradition of image manipulation, influences on contemporary practice, ways that practitioners use image manipulation to communicate effectively and creatively, and the impact of the digital environment on personal style should be led by the tutor.

Comparing and experimenting with computer-based and print-based image manipulation will provide a practical means to identify the advantages and disadvantages of working in a digital environment, compared with other media. Tutors should give learners opportunities to explore 2D, 3D and time-based digital environments within the course of this unit. Tutors will also need to ensure that learners are given opportunities to negotiate and undertake a brief with a client. Adequate access to relevant computer hardware and software, scanners, image banks and high-quality printers is essential.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’, for example to support the vocational content of the unit and programme.
Unit 34: Management of the Design and Production Process

Unit code: K/601/5394
Level: 5
Credit value: 15

- **Aim**

The aim of this unit is to provide learners with the knowledge and understanding of the complete design and production process.

- **Unit abstract**

In this unit, learners will understand how to produce creative solutions to design and communication projects and how to prepare work for presentation to a client, as well as for production. This unit builds on a selection of skills achieved in previous units. These skills will combine and interrelate giving an experience of the total design to production process and how it is managed effectively. This unit should be undertaken by learners working in groups, which will also develop essential communication and team building skills. Identifying the strengths that others may bring, listening to suggestions and giving these the same consideration as more formal and personal contributions are mature skills developed through experience. Group dynamics and the conduct required to encourage full participation from all will be a key aspect of this unit.

Learners should be guided towards understanding how a balance is essential between the best that can be produced and constraints such as time, money, materials, production, delivery, logistics and technical expertise. Applying strategies within achievable deadlines and developing appropriate degrees of autonomy in the team are qualities which should be encouraged. Tutors should have a good knowledge of the group undertaking this unit so that they can ensure that appropriate levels of expectation are placed upon individuals. It may also be appropriate for the tutor to influence the construction of teams so that a diverse, but supportive dialogue takes place within the group.

Learners should prepare professional, creative and written project briefs accompanied by a production schedule. Interpersonal skills, confidence and competence with oral presentation should be encouraged. The evidence of an appropriate level of attainment should be evaluated through observation of individual, group and team activities such as formal minutes at meetings and team feedback sessions.

Learners should be encouraged to seek collaboration with the creative industries for this unit and to produce a final solution to professional standards.
• Learning outcomes

**On successful completion of this unit a learner will:**

1. Be able to produce solutions using visual and communication skills
2. Be able to prepare a project and work to a realistic schedule
3. Be able to work in a team and manage the production process
4. Understand how to develop the creative production process.
Unit content

1 Be able to produce solutions using visual and communication skills

Communication: ideas eg initiate, discuss, debate, argue, present, questions, reconcile, clarify, listen, arbitrate; methods eg verbal, screen-based, PowerPoint, storyboards, posters, handouts, scripts, abstracts

Creative skills: eg originality, problem solving, experimentation, fitness for purpose, convention, innovation

2 Be able to prepare a project and work to a realistic schedule

Scheduling: eg planning, designing, production, delegation, time keeping, deadlines

Records: eg plans, schedules, minutes, progress reports, diaries, estimates, research, analysis, reviews

3 Be able to work in a team and manage the production process

Teamwork: eg selecting, evaluating eg strengths, weaknesses, skills, performance, behaviour eg criticism, participation, contribution, reluctance, dominance, listening, talking, dealing with change, equal workloads

Organise others: constraints eg time, quality, cost, customer, deadlines, encouragement eg autonomy, creativity, inclusiveness, clarifying goals, ground rules, scheduling

Production process: eg scheduling, task allocation, monitoring, strategies, costing, estimates, resources, technology, integration, fitness for purpose

4 Understand how to improve the creative production processes

In terms of: creativity; communication skills eg presentation, verbal, visual, written; organisation; motivation of; team; individuals; fitness for purpose
## Learning outcomes and assessment criteria

| Learning outcomes | Assessment criteria for pass
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1 Be able to produce solutions using visual and communication skills</td>
<td>1.1 Identify and analyse problems and evaluate design ideas to produce creative solutions</td>
</tr>
<tr>
<td></td>
<td>1.2 Apply creative skills within a time-constrained production process</td>
</tr>
<tr>
<td>LO2 Be able to prepare a project and work to a realistic schedule</td>
<td>2.1 Produce a professional production and progress schedule using appropriate methods and software</td>
</tr>
<tr>
<td></td>
<td>2.2 Work professionally to a schedule, taking damage limitation action where appropriate</td>
</tr>
<tr>
<td>LO3 Be able to work in a team and manage the production process</td>
<td>3.1 Work professionally within a team situation preparing and completing work for production</td>
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<td>3.2 Organise self and others for specific creative tasks, collating and incorporating ideas into the production process</td>
</tr>
<tr>
<td>LO4 Understand how to improve the creative production process</td>
<td>4.1 Evaluate team and self management in the preparation of work for production and propose improvements</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate team and own motivation and efficacy in the design and production process.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 10: Design Method
- Level 5:
  - Unit 4 Professional Practice in Art and Design
  - Unit 7: Professional Studies in Art and Design
  - Unit 14: Business Practice in Art and Design.

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements
Space will be required for teams to set up a ‘creative studio’ area for team working and team meetings. Access to computers and presentation software and materials should also be available.

Employer engagement and vocational contexts
All teams should be encouraged to visit creative practitioners, studios and workshops to see design and production processes in action. If it is possible, the projects undertaken should be in collaboration with industry. If this is not viable, then the projects should have a well researched and realistic focus in a commercial context.
Unit 35: Design Exploration in Textiles

Unit code: J/601/6391
Level: 4
Credit value: 15

• Aim

The aim of this unit is to introduce learners to the creative exploration and application techniques which support the generation of successful textile designs.

• Unit abstract

During this unit learners will engage with the theoretical and practical techniques for developing critical and analytical approaches to the research and sourcing of ideas for design development. Learners will also be encouraged to investigate the broader contexts in which the textile designer operates.

This unit should be delivered as an integrative assignment which will offer a framework for encouraging learners to be both experimental and investigative. The unit should include tutor-led formal lectures and demonstrations, as well as presentations and critiques. A regular system of tutorials should be established to provide ongoing guidance and feedback. Learners should be encouraged to research a personalised range of creative sources in order to develop an understanding of the broader contexts in which they work. This should include the analysis and evaluation of their own ideas and those of others through annotating and presenting their work within the group.

Through the exploration of usual and unusual referencing both historical and contemporary, learners will develop an understanding of a broader visual language. Learners should be encouraged to seek out inspiration and unique ideas from a number of areas, including the media, experimenting with technology, visiting galleries, museums and exhibitions. They should also be encouraged to refer to the broader areas of design, for example, fine art, architecture, 3D design, graphics, animation, film, fashion and photography. Learners should also seek out inspiration from global issues affecting creativity, such as environmental, social, political and ecological factors. Evidence of work for this unit should be developed through an integrative assignment approach, with, for example, Design Application in Textiles or Techniques and Processes in Textiles. Work will normally be presented to tutors and peers in the form of sketchbooks, ideas books, development sheets and mood boards. These should demonstrate a variety of theoretical and practical approaches, such as use of media, application of technology, innovative approaches and personal interpretations. Learners will communicate and evaluate their ideas through seminars, group and individual tutorials and a final critique.
• Learning outcomes

On successful completion of this unit a learner will:
1  Be able to explore the principles of textile design through experimentation with materials and media
2  Be able to analyse research sources and apply findings to creative textile design
3  Be able to apply formal design elements to the creative development process
4  Be able to apply and evaluate trend influences in contemporary textile design.
Unit content

1 Be able to explore the principles of textile design through experimentation with materials and media

Materials and media: eg pigments, pastels, inks, dyes, papers, chalks, acrylics; pencils, painting, printing, dipping, shredding, fringing, fraying, threads, fabrics; woven materials eg cotton, linen, viscose, silk, wool, nylon; non-woven materials eg knitted, felted, leather, rubber, fake fur

Experimental techniques: eg mark making, papermaking, collage, montage, wax resist, batik, stitching, felting, spraying, pleating, folding, smocking, tie-dye, bleaching, burning, cut-work, devore, wood block; non-traditional materials eg plastics, braids, wire, straw, clay, string, beads, feathers, sequins, elastic

Methods: eg knitting needles, knitting machines, hand looms, power looms, spinning, silk screen, hand printing, stencils, acetates, heat transfer, hand painting, hand embroidery, machine embroidery, tapestry, quilting

Investigate: exploration of eg colour; decoration; surface texture; techniques; combinations; applications; finishes; concepts eg brain storming, debating, research, developing ideas, comparing, analysing; properties eg opacity, translucency, weight, texture, shiny, matt, strength, flammability, elasticity

2 Be able to analyse research sources and apply findings to creative textile design

Sources: eg observational drawing; still life; books; trade journals; trade shows, exhibitions; galleries, films, artists, designers, architecture, interiors, places, people, memories; dreams; patterns eg decorative, organic, natural, synthetic, multicultural, historical, contemporary, popular culture, global influences, landscapes, ethnic artefacts

Identifying: relevant sources; relative to brief; researching; visual recording eg sketchbooks, annotation; ideas sheets; photographs, digital applications, collected items, written inspirations; collages, maquettes, 3D installations, models

3 Be able to apply formal design elements to the creative development process

Formal design elements: colour theory; texture; scale; proportion; composition; repeat patterns; movement; colour psychology

Application: to create movement; space; discord; subtlety; energy; balance; imbalance; impact; uniqueness
4 Be able to apply and evaluate trend influences in contemporary textile design

Prediction: trends eg colour, fibre, fabrics, fashion, lifestyle, seasonal changes; understanding eg market, customer, end use, long term, short term, seasonal, economy, global factors, social factors; influences eg haute couture, street fashion, youth culture

Present: select; appropriate methods, techniques, equipment; eg screen based, mounted, installations, framed, 3D, hangings

Evaluate: review; ideas, working practices, methods, applications, end results, selected subjects, intentions, purpose, function, aesthetic qualities
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
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<tr>
<td>LO1 Be able to explore the principles of textile design through experimentation</td>
<td>1.1 Experiment with and manipulate a range of materials and media</td>
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<tr>
<td>with materials and media</td>
<td>1.2 Research and record the exploration of colour, texture and pattern using a range of media</td>
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<td>1.3 Produce an individual and creative response using colour, texture and pattern</td>
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<tr>
<td>LO2 Be able to analyse research sources and apply findings to creative textile</td>
<td>2.1 Analyse information from primary and secondary sources and present it in a visually</td>
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<tr>
<td>design</td>
<td>stimulating manner</td>
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<td>2.2 Communicate the relevance of source material to intended outcomes through a body of</td>
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<td></td>
<td>work</td>
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<td></td>
<td>2.3 Synthesise and present source information and developmental work</td>
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<tr>
<td>LO3 Be able to apply formal design elements to the creative development process</td>
<td>3.1 Analyse and understand formal design elements in own and others' work</td>
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<td>3.2 Explore and apply formal design elements to own work to produce innovative and individual effects</td>
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<tr>
<td>LO4 Be able to apply and evaluate trend influences in contemporary textile</td>
<td>4.1 Research, assimilate and record influential trend information from secondary sources</td>
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<tr>
<td>design</td>
<td>4.2 Present a body of work demonstrating creative synthesis of research and experimentation</td>
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<td>4.3 Critically evaluate final body of work and the relationship to trends in contemporary</td>
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<tr>
<td></td>
<td>textiles.</td>
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</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 92: Printed Textiles for Fashion and Clothing
  - Unit 100: Woven Textiles
  - Unit 101: Knitted Textiles
- **Level 4:**
  - Unit 36: Design Application in Textiles
  - Unit 37: Techniques and Processes in Textiles
  - Unit 45: Design Exploration in Fashion
- **Level 5:**
  - Unit 38: Design Research in Textiles.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Learners will need access to broad-based research facilities including specialist trade journals and periodicals. They should also be encouraged to visit galleries, museums, exhibitions, craft centres, fabric wholesalers and retailers and other stimulating generic design sources.
Employer engagement and vocational contexts

As this unit is primarily research centred, concentrating on experimentation and personal design development, employer engagement will be minimal. Where appropriate, learners may want to make contact with textile design practitioners or producers to find out how new seasons’ designs are developed. The main area of industrial contact will be with trend prediction companies and forecasting agencies which can be sourced through the web and with professional bodies such as the Textile Institute and the International Colour Authority. If possible, it would be very beneficial to visit one of the major textiles trade fairs, such as Premier Vision in Paris, to experience the international textiles industry first hand and to make contact with international designers, producers, suppliers and trend forecasters.

- The Textile Institute (www.texi.org) disseminates information on the textiles, clothing and footwear industries.
- The International Colour Authority (www.theinternationalcolourauthority.org) is the premier body for trend and colour predictions for the coming season.
Unit 36: Design Application in Textiles

Unit code: M/601/6241
Level: 4
Credit value: 15

• Aim
The aim of this unit is to enable learners to demonstrate their knowledge and skills in textile design through the creative application of original ideas, techniques and processes.

• Unit abstract
This unit focuses on encouraging learners to develop their creative potential within the parameters of a directed project. Learners will be encouraged to research, analyse and evaluate possible creative solutions through conceptual and technical experimentation. This unit should extend the creative elements of textile design through progressing and relating knowledge of textile techniques, processes and practicalities to innovation and originality. The unit will also introduce time management and project management skills, as learners will be expected to work through the design and sampling process from concept to finished sample range.

Learners should be encouraged to extend their creative directions and intentions and to take risks with ideas, experiments and prototypes. Original solutions should be encouraged within the natural constraints of the project brief. Evidence for this unit should be developed through an assignment which is integrated with other units, for example Design Exploration in Textiles and Techniques and Processes in Textiles.

Learners should present their work in a format which suits the form and nature of the product. Samples need to be executed and displayed professionally or lengths appropriately hung. The complexity of the technique should not be the main focus of assessment but rather how effectively techniques and methods can be manipulated to demonstrate design flair and understanding. Projects for this unit will normally be tutor led, but the four learning outcomes do not necessarily have to be met within the framework of just one project. Smaller projects that focus on individual outcomes may be linked to cover the unit. The main focus of the unit is to encourage originality and experimentation with ideas, techniques, materials and media in order to develop individual direction and style, whilst at the same time working within the constraints of a time-based project brief.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to research and synthesise diverse creative source material for a specific theme or product
2. Understand the application of textile materials, techniques and processes
3. Be able to evaluate a range of possible outcomes and plan design solutions
4. Be able to develop and produce final outcomes to a set brief and timescale.
Unit content

1. Be able to research and synthesise diverse creative source material for a specific theme or product

Source material: eg books, periodicals, trade journals, web searches, observational drawing, textiles, photography, galleries, exhibitions, museums, artists, designers; trend forecasters; films, music, dance, theatre; global influences eg ethnic fabrics, costume, landscapes, climate, ecological, environmental, political, social, cultural

Trends: eg colour, styles, design, season, gender, occasion, purpose, target customer, consumer opinion

2. Understand the application of textile materials, techniques and processes

Visual studies: recording eg drawing, painting, photography, sketch books, maquettes, collage, digital imaging, story boards, mood boards

Experimentation: eg technical tests, paper making, felting, appliqué, patchwork, cutwork, fraying, pleating, stitching, gathering, smocking, photo transfer, screen printing; materials eg plastics, rubber, wire, feather, ribbons, paper, recycled; design principles eg scale, proportion, colour, texture, repeat pattern

Techniques and processes: fibre types eg synthetic, man made, cotton, acrylic, viscose, linen, silk, wool, nylon; colouring methods; manufacturing methods; qualities; components eg chemical properties, heat application, setting, fixing

3. Be able to evaluate a range of possible outcomes and plan design solutions

Target market: eg age range, disposable income, spending patterns, methods of payment; outlet types eg wholesale, retail, online, direct sales, mail order

Time management: forward planning; checking; monitoring; revising; trouble shooting; factors eg previous experience, enquiry, questioning, taking advice, successes, compromising, rethinking, pacing, making allowances

Resource availability: eg space, materials, equipment, support, expertise, assistance, time

Individual outcomes: eg design samples, fabric lengths, 3D models, fine art pieces, hangings, accessories, garments, displays

4. Be able to develop and produce final outcomes to a set brief and timescale

Equipment and techniques: machinery eg sewing, weaving, knitting, printing, macrame, pressing, heat transfer, embroidery; techniques eg manipulation of fabrics, trimming, fibres, surface treatments, hand knitting, crochet, braiding, tablet weaving, painting, deconstructing, burning, waxing

Final outcome: manual skills; professional standards eg finish, neatness, presentation, mounting, display, aesthetic quality, efficiency, time management; presentation support eg communication skills
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tbody>
</table>
| **LO1** Be able to research and synthesise diverse creative source material for a specific theme or product | 1.1 Research and evaluate data on future trends and influences relative to a specified project  
1.2 Present and debate research effectively |
| **LO2** Understand the application of textile materials, techniques and processes | 2.1 Use research to develop creative ideas within the parameters of available techniques and processes  
2.2 Develop and effectively communicate a range of creative design ideas |
| **LO3** Be able to evaluate a range of possible outcomes and plan design solutions | 3.1 Determine workable creative solutions through critical evaluation and forward planning  
3.2 Plan an effective timescale and sequence for all components of a project from concept to presentation and marketing |
| **LO4** Be able to develop and produce final outcomes to a set brief and timescale | 4.1 Demonstrate skill and innovation with materials, equipment, techniques and processes  
4.2 Professionally present final outcome to the required deadline |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 100: Woven Textiles
  - Unit 101: Knitted Textiles
  - Unit 102: Embroidered Textiles

- **Level 4:**
  - Unit 35: Design Exploration in Textiles
  - Unit 60: Fashion and Textiles Materials Understanding

- **Level 5:**
  - Unit 39: Textile Collection Realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.
Essential requirements

Access to a range of textile materials such as fibres, dyes, yarns, threads, fabrics and pigments is essential. Equipment should be appropriate to the specialist textile discipline and a minimum requirement should include:

- **dyeing**: dye baths, boilers, steamers, hydro extractor
- **weaving**: hand looms, warping frames, reed hooks, shuttles
- **knitting**: domestic flat bed machines with a range of gauges, including single and double bed; machines with jacquard capability
- **surface pattern**: print tables, silk screens, squeegees, backing cloths, dye-mixing facilities
- **embroidery**: machines for appliqué, quilting, smocking, tucking, binding
- **garment making**: machines for sewing, overlocking, pressing, binding, steaming
- **studio space**: for drawing, developing designs and presentations.

Employer engagement and vocational contexts

As this unit is primarily research centred, concentrating on the experimentation and application of personal design ideas, employer engagement will be minimal. Learners will need to contact trend prediction companies and forecasting agencies which can be sourced through the web. Learners interested in technological advances in textiles, trimmings and materials should be encouraged to contact manufactures in order to obtain sample lengths and technical data.

- The Textile Institute ([www.texi.org](http://www.texi.org)) disseminates information on the textiles, clothing and footwear industries
- The International Colour Authority ([www.theinternationalcolourauthority.org](http://www.theinternationalcolourauthority.org)) the premier body for trend and colour predictions for the coming season.
Unit 37: Techniques and Processes in Textiles

Unit code: L/601/6540
Level: 4
Credit value: 15

- **Aim**

This unit aims to develop learners’ understanding of the function and operation of textile equipment and processes and to develop skills in creating printed, woven, knitted and embroidered textiles.

- **Unit abstract**

This unit is designed to introduce and develop technical skills and practical application of the techniques used to produce sample fabrics in printed, knitted, woven, embroidered and combined media textiles. The unit will provide opportunities for learners to develop practical skills and understanding and to produce personal design solutions through linked units such as Design Exploration in Textiles, Design Application in Textiles and Design Research in Textiles. Learners should be encouraged to practise techniques and processes introduced in this unit to develop their technical skills and understanding of textile production methods.

Through experimentation with ideas and technology, learners will be able to apply acquired knowledge to help them achieve the desired outcomes in their future work. This unit will enable learners to evaluate the technical and creative potential of different technologies and processes and apply these to their own interpretations. Learners should be encouraged to accurately record the techniques and processes used in order to build up a resource from which to develop further skills.

Learners will be expected to take an increasingly experimental approach, developing work from the other linked units. Tutor-led lectures and demonstrations should be supported by practical workshop activities as well as individual and group tutorials. This unit will also demonstrate how these basic technologies can be combined to produce innovative alternative textiles, using non-conventional methods and materials. Learners will generate evidence for assessment through their selected area of interest, and particularly by applying their skills and understanding from this unit to design ideas developed in the other linked units. Work for this unit will need to be presented in the form of technical notes and samples. Further evidence for Learning Outcome 2 should be generated through project work linked with Design Application in Textiles.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to produce samples for original designs using selected textile equipment
2. Be able to develop and extend working processes in the interpretation of textile designs
3. Be able to apply a theoretical and practical knowledge of textile properties and techniques.
4. Understand the technical and creative potential of technologies and processes used in textile design developments.
Unit content

1. **Be able to produce samples for original designs using selected textile equipment**

   **Print**: eg printing screens, mesh gauges, printing blocks, use of squeegee, registration stops, heat transfer beds, steaming, fixing

   **Weave**: eg four and eight shaft table looms; component parts eg warp let-off mechanisms, weft insertion methods, warp lifting mechanisms, shafts, healds, pirn winding, design programming

   **Knit**: eg domestic knitting machines; component parts eg yarn feeding, tensioning, stitch programming, knit, miss, tuck; cam systems eg needle action, loop formation, take-down mechanisms, programming designs; industrial machines eg types and functions, flat bed, circular, ribbers, cut and sew

   **Sewing machines**: eg industrial and domestic; component parts eg yarn threading, tensioning, stitch formation, cloth feeding systems, needles, presser feet; stitch width, stitch length, controls, computerised additions, additional machinery eg overlock, button hole, pressing, steaming; binding, blind hemming

   **Yarn winders**: eg hank to cone, cone to hank, hand wind, mechanical, electrical

2. **Be able to develop and extend working processes in the interpretation of textile designs**

   **Printed textiles**: design repeats eg straight match, half drop, brick, repeat matching, design cut through, colour separation, Kodatrace preparation, screen exposure, fabric dyeing, finishing, setting, digital applications

   **Woven textiles**: eg yarn dyeing, yarn folding, plying, winding, sizing, warping, drafting, drawing in, pirn winding

   **Knitted textiles**: eg yarn dyeing, yarn folding, plying, twisting, waxing, spinning, carding

   **Embroidered textiles**: fabric preparation eg printing, painting, dyeing, felting, smocking, tucking, quilting, sewing

3. **Be able to apply a theoretical and practical knowledge of textile properties and techniques**

   **Print**: eg colour repeats, pigment printing, reactive dyes, stencilling, placement prints

   **Weave**: single cloth structures eg plain, twill, matt, satin, sateen; simple drafts; peg plans; yarn counts; cloth calculations

   **Knit**: single and double bed structures eg plain, rib, tuck, colour patterning, jacquard, lace stitch, open work

   **Embroidery**: eg felting, free-hand, machine applications, techniques, appliqué, mixed media

   **Interrelationships**: between theory and practice; awareness of parameters, restrictions, costs, end product, purpose
4 Understand the technical and creative potential of technologies and processes used in textile design developments

Function: purpose eg fashion, clothing, accessories, upholstery, soft furnishings, decorative panels, fine art outcomes

Analysis: fitness for purpose; production methods; design concepts; success eg of materials, media, concepts, technologies, processes; refine solutions eg review intentions
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tbody>
</table>
| **LO1** Be able to produce samples for original designs using selected textile equipment | 1.1 Select and use textile machinery and equipment creatively and safely  
1.2 Understand the purpose and functions of textile equipment and demonstrate this in interpretation of own work |
| **LO2** Be able to develop and extend working processes in the interpretation of textile designs | 2.1 Produce experimental samples in the development of original designs  
2.2 Apply innovation to design and manufacturing processes which extend individual concepts and skills |
| **LO3** Be able to demonstrate a theoretical and practical knowledge of textile techniques | 3.1 Interpret, extend and annotate technical and theoretical information for future application  
3.2 Apply theory and understanding to the production of textile samples |
| **LO4** Understand the technical and creative potential of processes used in textile design development | 4.1 Analyse and evaluate the technical and creative potential of different technologies and processes  
4.2 Evaluate the processes and applications used to produce end results. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 107: Exploring Specialist Textile Techniques
  - Unit 108: Extending Specialist Textile Techniques
- Level 4:
  - Unit 35: Design Exploration in Textiles
  - Unit 36: Design Application in Textiles
- Level 5:
  - Unit 38: Design Research in Textiles.

Links to National Occupational Standards

- Skillset-UK Sector Skills Council
  - Textiles and Material Design.

Essential requirements

Access to a range of textile materials including fibres, dyes, yarns, threads, fabrics and pigments is essential. Equipment must be appropriate to the four specialist textile disciplines (print, weave, knit, embroidery) and a minimum requirement should include:

- **dyeing**: dye baths, boilers, steamers, hydro extractor
- **weaving**: hand looms, warping frames, reed hooks, shuttles
- **knitting**: domestic flat bed machines with a range of gauges, including single and double bed; machines with jacquard capability
- **surface pattern**: print tables, silk screens, squeegees, backing cloths, dye-mixing facilities
- **embroidery**: machines for appliqué, quilting, smocking, tucking, binding
- **garment making**: machines for sewing, overlocking, pressing, binding, steaming
- **studio space**: for drawing, developing designs and presentations
Employer engagement and vocational contexts

Visits to textile manufacturers should be encouraged for this unit, in order that learners can view equipment and machinery in action in a commercial context and to give them a sense of the industry. Visiting specialists from industry may be supportive in demonstrating advanced techniques on the workroom equipment. Contact with fibre and yarn suppliers should also be encouraged in order that learners can begin to build up library of fabric and yarn references.

- The Textile Institute (www.texi.org) disseminates information on the textiles, clothing and footwear industries
- The British Wool Marketing Board (www.britishwool.org.uk) operates a central information and marketing service for fleece products
Unit 38: Design Research in Textiles

Unit code: Y/601/6234
Level: 5
Credit value: 15

Aim

The aim of this unit is to develop and extend learners research skills and creative exploratory processes in order to produce original outcomes for a self initiated project.

Unit abstract

This unit will encourage the synthesis of ideas from both practical and conceptual sources. Learners will be encouraged to investigate and apply a broad range of exploratory ideas, techniques and methods to a commercially focused project.

This unit encourages learners to develop initiatives and perception through personal expression and enquiry. Learners will be expected to utilise their progress to develop creative potential. Critical investigation and self-directed learning are the approaches which will allow learners to develop design and visual skills throughout the unit. Establishing individuality in generating concepts, developing textile design ideas and creating a personal visual language is fundamental to successfully achieving the outcomes and assessment criteria of this unit. Learners will be required to develop a creative uniqueness through a self-initiated project which should be linked to a commercial enterprise.

This unit could be undertaken in support of Textile Collection Realisation. Learners will be expected to identify a potential client for their brief, through sponsorship, a joint project or a competition. Learners should be encouraged to work independently, identifying and researching a wide range of sources in both written and visual formats. The unit will develop creative, critical and intellectual skills in relation to textile design and visual imaging. It will extend previously learned skills in forecasting theory and historical and cultural analysis. Learners should present their work in an appropriate and individual format, using a range of communication methods. The unit will also develop commercial understanding of textile design in relation to the global textiles industry, through engagement with a commercial partner or sponsor. It will extend upon previously learned skills in utilising and adapting market trends and client needs.

The programme should incorporate a series of tutorials, seminars and critiques. Learners will be expected to engage confidently and independently with a broad cross section of specialist tutors, technical support staff, practitioners and their peers throughout the unit to discuss and evaluate their ideas.
Learning outcomes

On successful completion of this unit a learner will:

1. Know how to research and analyse client needs and market trends to inform textile solutions
2. Be able to research and adapt original ideas and concepts to trend forecasts in a commercial context
3. Know how to synthesise, apply and evaluate information from a diverse range of sources
4. Be able to generate a personal style in creative visual communication and textile realisation.
Unit content

1. Know how to research and analyse client needs and market trends to inform textile solutions

   Markets: eg market levels, age groups, gender, lifestyles, pricing, environment, home, export, competition, consumer behaviour; categories eg furnishing, decorative, men's wear, women's wear, children's wear; specialist eg waterproof, stretch, active wear, lingerie, corporate, promotional, protective

   Client needs: influences on; design brief; design parameters eg fibre content, cloth construction, colour, repeat size, finishing treatments, ethical views, costs; life span eg one season, long term, specialist project

2. Be able to research and adapt original ideas and concepts to trend forecasts in a commercial context

   Primary sourcing: eg textile trade fairs, practitioners, crafts people, fibre merchants, fabric manufacturers, textile wholesalers, retailers, trimmings suppliers; events eg exhibitions, galleries, theatre, museums, artists, designers

   Secondary sourcing: eg magazines, journals, market intelligence, trend forecasters; professional bodies eg The British Wool Board, Textile Institute, International Textiles, Cotton Council, The Colour Authority; cultural influences eg global lifestyles, historical influences; current issues eg environmental, ecological, social, political economic

   Application: evaluating eg sector, information, time scale, trends, client; assimilating results eg sketchbooks, drawings, photographs, digital applications, illustrations, mood boards, collage, montage, hangings

3. Know how to synthesise, apply and evaluate information from a diverse range of sources

   Techniques: eg fabric treatments, manipulations, printing, weaving, dyeing, embroidery, conventional, unconventional applications, experimental investigation, thoughtful application

   Sourcing ideas: eg past experiences, personal reflections, brainstorming, debating, discussing, abstracting, revisiting, new directions, fresh approaches, unique concepts, materials experimentation, media application

   Evaluate: personal response to eg brief, client, research, ideas, analysis, synthesis, application, strengths, weaknesses, critical review, success, failure, preferences, fitness for purpose, function
4 Be able to generate a personal style in creative visual communication and textile realisation

Visual communication: materials and media eg colour, drawing, painting, collage, photography, digital techniques, printing, traditional, non-traditional, styles, representation, presentation

Formats: eg 2D, 3D mood boards, working drawings, photographs, development sheets, samples, mobiles, maquettes, hangings, installations, large scale, small scale; venue eg exhibition, outdoors, shopping mall, library, corporate building, transport, poster, bill boards, web page, blog, vlog

Personal style: eg uniqueness, recognisable, professional, personal, appropriate
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
</table>
| **LO1** Know how to research and analyse client needs and market trends to inform textile solutions | 1.1 Identify, research and analyse client needs and market trends  
1.2 Work to identified requirements of clients’ brief and market sector trends  
1.3 Communicate effectively an understanding of external factors influencing textile designers |
| **LO2** Be able to research and adapt original ideas and concepts to trend forecasts in a commercial context | 2.1 Research, evaluate and apply information from a variety of sources in relation to a self-initiated design project  
2.2 Communicate understanding of trend forecasts through adaptation and application of ideas to own original concepts |
| **LO3** Know how to synthesise, apply and evaluate information from a diverse range of sources | 3.1 Research and evaluate a broad range of design sources to support a self-initiated project  
3.2 Synthesise and apply written and visual information to inform an innovative and creative design solution |
| **LO4** Be able to generate a personal style in creative visual communication and textile realisation | 4.1 Demonstrate innovation in exploring and applying materials and media to produce original and creative ideas  
4.2 Select and apply a variety of visual communication formats to communicate specified project requirements  
4.3 Demonstrate a confident, individual style in communicating visual ideas to others. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 35: Design Exploration in Textiles
  - Unit 36: Design Application in Textiles
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 39: Textile Collection Realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
  - Crafts
- Skillset-UK Sector Skills Council
  - Textiles and Material Design.

Essential requirements

Learners will require access to individually focused research sources, for example specialist trade journals, books, databases and websites. Software and appropriate technology for image manipulation and digital design development should also be available.

Learners will require studio and workshop facilities for experimental investigation and applications. This should include facilities and equipment for drawing, painting, photography, printing, dyeing, weaving, knitting, embroidery and sewing. Space for individual presentations should be provided, as required.
Employer engagement and vocational contexts

Learners will be instigating their own self-initiated project for this unit, which should be put in a commercial context. Therefore it is essential that individual contacts be made with practitioners, producers, suppliers, retailers and wholesalers for the purpose of collaboration, sponsorship or endorsement. It would also be beneficial if learners could take part in national and international competitions or visit a textiles trade fair such as Premier Vision in Paris or Pitti Filati in Florence in order to make contacts within the global textiles industry.

- The Textile Institute (www.texi.org) disseminates information on the textiles, clothing and footwear industries.
- The International Colour Authority (www.internationalcolourauthority.org) the premier body for trend and colour predictions for the coming season.
- The British Wool Marketing Board (www.britishwool.org.uk) operates a central information and marketing service for fleece products.
Unit 39: Textile Collection Realisation

Unit code: J/601/6228
Level: 5
Credit value: 15

• Aim

The aim of this unit is to give learners the opportunity to consolidate their technical and creative skills, knowledge and understanding and apply these to the design, manufacture and presentation of a textile collection.

• Unit abstract

The unit will enable learners to select and use a range of textile media and techniques to realise personal ideas and concepts as well as work with a commercial focus. Learners should demonstrate clear design ‘vision’ and an innovative and creative application of skills in their work. The technical ability and presentation skills should approach a professional level.

Learners should carry out research with a personal and original focus and include an awareness of current trends in their particular field. The market research aspect of the unit could be delivered through learner-directed research, sponsored projects or interaction with current practitioners.

This unit demands the application of a variety of professional skills and therefore could be linked with other units in smaller assignments. It could be delivered independently but could benefit from links with other units which would allow larger blocks of time to be devoted to synthesising design skills. Learners should have recent experience of visual recording and experimentation, textile technical knowledge and its application and the design process from initial concept to final realisation. They are expected to produce an innovative final collection supported by thorough market and visual research. Opportunities for sponsorship should be encouraged through work experience and industrial links. Learners will need to exhibit visual research sheets, written reports and sample garments for assessment at a final presentation/exhibition.

It is important that learners gain a thorough understanding of historical and contemporary professional practice through visiting galleries, shops, exhibitions and high profile retail fairs. In addition guest speakers, practical workshops, visits to design studios, workshops and appropriate industrial sites will contextualise practical studies.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand how to use research to inform design intentions
2. Be able to produce a body of development work to meet creative intentions
3. Be able to realise creative intentions
4. Understand how to present textile design solutions.
Unit content

1 **Understand how to use research to inform design intentions**

Creative stimuli: eg current affairs, contemporary culture, conceptual ideas, trends, fashion, historical reference, environmental concerns

Target market: requirements eg client, gallery; price levels; timescale

Resources: materials (availability, appropriateness); cost; equipment; technical support

Research: sourcing documents; visual recording; collecting written information; collating ideas

2 **Be able to produce a body of development work to meet creative intentions**

Experimentation: eg paper-based, maquettes; media development; samples; croquis; technical testing

Development: refine ideas; propose solutions (assess, analyse, edit); visuals eg research sheets, mood boards, drawing, painting, CAD, digital images; work plans; samples

3 **Be able to realise creative intentions**

End product: eg single piece, collection for chosen specialism

Manufacture: craft skills; equipment eg for hand production, commercial manufacture; recording technical information in conventional format

Dexterity: manual skills; finish; neatness; care with process

Technical understanding: application of technical knowledge eg use of equipment, tools, materials, processes; cross-referencing systems

Innovation: combining techniques; unusual applications of materials; experimentation with formal elements; exploitation of unexpected outcomes eg capitalising on chance

4 **Understand how to present textile design solutions**

Recording techniques: eg photography, technical drawing, 2D visual representation

Layout skills: composition; collation of information; visual impact eg graphics, colouration

Display techniques: mounting; cutting; exhibiting (2D, 3D)

Client presentation: visual aids; verbal (clear, concise); format appropriate for audience
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| **LO1** Understand how to use research to inform design intentions | 1.1 Critically analyse information and target market sources to stimulate creative direction and design decisions  
1.2 Evaluate relevant personal research to inform development |
| **LO2** Be able to produce a body of development work to meet creative intentions | 2.1 Experiment with the creative use of media and processes in own work for innovative design development  
2.2 Consider and judge a range of creative solutions, providing a positive rationale for the intended outcome |
| **LO3** Be able to realise creative intentions | 3.1 Manufacture end product demonstrating a high degree of dexterity and technical understanding  
3.2 Produce innovative and technically competent responses to a self-identified brief |
| **LO4** Understand how to present textile design solutions | 4.1 Prepare a professional presentation using selected media and techniques  
4.2 Display responses to the design brief in a professional manner and context  
4.3 Communicate effectively with interest groups, clients and peers. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 35: Design Exploration in Textiles
  - Unit 36: Design Application in Textiles
  - Unit 37: Techniques and Processes in Textiles
  - Unit 60: Fashion and Textiles Materials Understanding

- **Level 5:**
  - Unit 38: Design Research in Textiles
  - Unit 41: Specialist Textiles Techniques and Processes
  - Unit 58: Cultural Understanding in Fashion.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.
Essential requirements

Access to a range of textile materials such as fibres, dyes, yarns, threads, fabrics, pigments is vital. Equipment should be appropriate to the specialist textile discipline and a minimum requirement should include:

- **dyeing**: dye baths, boilers, steamers
- **weaving**: hand looms, warping frames, reed hooks, shuttles
- **knitting**: domestic flat bed machines with a range of gauges, including single and double bed; machines with jacquard capability
- **surface pattern**: print tables, silk screens, squeegees, backing cloths, dye-mixing facilities
- **embellishment**: domestic sewing machines, felt-making equipment, paper-making equipment, beads, threads, ribbons
- **fashion**: domestic sewing machines, overlocking machines, cutting tables, pressing equipment, mannequins.

Equipment should be supported with discrete studio spaces nearby.

The course should be supported by research facilities including books, periodicals, journals and catalogues with particular reference to contemporary craft and design publications. Links with local galleries and museums could also extend the resources.

Employer engagement and vocational contexts

Centres should develop links with practising fashion and textile designers, manufacturers and suppliers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, Regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The British Fashion Council supports and promotes British fashion in the global market place (www.britishfashioncouncil.com).

The Textile Institute facilitates learning and achievement within the global clothing, textile and footwear industries (www.texi.org).
Unit 40: Textile Manufacture Production Operations

Unit code: Y/601/6217
Level: 5
Credit value: 15

• Aim

The aim of this unit is to provide learners with a knowledge and understanding of textiles production in small to large scale manufacturing operations.

• Unit abstract

This unit will enable learners to compare the differences between the systems in varying scales and types of textiles production. It will examine the impact these systems have on the fabrics produced and which are most appropriate for the range of textiles markets.

This unit is essentially investigative and research based and learners should be encouraged to make contacts with different sectors of the textiles industry both in the UK and worldwide in order to gain primary research of global production methods.

Short periods of work placement could be undertaken wherever appropriate and field visits to factories and manufacturers will form an essential part of the unit. Teaching and learning strategies could include lectures, videos, web searches, presentations, research projects, sponsored projects, group activities and team work with a strong focus on learners’ ability to collect and research their own information.

Evidence for assessment can be presented in a variety of formats; however the main focus of the assessment will be an illustrated report of between 2,500 and 3,000 words. This should be evidenced through presentation methods such as video, spoken commentary, slide presentation, handouts, abstracts and other visuals. Collected research should also be presented for assessment in technical files and notebooks containing samples and visuals. Content of the final presentation will vary depending on the links each individual learner has made, but all learners must visit at least two manufacturing outlets to enable better comparison and evaluation of the systems in use.

Visits to textiles trend forecasting groups, trade fairs and specialist museums, such as the Victoria and Albert, will all add diversity and enjoyment to the learning experience, as will visits from textile design practitioners and manufacturers. Clear briefing prior to market research will be necessary to establish that investigation is placed at the appropriate level.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the geographic, historic, economic and ecological significance of fibre production
2. Understand the systems and manufacturing processes relating to natural and man-made fibre and fabric production
3. Be able to research and evaluate production and operating methods relevant to selected specialist areas
4. Understand varying manufacturing operations and their respective production strategies.
Unit content

1 **Understand the geographic, historic, economic and ecological significance of fibre production**

Geographic: global distribution; raw materials; eg minerals, oil, rubber, cotton, wool, linen, flax; climate; growing conditions; food sources; labour sources

Historic: trade links eg silk route; population movements, religious persecution, slavery, impact of war, religion, empire growth

Economic: eg sources of wealth, developing economies, trade agreements, labour, transport, cost, fibre promotion; political issues eg labour laws, child exploitation, forced labour, price fixing

Ecological: eg deforestation, use of pesticide, poisonous dyestuffs, pollutants, unethical growing methods, ‘Fair Trade’, intensive farming; animal experimentation eg cloning, cross-breeding, force feeding, penning; global warming, climate change, natural disasters; ethical issues eg animal fur, animal skin, alpaca, mohair, pashmina

New directions: eg ‘smart textiles’, technological innovations; use of skins eg fish, pig, snake, ostrich; new fibres eg coconut, hemp, pineapple, banana; recycling eg plastics, fibres, fur

2 **Understand the systems and manufacturing processes relating to natural and man-made fibre and fabric production**

Natural fibres: eg sourcing, selecting, cleaning, preparing, blending, spinning, winding, folding

Man made fibres: eg sourcing, chemical preparation, extrusion, spinning, curing, texturing, winding, plying

Fabric production: eg warping, weaving, knitting, non-woven, lace

Processes: eg dyeing, finishing, inspection, quality control

3 **Be able to research and evaluate production and operating methods relevant to selected specialist areas**

Spinning: eg hand, continuous filament, woollen, worsted, cotton, conventional, open-end

Weaving: eg hand loom, floor loom, computer-aided loom, rapier, projectile, air jet, water jet, tappet, dobby, jacquard

Warp and weft knitting: eg domestic, industrial, flat bed, circular, computer-linked, raschel, beard

Non-woven: eg felt, needle punch, bonded, fused, stitch bonding

Printing: eg block, stencil, screen eg flat bed, circular; transfer, discharge, devore, embossing, flocking

Embroidery: eg domestic machines, commercial machines, hand-made

Quality methods: eg inspection, control, prevention
4 **Understand varying manufacturing operations and their respective production strategies**

**Organisation:** roles; chains of communication; flexibility; responsiveness

**Equipment:** investment; minimum quantities; depreciation; production capacity

**Types of business:** eg sole proprietors, partnerships, private limited companies, public limited companies

**Business structures:** eg manufacturers, processors, converters, small scale, large scale, bespoke batch production, flow production

**Market focus:** national; international; export; retail; wholesale; mail order, haute couture; contract
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
<tr>
<td><strong>LO1</strong> Understand the geographic, historic, economic and ecological significance of fibre production</td>
<td>1.1 Analyse and record information about fibre production from global sources</td>
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<tr>
<td><strong>LO2</strong> Understand the systems and manufacturing processes relating to natural and man-made fibre and fabric production</td>
<td>2.1 Record and differentiate the key elements of manufacturing processes</td>
<td>2.1 Record and differentiate the key elements of manufacturing processes</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to research and evaluate production and operating methods relevant to selected specialist areas</td>
<td>3.1 Make an accurate and informative report on a manufacturing operation</td>
<td>3.1 Make an accurate and informative report on a manufacturing operation</td>
</tr>
<tr>
<td><strong>LO4</strong> Understand varying manufacturing operations and their respective production strategies</td>
<td>4.1 Compare and contrast the organisation, equipment and methods of different manufacturers</td>
<td>4.1 Compare and contrast the organisation, equipment and methods of different manufacturers</td>
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<td>4.2 Research and analyse the interrelationships between types of business, business structures and market focus</td>
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<td>4.3 Research and analyse the key characteristics of the production and operation strategies of different business structures.</td>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 37: Techniques and Processes in Textiles
  - Unit 60: Fashion and Textiles Materials and Understanding
- Level 5:
  - Unit 41: Specialist Textiles Techniques and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

It is important that learners are able to handle a range of man made and natural fibres in both their raw state and at various stages of processing. Although it is not essential to use commercial production equipment, learners should visit processing and fabric production establishments to gain an insight into their functions. The fundamental principles of fibre processing and fabric production can be taught using hand techniques and domestic equipment. However, learners wishing to specialise in design may need access to specialist design software. Access to specialist research facilities is essential.
Employer engagement and vocational contexts

Visits to trade fairs, manufacturers and textiles and fibre promotional groups should be an integral part of this unit. Learners will be expected to make prompt and sustained efforts to build a database of contacts which they can then carry through to visits or work experience. If possible, a group visit to an international fabric manufacturing exhibition, such as Premiere Vision (held in Paris in September and February) would be very supportive. Making links with the broader non-UK textiles markets should also be encouraged.

- Goldsmiths University (www.gold.ac.uk) – Then input Constance Howard into the search bar. The Constance Howard Resource and Research Centre for Textiles is held in Goldsmiths University and holds a broad range of information.
- The UK Fashion and Textiles Association (www.5portlandplace.org.uk) works for the benefit of fashion clothing and textiles business in the UK and is a good source of contacts.
- UK Interior textiles (www.interiortextiles.com) promotes UK textiles companies of all sizes.
- Woolmark (www.wool.com) is the trade link for international promotion of wool products.
- Premiere Vision (www.premierevision.fr) is the major textile manufacturers’ exhibition worldwide and is help in Paris twice yearly.
Unit 41: Specialist Textiles Techniques and Processes

Unit code: D/601/5974
Level: 5
Credit value: 15

• Aim

The aim of this unit is to enable learners to develop specialist techniques and processes in textile design and to realise sophisticated design ideas to a professional standard.

• Unit abstract

This unit covers print, weave, knit and embroidery and learners will create innovative textiles for fashion, interior and fine art scenarios. Learners will be encouraged to investigate traditional and non-traditional media and materials and to experiment with combinations, techniques, technologies and processes. This experimental approach will enable learners to apply their technical skills and knowledge to realise personal creative design intentions. It is proposed that learners develop an awareness of the functionality or the non-functionality of samples.

Work for this unit will be based mainly on learner projects, supported by technical advice and critiques. In addition guest speakers, practical workshops, visits to professional studios and workshops will contextualise practical studies. Learners will study specialist techniques and processes appropriate to their own interests and design ideas alongside an understanding of relevant equipment, machinery and technological developments.

Learners should present technical files including accurate and detailed information on processes, techniques, technical details for fabric production and samples. Evidence for this unit should comprise a body of work generated in response to design ideas, briefs and personal interests, which may be related to development work in linked units. Evidence for assessment will normally be limited to a chosen specialism.

Theoretical elements of the unit will be delivered through tutor-led lectures and demonstrations supported by practical application through projects or assignments. Exploration may arise from the needs of a given situation but may also be stimulated by curiosity, extending personal vocabulary or style, and may result in unexpected, unusual and innovative outcomes.

When evaluating work, learners should be encouraged to discuss and assess the success or failure of media, materials, techniques, technologies and processes to enhance the quality of outcomes.
● Learning outcomes

On successful completion of this unit a learner will:

1. Be able to apply research in producing textiles to meet specific requirements
2. Be able to utilise specialist machinery and equipment for textile production
3. Understand theoretical principles relating to textile techniques and production
4. Be able to assess and refine own work to meet design briefs and functional requirements.
Unit content

1. **Be able to apply research in producing textiles to meet specific requirements**
   
   Textiles: eg weave (single-cloth weaving using block drafts, warp spacing, double cloths, extra warp/weft effects, jacquards, experimental hand techniques), knit (experimental hand techniques, cables, transfer techniques, plating, 3/4 colour jacquard, ruching, partial knitting, intarsia), embroidery (open work, cord work, quilting, couching, experimental hand techniques), print (four-colour screen, repeat lengths, transfer)
   
   Finishing treatments: eg steaming, brushing, raising, felting, shrinking, laminating
   
   Research: techniques; production processes eg materials, media

2. **Be able to utilise specialist machinery and equipment for textile production**
   
   Machinery: eg shaft floor looms, power looms, industrial hand flat knitting machines, electronic industrial/domestic machines, industrial sewing machines, specialist embroidery machines, transfer printing equipment
   
   CAD/CAM: for cloth manufacture eg computer-linked looms, knitting machines, design packages, production packages

3. **Understand theoretical principles relating to textile techniques and production**
   
   Fabric theory: eg knit (racking, cabling, hand transfer techniques, blister effects, 3/4 colour jacquard design, ruching techniques, partial knitting, shaping, intarsia), weave (double-cloth construction, extra warp/weft, jacquard, compound/block drafts, advanced colour effects, weave effects, cloth analysis), print (specialist chemicals, recipes for discharge, devore, flocking, technical notation), embroidery (sculpturing, layering, bubble work, cut work, ruching, machine lace)
   
   Research: cloth construction; textile production

4. **Be able to assess and refine own work to meet design briefs and functional requirements**
   
   Critical analysis: assess results; refine solutions; evaluate outcomes against intentions
   
   Functional textiles: interiors eg upholstery, drapes, cushions, lighting; fashion eg garments, accessories, millinery
   
   Non-functional textiles: eg decorative, fine art
   
   Record keeping: technical notes eg processes, techniques, details for fabric production; samples
## Learning outcomes and assessment criteria

<table>
<thead>
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<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
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<tr>
<td><strong>LO1</strong> Be able to apply research in producing textiles to meet specific requirements</td>
<td>1.1 Research textile techniques and production processes</td>
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<td>1.2 Analyse the creative potential of textile techniques and production processes</td>
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<td>1.3 Exploit selected technologies to achieve professional final outcomes</td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to utilise specialist machinery and equipment for textile production</td>
<td>2.1 Explore the potential of CAD and CAM within the chosen specialisms</td>
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<td>2.2 Operate textile machinery and equipment safely and competently</td>
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<td>2.3 Challenge the limitations of machinery and equipment to produce innovative textiles</td>
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<tr>
<td><strong>LO3</strong> Understand theoretical principles relating to textile techniques and production</td>
<td>3.1 Research and analyse fabrics to determine cloth construction</td>
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<td>3.2 Evaluate production processes</td>
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<td>3.3 Interpret and extend theoretical information into practical outcomes</td>
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<tr>
<td><strong>LO4</strong> Be able to assess and refine own work to meet design briefs and functional requirements</td>
<td>4.1 Analyse the strengths, weaknesses and opportunities for refinement of the end product and justify creative intentions</td>
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<td>4.2 Develop ‘fit for purpose’ end product in response to brief and based on evaluation of techniques and processes</td>
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<td>4.3 Compile comprehensive records for future reference.</td>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 37: Techniques and Processes in Textiles
  - Unit 59: CAD/CAM for Fashion and Textiles
  - Unit 60: Fashion and Textiles Materials Understanding
- Level 5:
  - Unit 38: Design Research in Textiles
  - Unit 39: Textile Collection Realisation
  - Unit 42: Experimental Constructed Textiles
  - Unit 44: Experimental Embroidered Textiles.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.
Essential requirements

Learners will need access to adequate facilities for the production of woven, knitted, printed or embellished textiles to a professional standard. Access to a range of textile materials such as fibres, dyes, yarns, threads, fabrics, pigments is vital. Equipment should be appropriate to the specialist textile discipline and a minimum requirement should include:

- **dyeing**: dye baths, boilers, steamers
- **weaving**: hand looms, warping frames, reed hooks, shuttles
- **knitting**: domestic flat bed machines with a range of gauges, including single and double bed; machines with jacquard capability
- **surface pattern**: print tables, silk screens, squeegees, backing cloths, dye-mixing facilities
- **embellishment**: domestic sewing machines, felt-making equipment, paper-making equipment, beads, threads, ribbons.

Equipment should be supported with discrete studio spaces nearby. Facilities offered by the centre can be supported by developing active links with industrial manufacturers and partners.

Resources for research include art galleries and museums, exhibitions, books, periodicals, journals, craft/textile magazines, catalogues, trends and forecasting information with particular reference to contemporary craft and design publications.

It is expected that consideration will be given to all aspects relating to health and safety. Learners will need to be encouraged to document and record technical information for future reference.

Employer engagement and vocational contexts

Centres should develop links with manufacturers, suppliers, practising fashion and textile designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, Regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design, have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The British Fashion Council supports and promotes British fashion in the global market place (www.britishfashioncouncil.com).

The Textile Institute facilitates learning and achievement within the global clothing, textile and footwear industries (www.texi.org).
Unit 42: Experimental Constructed Textiles

Unit code: T/601/5883
Level: 5
Credit value: 15

• Aim

The aim of this unit is to offer learners the opportunity to broaden their skills and understanding of constructed textiles through extensive exploration and experiment with media, materials, techniques, technologies and processes.

• Unit abstract

In this unit learners will create innovative constructed textile samples for fashion, interior and fine art scenarios. Learners will be encouraged to investigate traditional and non-traditional media and materials and to combine and experiment with techniques, technologies and processes. They will be expected to distort and manipulate constructed surfaces and experiment with yarn and thread qualities to produce a personal collection of constructed textile samples. These samples should indicate the projected finished appearance of the textile. It is proposed that learners develop an awareness of the functionality or the non-functionality of the samples. When evaluating work, learners should be encouraged to discuss and comment on the success or failure of media, materials, techniques, technologies and processes to enhance the quality of outcomes. Work for this unit will be mainly based on learner projects, supported by technical advice and critiques. In addition, guest speakers, practical workshops, visits to professional studios and workshops will contextualise practical studies.

It is imperative before starting this unit that learners have researched, gathered and produced visual source material to work from in order to achieve an innovative collection of samples. Learners do not necessarily have to produce work for all the constructed textiles areas – woven, knitted and tapestry. If a learner has a particular interest within one field they should be encouraged to experiment in greater depth in that area. Learners who are unsure about which area they wish to specialise in should be encouraged to sample all fields. Exploration may arise from the needs of a given situation but may also be stimulated by curiosity, extending personal vocabulary or style, and may result in unexpected, unusual and innovative outcomes.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the properties and characteristics of materials and processes for constructed textiles
2. Be able to collect source materials and carry out preparatory processes
3. Be able to produce a portfolio of work to meet creative intentions
4. Be able to assess and refine own work to meet design intentions and functional requirements.
Unit content

1  **Understand the properties and characteristics of materials and processes for constructed textiles**

   Properties and characteristics: eg weight, texture, strength, elasticity; appearance eg transparent, opaque, shiny, matt, rough, smooth

   Traditional materials: fabrics eg natural, synthetic; yarns eg natural, synthetic; threads eg machine, embroidery, metallic, tapestry, piping cord

   Non-traditional materials: eg plastic (sheet, tubing), paper, string, wire (mesh, copper), fake fur, foam, found materials; organic materials eg twigs, pebbles, grasses

   Constructed textile techniques: eg weave, knit, tapestry

   Constructed textile processes: eg knotting, wrapped elements, looping, tufts, plain weave, weft (discontinuous, distorted), knit (plain, rib, tuck, single/double bed structures), plaits, tassels, tapestry (flat, shaped, tension differential, slit)

2  **Be able to collect source materials and carry out preparatory processes**

   Source materials: eg drawings, paintings, prints, lens-based imagery, computer-generated imagery, textures, paper structures, colour reference

   Preparatory processes: eg weave (winding warp on warping mill, beaming onto loom, threading, reeding, tying on), tapestry (winding warp onto frame), knit (threading, casting on, setting knitting machines)

3  **Be able to produce a portfolio of work to meet creative intentions**

   Research: contextual eg historical, contemporary, cultural; market research; ergonomics; other issues eg ethical, environmental

   Design development: initial responses; 2D development eg sketches, collage, mixed media, digital images, working drawings; 3D development eg samples, prototypes

   Creative processes: materials eg combinations, colours, styles (distressed, conventional), traditional, non-traditional; techniques eg weave, tapestry, knitting; sampling

4  **Be able to assess and refine own work to meet design intentions and functional requirements**

   Critical analysis: assess results; refine solutions; evaluate outcomes against intentions

   Functional textiles: interiors eg upholstery, drapes, cushions, lighting; fashion eg garments, accessories, millinery

   Non-functional textiles: eg decorative, fine art
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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</thead>
<tbody>
<tr>
<td><strong>Learning outcomes</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td></td>
</tr>
</tbody>
</table>
| LO1 Understand the properties and characteristics of materials and processes for constructed textiles | 1.1 Diagnose the aesthetic and decorative characteristics of materials  
1.2 Evaluate the creative potential of textile materials and processes |
| LO2 Be able to collect source materials and carry out preparatory processes | 2.1 Research relevant sources to develop imaginative and creative outcomes  
2.2 Select a variety of traditional and non-traditional materials and perform preparatory procedures |
| LO3 Be able to produce a portfolio of work to meet creative intentions | 3.1 Explore the working characteristics and properties of traditional and non-traditional media and materials to produce innovative samples  
3.2 Exploit techniques, technologies and processes in own work for innovative design development  
3.3 Demonstrate a personal creative approach in the application of techniques and processes to produce experimental constructed textile samples |
| LO4 Be able to assess and refine own work to meet design intentions and functional requirements | 4.1 Analyse the strengths, weaknesses and opportunities for refinement of the end product and justify creative intentions  
4.2 Develop ‘fit for purpose’ end product based on evaluation of samples  
4.3 Compile comprehensive records on sample production for future reference |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 35: Design Exploration in Textiles
  - Unit 36: Design Application in Textiles
  - Unit 37: Techniques and Processes in Textiles
  - Unit 60: Fashion and Textiles Materials Understanding
- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 41: Specialist Textiles Techniques and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Specialist physical resources needed are as follows:

- **weave:** various shaft handlooms, card looms, winding machines (hank and cone)
- **knit:** domestic knitting machines (single/double bed)
- **tapestry:** high looms.

Resources for research may include art galleries and museums, exhibitions, craft/textile magazines, trends and forecasting information. It is expected that all aspects relating to health and safety in the workplace will be a pre-requisite outcome of the learning activity. Learners will need to be encouraged to document and record technical information for future reference.
Employer engagement and vocational contexts

Centres should develop links with practising fashion and textile designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, Regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects’, for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design, have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 43: Experimental Printed Textiles

Unit code: K/601/5881
Level: 5
Credit value: 15

• Aim
The aim of this unit is to offer learners the opportunity to broaden their skills and understanding of printed textiles through extensive exploration and experiment with media, materials, techniques, technologies and processes.

• Unit abstract
In this unit learners will create innovative functional and non-functional printed textile samples for fashion, interior and fine art scenarios. Learners will be encouraged to investigate traditional and non-traditional printed textile media and materials and to experiment with techniques, technologies and processes. They will be expected to juxtapose and combine colour, images and texture to produce a personal collection of samples on fabric and paper. These samples should indicate the projected finished appearance of the textile. It is proposed that learners develop an awareness of the functionality or the non-functionality of the samples.

When evaluating work, learners should be encouraged to discuss and comment on the success or failure of media, materials, techniques, technologies and processes to enhance the quality of outcomes. Learners will need to be encouraged to document and comprehensively record technical information about printing and dyeing for future reference. They must be made aware of correct printing recipes and dye methods including the appropriate methods for fixing and finishing fabrics. It is expected that all aspects relating to health and safety in the workplace will be a pre-requisite outcome.

Work for this unit will be based mainly on learner projects, supported by technical advice and critiques. In addition, guest speakers, practical workshops, visits to professional studios and workshops will contextualise practical studies.

It is imperative, before starting this unit, that learners have researched, gathered and produced visual source material to work from to achieve an innovative collection of paper and fabric samples. By selecting, combining and using a range of media, materials, techniques, technologies and processes they are able to consolidate their learning. Exploration may arise from the needs of a given situation but may also be stimulated by curiosity, extending personal vocabulary or style, and may result in unexpected, unusual and innovative outcomes.
• Learning outcomes

On successful completion of this unit a learner will:

1. Understand the properties and characteristics of materials and processes for printed textiles
2. Be able to collect source materials and carry out preparatory processes
3. Be able to produce a portfolio of work to meet creative intentions
4. Be able to assess and refine own work to meet design intentions and functional requirements.
Unit content

1. Understand the properties and characteristics of materials and processes for printed textiles

   Properties and characteristics: eg weight, texture, strength, elasticity; appearance eg transparent, opaque, shiny, matt, rough, smooth

   Traditional materials: natural fabrics eg silk, cotton, flax, jute, wool; synthetic fabrics eg acrylic, acetate, viscose, PVC

   Non-traditional materials: eg plastic (sheet, tubing), papers (hand made, commercially made), string, wire (mesh, copper), foam, found materials, organic materials (twigs, pebbles, grasses)

   Printing materials: eg dyes, acids, inks, paints, pigments, chemicals for printed textiles

   Processes: printing eg screen, block, mono; dyeing eg disperse, direct, discharge, acid, Procian; other techniques eg hand painting, devore; fixing eg steaming, baking; finishing

2. Be able to collect source materials and carry out preparatory processes

   Source materials: eg drawings, paintings, prints, lens-based imagery, computer-generated imagery, textures, colour reference

   Preparatory processes: eg positive images (kodatrace, acetates), dyeing, preparing dyestuff, photographically exposing screens; recipes (printing, dyeing)

   Printing equipment: eg photo-sensitive emulsion, silk screens, UVA exposure bed

3. Be able to produce a portfolio of work to meet creative intentions

   Research: contextual eg historical, contemporary, cultural; market research; ergonomics; other issues eg ethical, environmental

   Design development: initial responses; 2D development eg sketches, paintings, collage, mixed media, digital images, working drawings

   Drawing and painting materials: graphite, pastel, chalk, conte, pencil, coloured pencil, gouache, inks, acrylic pigments

   Creative processes: combining materials eg traditional, non-traditional, colours, dyes; combining techniques eg printing (screen, block, mono), dyeing (disperse, direct, acid, reactive), painting, devore; fixing; finishing
4 Be able to assess and refine own work to meet design intentions and functional requirements

Critical analysis: record technical information; assess results; refine solutions; evaluate outcomes against intentions

Functional textiles: interiors eg upholstery, drapes, cushions, lighting; fashion eg garments, accessories, millinery

Non-functional textiles: eg decorative, fine art

Record keeping: technical notes; recipes (dyeing, printing); processes; research; sample production
Learning outcomes and assessment criteria

<table>
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<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
</tbody>
</table>
| **LO1** Understand the properties and characteristics of materials and processes for printed textiles | 1.1 Explore the aesthetic and decorative characteristics of materials for printed textiles  
1.2 Investigate the creative potential of printed textile materials and processes in own work |
| **LO2** Be able to collect source materials and carry out preparatory processes | 2.1 Investigate relevant sources to develop imaginative and creative outcomes  
2.2 Select a variety of traditional and non-traditional materials and perform preparatory procedures combining different prepared surfaces and processes |
| **LO3** Be able to produce a portfolio of work to meet creative intentions | 3.1 Explore the working characteristics and properties of traditional and non-traditional media and materials to produce innovative samples  
3.2 Exploit techniques, technologies and processes in own work for innovative design development  
3.3 Demonstrate a personal creative approach in the application of techniques and processes to produce experimental printed textile samples |
| **LO4** Be able to assess and refine own work to meet design intentions and functional requirements | 4.1 Analyse the strengths, weaknesses and opportunities for refinement of the end product and justify creative intentions  
4.2 Develop ‘fit for purpose’ end product based on evaluation of samples  
4.3 Compile comprehensive records on sample production for future reference. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 35: Design Exploration in Textiles
  - Unit 36: Design Application in Textiles
  - Unit 37: Techniques and Processes in Textiles
  - Unit 60: Fashion and Textiles Materials Understanding
- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 38: Design Research in Textiles
  - Unit 41: Specialist Textiles Techniques and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Physical resources should include an exposure bed, screen printing screens, print bed and a dye area.

Resources for research may include art galleries and museums, exhibitions, craft/textile magazines, trends and forecasting information. Learners will need to be encouraged to document and record technical information for future reference.

It is expected that consideration will be given to all aspects relating to health and safety.
Employer engagement and vocational contexts

Centres should develop links with practising fashion and textile designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, Regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design, have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillfast-UK, the sector skills council for fashion and textiles, provide details on their careers web pages (www.skillfast-uk.org/justthejob) about careers advice and industry information, plus regularly updated news and events pages.

The British Fashion Council supports and promotes British fashion in the global marketplace (www.britishfashioncouncil.com).

The Textile Institute facilitates learning and achievement within the global clothing, textile and footwear industries (www.texi.org).
Unit 44: Experimental Embroidered Textiles

Unit code: H/601/5796
Level: 5
Credit value: 15

● Aim

The aim of this unit is to offer learners the opportunity to broaden their skills and understanding of embroidered textiles through extensive exploration and experiment with media, materials, techniques, technologies and processes.

● Unit abstract

In this unit learners will create innovative functional and non-functional embroidered and embellished textile samples for fashion, interior and fine art scenarios. Learners will be encouraged to investigate traditional and non-traditional media and materials and to combine and experiment with techniques, technologies and processes. They will be expected to put ideas and techniques into practice through manipulating and combining qualities of fabric, yarns and threads to produce a personal collection of embroidered samples. These samples should indicate the projected finished appearance of the textile. It is proposed that learners develop an awareness of the functionality or the non-functionality of the samples.

When evaluating work, learners should be encouraged to discuss and comment on the success or failure of media, materials, techniques, technologies and processes to enhance the quality of outcomes. Learners will need to be encouraged to document and comprehensively record technical information and manipulation techniques for future reference. It is expected that all aspects relating to health and safety in the workplace will be a pre-requisite outcome of unit learning activity.

Work for this unit will be mainly based on learner projects, supported by technical advice and critiques. In addition guest speakers, practical workshops, visits to professional studios and workshops will contextualise practical studies. It is imperative before starting this unit that learners have researched, gathered and produced visual source material to work from in order to achieve an innovative collection of embroidered samples. By selecting, combining and using a range of media, materials, techniques, technologies and processes learners are able to consolidate their learning. Exploration may arise from the needs of a given situation but may also be stimulated by curiosity, extending personal vocabulary or style, and may result in unexpected, unusual and innovative outcomes.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the properties and characteristics of materials and processes for embroidered textiles
2. Be able to collect source materials and carry out preparatory processes
3. Be able to produce an imaginative body of development work to meet creative intentions
4. Be able to assess and refine own work to meet design intentions and functional requirements.
Unit content

1 Understand the properties and characteristics of materials and processes for embroidered textiles

- Properties and characteristics: eg weight, texture, strength, decorative, protective, elasticity; appearance eg transparent, opaque, shiny, matt, rough, smooth
- Traditional materials: fabrics eg natural, synthetic; yarns eg natural, synthetic; threads eg machine, embroidery, metallic, tapestry, piping, cord, ribbon; other materials eg aquafilm, dissolve-away fabric, bonderweb
- Non-traditional materials: eg plastic, paper, string, wire, foam, fake fur, found materials; organic materials (twigs, pebbles, grasses)
- Machine: eg free hand, fraying, experimenting with bobbin tension, pin tucks, piping, rouleau loops, darts, pleats, button holes, patchwork, appliqué
- Hand: eg traditional decorative stitches, straight stitch, blanket stitch, gathering, smocking

2 Be able to collect source materials and carry out preparatory processes

- Source materials: eg drawings, paintings, prints, lens-based imagery, computer-generated imagery, colour swatches, textures, paper structures
- Preparatory processes: fabrics eg stretch over frame, apply aquafilm, bondaweb; sewing machine eg thread up, set tension, select feet, set bobbin tension

3 Be able to produce an imaginative body of development work to meet creative intentions

- Research: contextual eg historical, contemporary, cultural; market research; ergonomics; other issues eg ethical, environmental
- Design development: initial responses; 2D development eg sketches, paintings, collage, mixed media, digital images, working drawings
- Drawing and painting materials: eg graphite, pastel, chalk, conte, pencil, coloured pencil, gouache, inks, acrylic pigments
- Creative processes: materials eg combinations, colours, traditional, non-traditional; embroidery techniques eg machine, hand

4 Be able to assess and refine own work to meet design intentions and functional requirements

- Critical analysis: assess results; refine solutions; evaluate outcomes against intentions
- Functional textiles: interiors eg upholstery, drapes, cushions, lighting; fashion eg garments, accessories, millinery
- Non-functional textiles: eg decorative, fine art
- Record keeping: technical notes; processes; research; sample production
Learning outcomes and assessment criteria

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<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
</tbody>
</table>
| **LO1** Understand the properties and characteristics of materials and processes for embroidered textiles | 1.1 Analyse the aesthetic and decorative characteristics of materials for embroidered textiles  
1.2 Evaluate the creative potential of embroidered textile materials and processes in own work |
| **LO2** Be able to collect source materials and carry out preparatory processes | 2.1 Investigate relevant sources to develop imaginative and creative outcomes  
2.2 Select a variety of traditional and non-traditional materials and perform preparatory procedures |
| **LO3** Be able to produce an imaginative body of development work to meet creative intentions | 3.1 Explore the working characteristics and properties of traditional and non-traditional media and materials to produce innovative samples  
3.2 Exploit techniques, technologies and processes in own work for innovative design development  
3.3 Demonstrate a personal creative approach in the application of techniques and processes to produce experimental embroidered textile samples |
| **LO4** Be able to assess and refine own work to meet design intentions and functional requirements | 4.1 Analyse the strengths, weaknesses and opportunities for refinement of the end product and justify creative intentions  
4.2 Develop ‘fit for purpose’ end product based on evaluation of samples  
4.3 Compile comprehensive records on sample production for future reference. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 35: Design Exploration in Textiles
  - Unit 36: Design Application in Textiles
  - Unit 37: Techniques and Processes in Textiles
  - Unit 60: Fashion and Textiles Materials Understanding

- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 38: Design Research in Textiles
  - Unit 41: Specialist Textiles Techniques and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Textiles and Material Design.
Essential requirements

Physical resources should include domestic machines for embroidery (eg Berninas) and sufficient materials to support each learner’s direction.

Resources for research may include art galleries and museums, exhibitions, craft/textile magazines, trends and forecasting information. Learners will need to be encouraged to document and record technical information for future reference.

It is expected that consideration will be given to all aspects relating to health and safety.

Employer engagement and vocational contexts

Centres should develop links with practising fashion and textile designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, Regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design, have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillfast-UK, the sector skills council for fashion and textiles, provide details on their careers web pages (www.skillfast-uk.org/justthejob) about careers advice and industry information, plus regularly updated news and events pages.

The British Fashion Council supports and promotes British fashion in the global market place (www.britishfashioncouncil.com).

The Textile Institute facilitates learning and achievement within the global clothing, textile and footwear industries (www.texi.org).
Unit 45: Design Exploration in Fashion

Unit code: T/601/6399
Level: 4
Credit value: 15

Aim
The aim of this unit is to extend learners' knowledge, skills and understanding in fashion design and visual representation through experimentation with media and ideas.

Unit abstract
This unit encourages learners to develop research, design and visual techniques through personal investigation and media experimentation. Visual communication in fashion has evolved in association with other disciplines, including graphic design and, more recently, through interactive media.

This unit aims to develop a range of visual skills within the context of fashion design and illustration in both traditional media and new forms of visual representation. Learners will explore image as a central means of personal communication within fashion. Learners will work towards developing a personal style of visual communication, and demonstrate illustrative and graphic techniques through the assimilation and interpretation of visual information. The themes and projects developed in the unit will draw on contemporary visual practice in fashion, the contemporary fashion audience and the broader integrated social and cultural contexts.

Learners will be expected to develop an awareness of the work of artists, designers and illustrators, both historical and contemporary, through the personal investigation and recording of media and methods. Whilst drawing is central to this unit, learners will also be introduced to specialist techniques and digital processes which reflect the developmental impact that technology has had on fashion design and illustration.

Assignments for this unit will be set around a theme or linked to research undertaken for other units. Work will be presented in formats that are appropriate for the form and nature of the work. This could comprise sketchbooks, notebooks, onscreen, photographs, printouts and other visual material. Throughout the unit learners will have the opportunity to engage in group critiques and discussions and to develop a personal visual style.

Learning outcomes

On successful completion of this unit a learner will:

1. Be able to explore and experiment with the formal elements of fashion design and imaging
2. Understand and interpret visual research
3. Be able to produce personal visual solutions through creative application of media.
Unit content

1 Be able to explore and experiment with the formal elements of fashion design and imaging

Formal elements: eg proportion, balance, scale, rhythm, detail, texture, colour

Mark-making techniques and media: own interpretation of media eg traditional; non-traditional; investigation eg painting, printmaking, photography, sculpture, animation, rendering, digital applications

Illustration: figure representation eg life drawing, clothed figure, flats, spec drawings, collage, montage; fabric representation; contemporary practice eg professional illustration, magazines, newspapers, in-store promotion, trade fairs, exhibitions, beauty, hair, makeup, illustrators' agents

2 Understand and interpret visual research

Information sources: eg historical, contemporary, ethnographic, fashion predictions, trend information, colour predictions, exhibitions, film, television, costume, theatre, literature, art movements, fabric developments

Interpretation of information: eg identifying, classifying, selecting and recording visual information; understanding and applying; convention, innovation

Application of information: eg modify, manipulate, discover, discriminate, combine visual information in own work

Visual synthesis: eg deconstruction of images, image analysis, creative communication, innovation, developing own style

3 Be able to produce personal visual solutions through creative application of media

Application of analysis: selection eg synthesis of research, application, fashion awareness, application to own work, identification of elements from visual research, judgement, choice

Visual awareness: expressive representations of mood, emotion, texture, movement, market, occasion, visual language

Market awareness: eg occasion, gender, fabric, market levels, trend prediction, colour prediction, environmental, cultural, ecological

Communication of ideas: eg storyboards, research notebooks, learning journal, sketchbooks, printouts, onscreen; design conventions eg composition, layout, typographic use, text placement
## Learning outcomes and assessment criteria

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<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research and analyse the formal elements of fashion design and imaging</td>
</tr>
<tr>
<td>Be able to explore and experiment with the formal elements of fashion design and</td>
<td>1.2 Use a range of materials and media to communicate visual intentions</td>
</tr>
<tr>
<td>imaging</td>
<td>1.3 Develop creativity through experimentation and knowledge of historical and contemporary sources</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Interpret and apply selected research to develop a personal style</td>
</tr>
<tr>
<td>Understand and interpret visual research</td>
<td>2.2 Record and utilise researched evidence through appropriate means</td>
</tr>
<tr>
<td></td>
<td>2.3 Explore the unfamiliar and apply new ideas to visual solutions</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Communicate intention and purpose through effective selection and use of media</td>
</tr>
<tr>
<td>Be able to produce personal visual solutions through creative application of media</td>
<td>3.2 Use media effectively to communicate personal concepts and intentions</td>
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<td></td>
<td>3.3 Combine a range of ideas, techniques and technology in the production of fashion design and imaging.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 3: Contextual and Cultural Referencing in Art and Design
- Level 5:
  - Unit 50: Research and Development for Fashion Design
  - Unit 58: Cultural Understanding in Fashion.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Textiles and Material Design.

Essential requirements

Computer access will be essential for use of specialist imaging programmes such as Photoshop, Illustrator and InDesign. Digital cameras are also a requirement.

Life drawing and general drawing will require appropriate studio space and equipment.

Employer engagement and vocational contexts

Learners should be encouraged to develop industry contacts and professional bodies that will assist them in their selected interests and themes. For example:

- The International Colour Authority (www.theinternationalcolourauthority.org) gives advice and information on coming trends in fashion, textiles, and interiors
- The Association of Illustrators (www.theaoi.com) holds information and resources for commissioners and practitioners of illustration.
Unit 46: Design Application in Fashion

Unit code: D/601/6400
Level: 4
Credit value: 15

• Aim
The aim of this unit is to develop learners’ understanding and skills in fashion and design, through the exploration of the relationship between design, marketing, promotion and production processes.

• Unit abstract
This unit is designed as an introduction to the fashion industry and the different contexts in which creative ideas move from concept to the customer. The unit will give learners information which can be assimilated into their own practice and creative aspirations.

The fashion industry produces fast-moving consumer products in a highly competitive global business environment. The design profession is becoming increasingly complex in the knowledge required to be a successful practitioner. This unit will underpin creative intentions with a sound understanding of the sector and an appreciation of contemporary design influences.

Learners will be encouraged to research new and emerging markets and to synthesise analysis of these factors in the context of their own work. A key feature of this unit will be lectures and seminars delivered by professional practitioners in the fields of design, trend forecasting, marketing, promotion and manufacturing. In addition to this, group visits to designers’ showrooms, marketing and press offices, manufacturing outlets and trend forecasting agencies will be included in this unit.

Opportunities will be given for commercially focused projects, international competitions and sponsored assignments, encouraging a work-based focus to the unit. Work produced in response to a range of set design briefs, to encourage studio practice, will be supported by group critiques and tutorial support. Written reports will provide material for assessment. Learners should be encouraged to develop team working skills, through engaging in group discussion, and to use a range of communication skills when presenting design solutions.

• Learning outcomes
On successful completion of this unit a learner will:
1. Be able to analyse and evaluate the influence of contemporary design
2. Understand the roles of the design, marketing, promotion and production processes within the fashion industry
3. Be able to research and synthesise design trends
4. Be able to apply conceptual, creative and visual skills to a targeted brief.
Unit content

1 Be able to analyse and evaluate the influence of contemporary design

Design styles: art movements eg art deco, art nouveau, cubism, contemporary British; global eg oriental, tribal, Arabic, African; designers; couture; high street; contemporary, historical; events; fashion shows; television shows; displays; exhibitions

Retail sector trends: market intelligence eg Market Intelligence (MINTEL) Verdict Research; shop reports eg, designer, department stores, online shopping, markets

Design: influences eg interiors, architecture, graphics, 3D; exhibitions; galleries, museums

2 Understand the roles of the design, marketing, promotion and production processes within the fashion industry

Interaction: initial briefing; brain storming, generating ideas, design development; design realisation, creating samples, selection; promotion eg marketing campaigns, advertising, celebrity endorsement, advertorials, press releases; events; eg fashion shows, in-store; trade fairs; promotional campaigns; production processes eg cutting, manufacture, quality control, finishing, distribution; retail eg merchandising, display, placement, pricing

Personnel: eg designer, trend forecaster, buyer, merchandiser, press officer, fashion editor, promoter, illustrator, photographer, stylist, manufacturer, distribitor, sales assistant, store manager

Commercial environment: eg fashion houses, independent designers, manufacturers, agents, public relations (PR) companies, mail order, e-tailing, trend forecasters, illustration agencies, photography studios

3 Be able to research and synthesise design trends

Trend information: specialist journals eg, Viewpoint, International Textiles, View on Colour; magazines; newspapers; supplements; websites; fashion shows, trade shows; forecasting companies eg Promostyl, Carlin International, Peclers Paris

Market research: consumer behaviour, customer profile, retail trends, price points; market intelligence companies eg MINTEL, Verdict Research, Keynote, Snapdata

4 Be able to apply conceptual, creative and visual skills to a targeted brief

Understanding the market: categories eg men; women; children; sportswear; knitwear, lingerie, corporate; functional; protective; specialist; promotional

Develop ideas: eg brain storming, spider charts, drawing, painting, collage, storyboards, sketchbooks, design sheets, flats, spec drawings; methods of presentation eg photographs, collage, montage, screen based, video, animation, interactive media

Visual identity: own style; personal interpretation; professional presentation; fitness for purpose
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</table>
| LO1 Be able to analyse and evaluate the influence of contemporary design | 1.1 Research and analyse key influences in contemporary fashion  
1.2 Evaluate the influence of designers, fashion houses, trend agencies and the retail sector |
| LO2 Understand the roles of the design, marketing, promotion and production processes within the fashion industry | 2.1 Evaluate the role of the designer and the commercial environment in which they operate  
2.2 Analyse the interaction between design, marketing, forecasting and production processes |
| LO3 Be able to research and synthesise design trends | 3.1 Analyse consumer behaviour, fashion trends, market intelligence and retail outlets  
3.2 Produce evidence of research, analysis and application through journals, sketchbooks, storyboards and design sheets  
3.3 Produce design solutions using creative visual imaging skills |
| LO4 Be able to apply conceptual, creative and visual skills to a targeted brief | 4.1 Produce creative design solutions within the constraints of a commercially targeted project  
4.2 Design for a range of markets, customers, functions, purposes and seasons using analysed market intelligence  
4.3 Present research and personal design solutions to a professional standard. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 45: Design Exploration in Fashion
  - Unit 47: Techniques and Processes in Fashion
  - Unit 60: Fashion and Textile Materials Understanding
- **Level 5:**
  - Unit 50: Research and Development for Fashion Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Resources should include design studio space, specialist library facilities, access to computers with appropriate software, eg Illustrator, Photoshop, PowerPoint; access to retail outlets, exhibitions, galleries, trade shows, fashion shows.

Employer engagement and vocational contexts

An essential part of this unit will be input from the fashion industry. This will include visiting personnel from the various sectors ie design, marketing, public relations, retail, the media and manufacture. Learners should also be encouraged to make their own arrangements to visit sectors of the industry individually, or in study groups. This unit should provide the opportunity to become involved in commercial projects; these could be set by industry, or could be in the form of national or international competitions. Other employer links could include the following:

- The UK Fashion and Textiles Association (www.5portlandplace.org.uk)
- The British Fashion Council (www.britishfashioncouncil.com) promotes UK designers in the global marketplace.
Unit 47: Techniques and Processes in Fashion

Unit code: R/601/6412
Level: 4
Credit value: 15

• Aim

The aim of this unit is to develop the technical skills and understanding required to cut accurate patterns from original designs and from these to produce the finished garment.

• Unit abstract

In this unit learners will develop pattern cutting and clothing production techniques and apply these to the production of patterns from their own design work. Exploration of the two- and three-dimensional parameters of garment design will be investigated, encompassing cutting, drafting and draping. Learners will carry these skills forward in the application of manufacturing processes and techniques to the production of finished garments. They will be expected to undertake research, design development, pattern making, sampling and toile production, followed by finished garments, selected from their own designs. The final outcomes should demonstrate an emerging creative and personal style.

Problem solving, lateral thinking and the application of solutions to different contexts will be encouraged, whilst also understanding the importance of precision and accuracy in the cutting and manufacturing processes. Discussion with tutors will help learners to select and apply the most suitable methods for both pattern construction and garment manufacture and will enable learners to begin to assemble and construct whole garments from these individual processes.

In this unit learners are expected to produce a collection of patterns and samples based on their individual interests and design concepts. Learners will be encouraged to tackle a range of design ideas, utilising appropriate pattern and garment-making processes. They will need to explore a variety of fabrics, as well as the external factors which may affect choice such as working to a client brief, availability of materials, current trends and technological developments. Processes should be produced as a folder of samples, which should be added to throughout the course and used as visual reference for future projects. Learners will be expected to present and style their finished garments individually and professionally. Group critiques during the toile and garment development stages will form an important part of the delivery of this unit.
• Learning outcomes

**On successful completion of this unit a learner will:**

1. Be able to apply pattern construction processes to interpret garment designs
2. Be able to apply garment manufacturing processes to interpret garment designs
3. Be able to use technologies and associated equipment for pattern construction and garment production
4. Understand the relationship between design research and development, pattern cutting and garment manufacturing processes.
Unit content

1 Be able to apply pattern construction processes to interpret garment designs

Methods: flat cutting; modelling on the stand; draping

Processes: manipulation eg darts, seam placement, yokes, pleats, gathers, fullness; details eg collars; roll, shirt, rever, mandarin, sailor, cowl; cuffs eg shirt, double, frilled, fluted; openings eg placket, waistbands, button, zip, fly, toggle, stud, tie; pockets eg patch, bellows, jetted, flap; sleeves eg set-in, raglan, flared, puff, kimono, batwing

Construction: correct labelling; lay planning; order of making up

2 Be able to apply garment manufacturing processes to interpret garment designs

Techniques: seams eg flat, channel, French; seam finishes eg overlocked, bound, double stitched; fabric treatments eg gathers, frilling, pleating, smocking, gathering, quilting

Processes: manipulation eg darts, seam placement, yokes, pleats, gathers, fullness; details eg collars; roll, shirt, rever, mandarin, sailor, cowl; cuffs eg shirt, double, frilled, fluted; openings eg placket, waistbands, button, zip, fly, toggle, stud, tie; pockets eg patch, bellows, jetted, flap; sleeves eg set-in, raglan, flared, puff

Cloth selection: types eg woven, knitted, printed, embroidered, natural, man-made, stretch; surfaces eg nap, pile, striped, checked, shot, textured, interlinings, linings, canvas, vilene

Construction: eg appropriate techniques, accuracy, neatness, thread choice

3 Be able to use technologies and associated equipment for pattern construction and garment production

Hand tools: correct use; notchers, shears, tracing wheels, tailors chalk, hole punch

Manufacturing equipment: machinery eg flat bed; lockstitch; overlock; button hole, binder, stud applicator, dress stands

Pressing equipment: eg steam, dry press, fusing press, stand steamer

Health and safety: hazards eg steam press; finger guards; chemical stiffeners; needle placement; knives and blades; COSHH; current regulations; chemicals; production processes

4 Understand the relationship between design research and development, pattern cutting and garment manufacturing processes

Cohesion: eg integration, ideas, designs, cutting techniques; selection eg processes, fabrics, methods, applications; samples eg maquettes, toiles, final garment; effectiveness; materials, colours, techniques

Evaluate: quality; technical skill, processes, designs; fitness for purpose; right choices; fluency of procedures; technical progression, creative development
# Learning outcomes and assessment criteria

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| LO1 Be able to apply pattern construction processes to interpret garment designs | 1.1 Produce accurate patterns which interpret original garment designs  
1.2 Use appropriate pattern construction processes effectively |
| LO2 Be able to apply garment manufacturing processes to interpret garment designs | 2.1 Produce sewn fabric samples using appropriate manufacturing processes  
2.2 Produce an efficient and accurate lay plan for cutting out and making up  
2.3 Select and apply garment manufacturing processes to create a finished garment |
| LO3 Be able to use technologies and associated equipment for pattern construction and garment production | 3.1 Select and use correct equipment and machinery for a given task  
3.2 Use accurate and safe working practices across machinery and hand tools |
| LO4 Understand the relationship between design research and development, pattern cutting and garment manufacturing processes | 4.1 Evaluate and report on the processes of design, pattern cutting and manufacturing in the production of a finished garment. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 45: Design Exploration in Fashion
  - Unit 46: Design Application in Fashion
  - Unit 60: Fashion and Textile Materials Understanding.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Textiles and Material Design.

Essential requirements

Centres need to provide adequate facilities for garment manufacture for all learners. Minimum requirements must include lockstitch and overlocker machines, a coverstitch machine and suitable industrial-standard pressing equipment.

Centres also need to provide a full range of standard block patterns, correct height cutting tables, cutting equipment, dress stands of varying sizes, genders and scale. Access to block materials, such as plastic and card, and pattern cutting paper will also be required.

It will be the decision of individual centres which equipment they will expect learners to provide themselves.

Employer engagement and vocational contexts

It would be appropriate during this unit if learners could see pattern cutting and manufacturing methods first hand at a production facility. If this is not possible, then the industrial links below may provide access to videos which show the fashion manufacturing industry in action:

- The UK Fashion and Textiles Association (www.5portlandplace.org.uk)
- The British Fashion Council (www.britishfashioncouncil.com) promotes UK designers in the global marketplace.
Unit 48: Production Techniques in Fashion

Unit code: H/601/6415  
Level: 4  
Credit value: 15

- **Aim**

The aim of this unit is to equip learners with the skills and understanding to use specialist clothing industry tools and machinery.

- **Unit abstract**

This unit will give learners the essential skills for and understanding of the basic principles required to produce sample garments to industry standards, using specialist production methods and equipment.

Demonstration and practice should form the basis of this unit. Learners will develop skills and build confidence in using a full range of industrial machinery and workroom equipment effectively and safely. They will also be able to use correct manufacturing terminology to identify the equipment, machinery, tools and processes used in clothing production.

This unit will give learners the opportunity to gain machine skills through practice and sample production. Samples will be professionally presented and developed into a visual reference resource for future projects. Learners should be encouraged to experiment creatively with their design ideas and develop these as toiles for a range of design areas, eg women, men, designer, experimental, sportswear, high street, high fashion.

For learning outcome 1, work should be presented in the form of technical notes and sample files. After completing a series of set exercises to cover the basic principles, learners should be encouraged to carry out increasingly self-directed explorations of the potential of manufacturing equipment and cutting and making techniques. Work for learning outcomes 2 and 3 can be integrated through project work linked to design units. Projects should encourage learners to explore more sophisticated production techniques as well as more adventurous styling and fitting. Learners should recognise that accurate and professional manufacture and the efficient use of industrial equipment forms the basis for creative and individual design solutions.

The unit demonstrates how proficiency in technical skills, linked with research and design development, forms the basis for the eventual production of individual and unique fashion solutions.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to select and use industrial standard equipment in the development of manufacturing skills.
2. Be able to construct a calico toile for a selected garment.
3. Be able to produce a professionally manufactured garment.
4. Understand the use of industrial equipment and the finished garment.
Unit content

1 **Be able to select and use industrial standard equipment in the development of manufacturing skills**

   Machinery: eg sewing machines, lock stitch, twin needle, overlocker, binder; presses eg Hoffman, steam irons, pressing tables, vacuum steamers, freestanding steamers

   Equipment: eg velvet boards, sleeve boards, pressing bucks, cloth eggs, dress stands, trouser stands

   Maintenance and use: machine needles; thread type; stitch; tension; speed; oiling; cleanliness

   Health and safety: manufacturers’ guidelines; COSHH current legislation

   Techniques: eg manipulation, darts, seam placement, yokes, pleats, gathers, fullness; details, collars eg roll, shirt, rever, mandarin, sailor, cowl; cuffs eg shirt, double, frilled, fluted; openings eg placket, waistbands, button, zip, fly, toggle, stud, tie; pockets eg patch, bellows, jetted, flap; sleeves eg set-in, raglan, flared, puff, kimono, batwing

2 **Be able to construct a calico toile for a selected garment**

   Techniques: seams eg flat, channel, French; seam finishes eg overlocked, bound, double stitched; fabric treatments eg gathers, frilling, pleating, smocking, gathering, quilting

   Fitting: adjusting eg neckline, shape, darts, seams, fullness; detail placement eg pockets, waistbands, openings

   Processes: eg manipulation, darts, seam placement, yokes, pleats, gathers, fullness; details; collars eg roll, shirt, rever, mandarin, sailor, cowl; cuffs eg shirt, double, frilled, fluted; openings eg placket, waistbands, button, zip, fly, toggle, stud, tie; pockets eg patch, bellows, jetted, flap; sleeves eg set-in, raglan, flared, puff

3 **Be able to produce a professionally manufactured garment**

   Manufacturing: eg correct sequence, lay planning, fabric type, marking up; cutting; bundling; selection eg correct interlinings, canvas, Vilene, padding; processes eg seaming, seam finishing, under pressing, fusing, trimming; finishing; final inspection

4 **Understand the use of industrial equipment and the finished garment**

   Quality control: inspecting; top pressing; detail eg top stitching, neatness, fit, hang, drape, fastenings

   Evaluate: eg correct use of cutting tools, machinery, equipment, techniques, processes; finished garment; fitness for purpose eg age, gender, market type, customer, price range, look, originality, hang, fit, aesthetics, relevance
## Learning outcomes and assessment criteria

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| **LO1** Be able to select and use industrial standard equipment in the development of manufacturing skills | 1.1 Select and use machinery, hand tools and techniques for identified purposes  
1.2 Adjust and maintain industrial equipment to ensure safe working and accuracy  
1.3 Create sample pieces which demonstrate accurate use of machinery, equipment and techniques  
1.4 Apply appropriate health and safety procedures in the workroom |
| **LO2** Be able to construct a calico toile for a selected garment | 2.1 Select and apply appropriate toile materials for sampling  
2.2 Identify a suitable manufacturing sequence of processes to construct a toile from a selected design  
2.3 Construct a toile to a professional standard of make, fit and finish |
| **LO3** Be able to produce a professionally manufactured garment | 3.1 Devise an accurate manufacturing sequence for a finished garment  
3.2 Produce an effective lay plan for a finished garment to include selected interlinings and linings  
3.3 Produce a professionally finished garment |
| **LO4** Understand the use of industrial equipment and the finished garment | 4.1 Evaluate the use of a range of equipment, processes and techniques in the production of a toile and a finished garment  
4.2 Evaluate the finished garment in terms of finish, accuracy, cut, shape, hang, detail. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 47: Techniques and Processes in Fashion
  - Unit 49: Pattern Drafting in Fashion
- Level 5:
  - Unit 52: Garment Manufacture.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Centres will need to provide adequate facilities for toile making and garment manufacture for all learners. Minimum requirements must include lockstitch and overlocker machines, a coverstitch machine and suitable industrial standard pressing equipment.

Centres also need to provide a full range of standard block patterns, correct height cutting tables, cutting equipment, dress stands of varying sizes, genders and scale. Access to block materials, such as plastic and card, and pattern cutting paper will also be required.

It will be the decision of individual centres which equipment and tools learners will be expected to provide themselves.

Employer engagement and vocational contexts

It would be appropriate for this unit if learners could see pattern cutting and manufacturing methods first hand at a production facility. If this is not possible, then the industrial links below may provide access to videos which show the fashion industry in action.

- The UK Fashion and Textiles Association (www.5portlandplace.org.uk).
- The British Fashion Council (www.britishfashioncouncil.com) promotes UK designers in the global marketplace.
Unit 49: Pattern Drafting in Fashion

Unit code: M/601/6420
Level: 4
Credit value: 15

Aim

The aim of this unit is to provide learners with the opportunity to develop skills in the principles of pattern drafting through block construction and pattern manipulation.

Unit abstract

This unit delivers the skills and processes required to allow learners to progress towards creating patterns from original designs and working drawings.

The unit should be delivered by demonstration and practical application. Learners should be encouraged to explore their ideas as well as understanding the technical principles. Learners should be also be encouraged to engage in producing accurate and professional cutting solutions and to understand the creative potential that technical proficiency can bring.

This unit will enable learners to develop the basic principles of pattern drafting and create a set of basic blocks. Each block will be produced by working from written instructions and diagrams with technical support. Learners will need to be taught the use of specialist equipment and given sufficient opportunity to develop accuracy and precision in measuring, marking out and cutting. Learners will assess the accuracy of their blocks by fitting them against a template. They should be made aware of how important a set of accurate blocks is to the creation of full-scale patterns for garment manufacture, and in the creative design process.

Work for learning outcomes 1 and 2 will need to be presented in the form of a set of basic blocks supported by technical notebooks and sample books recording explorations carried out to a designated scale. The full-scale flat pattern required for learning outcome 3 may result from a creative design project, or from assignments and projects being undertaken in other units. Projects should encourage learners to apply more complex manipulation and fitting principles to creative garments produced from a set of basic blocks.

Learning outcomes

On successful completion of this unit a learner will:

1. Be able to create and use a set of basic blocks
2. Be able to apply skills in dart and seam manipulation
3. Be able to produce a full-scale pattern from creative designs and working drawings
4. Be able to apply principles of form, shape, cut and proportion to a full-scale pattern.
Unit content

1 **Be able to create and use a set of basic blocks**
   
   Basic blocks: eg bodice; skirt; trousers; set in one-piece sleeve
   
   Tools and equipment: for cutting eg table, shears, notchers, hole punch; for measuring eg rule, curved rule, calculator; for marking eg set square, scale squares, grading square, curves, tracing wheel, pens, pencils, chalk, paper, card; for holding eg weights, pattern hooks

2 **Be able to apply skills in dart and seam manipulation**
   
   Darts and seams: skirts eg straight, panel, A-line, circular, frilled, flared, fluted, pleats, godets, yokes; bodices eg low-cut front, buttoned, shirt front, fitted, yokes, bust darts, seaming; sleeves eg straight, shirt, semi-fitted, short, flared, puffed, raglan; trousers eg flare, straight, peg, yoked, high-waisted, low rise
   
   Details: eg collars, cuffs, openings, fastenings, waistbands, pockets
   
   Silhouettes and fitting: eg fitted, semi-fitted, structured, loose

3 **Be able to produce a full-scale pattern from creative designs and working drawings**
   
   Full-scale pattern: naming components eg centre back, centre front, quantity to cut, folds; manufacture indicators eg balance marks, notches, seam allowances, construction lines, grain lines; pattern size, cutting instructions
   
   Lay plan: grain; economical use of fabric; matching patterns eg one-way naps, stripes, checks, tonics, shot fabric
   
   Working from drawings: interpreting drawings; developing spec drawings; transposing 2D into 3D; communicating ideas

4 **Be able to apply principles of form, shape, cut and proportion to a full-scale pattern**
   
   Evaluate pattern: effectiveness of final pattern eg achieving creative intentions, fitness for purpose; economy of final lay plan
   
   Understanding cutting principles: interpretation of ideas eg aesthetic considerations, correct fit, creative realisation, optimum use of fabric; effective use of fabric
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<tr>
<td><strong>LO1</strong> Be able to create and use a set of basic blocks</td>
<td>1.1 Select and use tools effectively and safely 1.2 Apply understanding of standard sizing systems to produce accurate blocks</td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to apply skills in dart and seam manipulation</td>
<td>2.1 Manipulate darts and seams to give shape, form, structure and fit to a garment 2.2 Apply detail to a range of patterns to create style and function 2.3 Produce different patterns to scale demonstrating creative development</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to produce a full-scale pattern from creative designs and working drawings</td>
<td>3.1 Apply the principles of pattern cutting effectively 3.2 Draft an accurate full-scale pattern and lay plan 3.3 Interpret creative design through effective pattern cutting</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to apply principles of form, shape, cut and proportion to a full-scale pattern</td>
<td>4.1 Apply the full-scale pattern to produce an efficient and cost-effective lay plan 4.2 Apply accurate and appropriate codes and instructions to each pattern piece 4.3 Transpose 2D ideas into 3D constructed form.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 47: Techniques and Processes in Fashion
  - Unit 48: Production Techniques in Fashion
- Level 5:
  - Unit 51: Pattern Construction in Fashion.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Pattern cutting facilities and adequate space will be required. These will include correct height and size cutting tables as well as access to block materials such as paper, card or plastic sheeting and various weights of calico.

Other equipment required includes sewing machines and specialist cutting tools including notchers, pin wheels, weights, tailors chalk, metre sticks, set squares, curves, fabric shears and paper scissors.

Employer engagement and vocational contexts

It would be useful for learners to visit a manufacturing resource to gain understanding of how pattern drafting and lay plan techniques are adapted for industry. It would also enhance the learning experience to include one or two master classes from practising creative designers, demonstrating how contemporary and innovative clothing shapes can be adapted from the basic pattern blocks.

Other useful industry links are as follows:

- British Fashion Council (www.britishfashioncouncil.com) is the association supporting and promotion British Fashion in the global marketplace.
Unit 50: Research and Development for Fashion Design

Unit code: F/601/6423
Level: 5
Credit value: 15

• Aim
The aim of this unit is to further extend learners’ knowledge and skills in fashion design, through critical investigation, personal enquiry and the advanced selection and application of media.

• Unit abstract
This unit encourages learners to develop initiatives and perception through personal expression and enquiry. Learners will be expected to utilise their progress to develop creative potential and personal style. Critical investigation and experimental learning are the approaches which will allow learners to develop design and visual skills throughout the unit.

Establishing individuality in generating concepts, developing design ideas and creating a personal visual language is fundamental to successfully achieving the outcomes and assessment criteria of this unit. Learners will be required to develop a creative uniqueness by exploring the design process through specific projects.

Group and individual critiques and presentations of work are essential to this unit to encourage debate and mutual learning within the cohort and to stimulate critical and creative thinking. Learners should be encouraged to research unfamiliar, as well as, familiar sources and to experiment with a range of materials and technologies in order to achieve personalised creative solutions. Learners will be expected to work independently, analysing and evaluating their own discoveries and design solutions through learning journals, self-evaluation and peer group critiques. Experimental design development is explored in this unit and learners should be encouraged to push personal creative parameters through concept development, experimentation and sustained critical reflection. Learners will be expected to challenge and develop methods of fashion forecasting and directional influences.

The unit will develop creative, critical and intellectual skills in relation to fashion design and imaging. The unit will extend upon previously learned skills in forecasting theory and cultural analysis. Learners should present their work in an appropriate format, covering a range of communication methods. Learners will be expected to discuss and evaluate their ideas with tutors and peers using appropriate language and convincing argument.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand how to develop the design process through experimental ideas and applications
2. Be able to present research analysis to client groups
3. Be able to extend and apply skills in fashion forecasting and analysis
4. Be able to synthesise and critically evaluate experimentation in personal creative practice.
Unit content

1 Understand how to develop the design process through experimental ideas and applications

Research: through self-initiated study eg personal enquiry, discovery, perception, initiative, compiling, collating; fashion prediction; trend information eg magazines, websites, historical, contextual, contemporary, design practices, artist; influential factors eg, political, economic, social, cultural, environmental, technological

Visual development: media application eg traditional; non traditional; investigation eg painting, printmaking, photography, sculpture, animation, rendering, digital applications; methods eg combining, compiling, categorising, relating, contrasting, manipulating

Illustration: figure representation eg life drawing, clothed figure, flats, spec drawings, collage, montage; fabric representation; contemporary practice eg professional illustration, magazines, newspapers, in-store promotion, trade fairs, exhibitions, beauty, hair, makeup, illustrators' agents

2 Be able to present research analysis to client groups

Individual approach: personal representations eg mood, emotion, texture, movement, market, occasion, visual language; response to ideas eg visual stimuli, intellectual approach, interpretation

Communication of ideas: formats eg storyboards, research notebooks, learning journal, sketchbooks, printouts, onscreen; design conventions eg composition, layout, typographic use, text placement

Present: verbal; visual; written; electronic; format eg sketchbooks, notebooks, storyboards, mood boards, fashion show, installation

3 Be able to extend and apply skills in fashion forecasting and analysis

Examining and recording: historical and cultural referencing eg contemporary, ethnographic, fashion predictions, trend information, colour predictions, exhibitions, film, television, costume, theatre, literature, art movements, fabric developments

Interpretation of information: identification eg classifying, selecting and recording visual information; understanding and applying; convention, innovation, reaching conclusions, structuring argument, constructive criticism

Market awareness: occasion; gender; fabric; market level; trend prediction; colour prediction; environmental; cultural; ecological
4 Be able to synthesise and critically evaluate experimentation in personal creative practice

Evaluation: response eg to critical debate; personal reflection; development eg further designs, change of direction, value judgement

Application of analysis: selection eg synthesis of research, application, fashion awareness, application to own work, identification of elements from visual research, judgement, choice

Synthesis: eg deconstruction of images, image analysis, creative communication, innovation, developing own style, personal expression
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| **LO1** Understand how to develop the design process through experimental ideas and applications | 1.1 Demonstrate an understanding of extended design practice through experimental ideas and practices  
1.2 Resolve final design solutions through the manipulation of creative ideas and applications |
| **LO2** Be able to present research analysis to client groups | 2.1 Analyse and apply fashion forecasting strategies to inform own practice  
2.2 Demonstrate a critical approach to the analysis and synthesis of research into final design solutions  
2.3 Present work in an engaging and creative style |
| **LO3** Be able to extend and apply skills in fashion forecasting and analysis | 3.1 Record and evaluate developmental approaches to fashion design  
3.2 Select and manipulate visual information to extend and develop creative ideas and visual interpretation |
| **LO4** Be able to synthesise and critically evaluate experimentation in personal creative practice | 4.1 Combine and apply extended visual techniques in the development of innovative fashion design and visual interpretation  
4.2 Apply unique and personal approaches to fashion design and visual interpretation  
4.3 Produce a body of work which demonstrates creativity, originality, personal expression and professionalism. |
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 5:
  - Unit 61: Fashion Collection Realisation.

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements
Computer access will be essential for use of specialist imaging programmes such as Photoshop, Illustrator and InDesign. Learners may need to access use of digital cameras and/or darkroom and photographic studio facilities.

It is essential that the international collections are studied, through the international Vogue magazines, and through individual couture designer websites.
Employer engagement and vocational contexts

Learners should be encouraged to access creative designer fashion and to examine first hand fabric, cut, shape and fit by visiting sample rooms, designers’ studios and designer retail outlets.

Learners should be encouraged to develop contacts with industry and professional bodies which will assist them in their selected interests and themes. For example:

- The International Colour Authority (www.theinternationalcolourauthority.org) gives advice and information on coming trends in fashion, textiles, and interiors
- The Association of Illustrators (www.theaoi.com) holds information and resources for commissioners and practitioners of illustration
- Peclers (www.peclersparis.com) holds trend information and fashion forward ideas
- Promostyl (www.promostyle.com) holds trend information and fashion forward ideas
- Illustrator Web (www.illustratorweb.com) is the premier organisation for illustrators and image makers working in fashion and lifestyle areas.
Unit 51: Pattern Construction in Fashion

Unit code: L/601/6425
Level: 5
Credit value: 15

Aim

The aim of this unit is to develop further the skills and understanding required to construct patterns from original designs.

Unit abstract

In this unit, learners will explore the two- and three-dimensional parameters of pattern cutting and garment production, using creative designs and working drawings as a starting point. The unit will include flat pattern cutting, drafting, modelling on the stand and grading. Learners will undertake more complex cutting and construction, including advanced creative detailing and manufacturing techniques. Formal delivery and workshop demonstrations should be used, as well as individual and group critiques. Tutorials will enable learners to select and apply the pattern construction methods which best suit their individual needs. Assignments for this unit should be fully integrated with design units, enabling learners to work independently and develop a unique fashion range.

To meet the requirements of the unit learners will produce a capsule collection and will develop an understanding of grading principles. The collection could be designed and manufactured in collaboration with an industrial partner. The processes covered will depend on the designs and patterns produced by the individual learners. The set of graded patterns for a simple garment for learning outcome 2 may form part of the collection or be undertaken as a separate assignment. Costing and lay planning evidence for learning outcome 3 should be presented using an industry standard format. Processes not covered through the production of the collection can be submitted in sample form.

Learning outcomes

On successful completion of this unit a learner will:

1. Be able to apply creative and accurate pattern cutting skills to original designs
2. Be able to apply the processes of pattern grading
3. Be able to use specialist processes to meet requirements
4. Be able to evaluate own pattern cutting and grading skills applied to original designs.
Unit content

1. **Be able to apply creative and accurate pattern cutting skills to original designs**

   **Methods**: flat pattern cutting; modelling on the stand; drafting

   **Applications**: clothing eg dresses, skirts, trousers, bodices, shirts, blouses, coats, jackets, waistcoats; customer; men, women, children, infants; specialist eg protective, active sports, insulated, waterproof; design areas eg couture, high street, designer, mass market

   **Design solutions**: original adaptations eg sleeves eg shirt, puff, raglan, kimono, fitted, flared, set-in; collars eg roll, shirt, sailor, cowl, shirt, mandarin, rever, lapel; trousers eg peg, bootcut, flared, cropped, Capri, harem; details eg darts, seam placement, yokes, pleats, gathers, fullness, godets, panels, inserts, peplums; fastenings eg placket, waistbands, button, zip, fly, toggle, stud, tie; pockets eg patch, bellows, jetted, flap

   **Fabric considerations**: types eg woven, knitted, printed, embroidered, natural, man-made, stretch; surfaces eg nap, pile, striped, checked, shot, textured, interlinings, linings, canvas, Vilene

2. **Be able to apply the processes of pattern grading**

   **Standard pattern**: processes; grading up sizes; grading down sizes; instructions eg marking up, seam allowances, balance marks, number of pieces to be cut, interlining pattern

3. **Be able to use specialist processes to meet requirements**

   **Techniques by hand**: eg scissors, shears, tracing wheels, curves, tailors chalk, set square; powered cutting equipment

   **Machinery**: eg flat bed; lockstitch; overlock; button hole; binder; cover stitch; twin needle; blind hemmer; for pressing eg steam, dry press, donkeys, fusing press, sleeve boards, stand steamer

   **Computer applications**: eg lay planning, pattern grading, costing, spec sheets, machinists’ instructions

   **Health and safety awareness**: safe working practices; COSHH current legislation

4. **Be able to evaluate own pattern cutting and grading skills applied to original designs**

   **Use of technique**: eg ideas, fluency, familiarity, capability, control, accuracy

   **Pattern construction**: eg finished garment, interpretation of design, right fabric choice, aesthetics, cohesion, evaluation; of process, quality, time-keeping, progression, accuracy, techniques, creative development
## Learning outcomes and assessment criteria

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<thead>
<tr>
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<th>Assessment criteria for pass</th>
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</tbody>
</table>
| **LO1** Be able to apply creative and accurate pattern cutting skills to original designs | 1.1 Select and apply appropriate cutting processes to creative designs  
1.2 Produce patterns for a capsule collection demonstrating accurate interpretation of designs  
1.3 Produce accurate and informative patterns which contain all relevant labelling and instructions |
| **LO2** Be able to apply the processes of pattern grading | 2.1 Produce a set of graded patterns with instructions for sizing, cutting, manufacture and finishing |
| **LO3** Be able to use specialist processes to meet requirements | 3.1 Observe current health and safety regulations in the cutting room  
3.2 Produce accurate costing sheets and lay plans showing effective use of fabric and grading processes  
3.3 Apply appropriate software in the production and management of a fashion collection |
| **LO4** Be able to evaluate own pattern cutting and grading skills applied to original designs | 4.1 Evaluate and make recommendations for improvement of own pattern cutting and grading skills and use of workroom equipment. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 47: Techniques and Processes in Fashion
  - Unit 49: Pattern Drafting in Fashion
- **Level 5:**
  - Unit 50: Research and Development for Fashion Design
  - Unit 61: Fashion Collection Realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Pattern-cutting facilities and adequate space will be required for the delivery of this unit. This will include correct height and size cutting tables as well as access to block materials such as paper, card or plastic sheeting and various weights of calico.

Equipment required includes sewing machines and specialist cutting tools including notchers, tracing wheels, weights, tailors chalk, metre sticks, set squares, curves, fabric shears and paper scissors and dress stands.

Employer engagement and vocational contexts

Tutors are encouraged to include visits to manufacturers and factories, so that learners can observe the application of cutting and grading operations in a commercial context. As this unit may be linked with a fashion collection, learners are encouraged to find their own commercial links for sponsorship or collaboration.
Unit 52: Garment Manufacture

Unit code: R/601/6426
Level: 5
Credit value: 15

• Aim

The aim of this unit is to further develop skills and understanding of manufacturing techniques and processes involved in clothing production.

• Unit abstract

This unit will give learners the opportunity to extend skills in clothing production learned in previous units. Learners will be introduced to an advanced range of techniques and methods, using industrial machinery to produce designer samples to a professional standard. This process will be undertaken through the creation of a capsule collection of unique garments. Problem solving, lateral thinking and applying solutions to different contexts are all to be encouraged. It is envisaged that original designs and garment patterns produced in other units will be taken through to completion for this unit. Learners will work individually, with group critiques included to encourage enquiry, debate and evaluation. Tutorials will enable learners to select and apply the most suitable methods for garment manufacture and will support learners in the development of a unique capsule collection from their own designs and patterns.

Projects for this unit should be fully integrated with the design and pattern cutting units, enabling learners to produce a mature and personal collection over a sustained period of time. Those learners who wish to should be encouraged to seek a collaborative partnership with a commercial partner. The manufacturing processes covered will depend on the individual design work produced and innovative solutions are to be encouraged. Processes not covered by the range of garments should be produced as samples. The fabrics and trimmings selected will also relate to the individual collections, and learners should be encouraged to tackle a range of fabrics in order to demonstrate proficiency of manufacturing skills and finishes. The research analysis of fabric will be a key element of this unit and learners will be encouraged to visit fabric wholesalers and retailers, as well as trade shows, in order to access individual and unique sample lengths. Learners will be encouraged to undertake individual research into innovative global manufacturing methods and present this research at the final stage of the unit along with the final collection and related work.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to produce a finished sample garment
2. Be able to use equipment and technologies for garment manufacture
3. Be able to produce a capsule collection of finished garments
4. Understand the use of manufacturing equipment and technologies in creating and presenting a capsule collection.
Unit content

1 **Be able to produce a finished sample garment**

Cloth: types eg woven, knitted, man-made, natural, stretch, pile, nap, striped, patterned, shot; surface treatments eg embroidered, painted, quilted, smocked, tucked; interlinings eg acetate, Vilene, canvas, wadding

Techniques: seams eg flat, channel, French; seam finishes eg overlocked, bound, double stitched; fabric treatments eg gathers, frilling, pleating, smocking, gathering, quilting

Processes: manipulation eg darts, seam placement, yokes, pleats, gathers, fullness; details eg collars eg roll, shirt, rever, mandarin, sailor, cowl; cuffs eg shirt, double, frilled, fluted; openings eg placket, waistbands, button, zip, fly, toggle, stud, tie; pockets eg patch, bellows, jetted, flap; sleeves eg set-in, raglan, flared, puff

2 **Be able to use equipment and technologies for garment manufacture**


Processes: eg lock stitch, threading, changing needle, backstitch, stitching, starting, stopping

Health and safety: hazards eg steam press; finger guards; chemical stiffeners; needle placement; knives and blades; chemicals; production processes COSHH (Control of Substances Hazardous to Health)

3 **Be able to produce a capsule collection of finished garments**

Planning: processes; logical sequence; safety; timescale

Realisation process: eg working drawings, scale samples, fabric treatments, toiles; sample garments, prototypes, design development, sketchbooks, illustration, design sheets, presentation

4 **Understand the use of manufacturing equipment and technologies in creating and presenting a capsule collection**

Quality: techniques, processes, designs

Presentation: eg fashion show, photographs, mixed media, animation, film, video, illustration, website, styling, critique

Effectiveness: eg choice of fabric, trimmings, linings, finishes, methods, techniques, equipment, machinery; planning; scheduling; meeting deadlines; end result eg fitness for purpose, meeting own objectives, fulfilling expectations, supporting rationale, defining personal style, reaching goals, innovation
## Learning outcomes and assessment criteria

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<tr>
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Select and apply suitable techniques for working with different fabric types</td>
</tr>
<tr>
<td>Be able to produce a finished sample garment</td>
<td>1.2 Produce a sample garment to industry quality</td>
</tr>
<tr>
<td></td>
<td>1.3 Select and apply appropriate and effective methods of manufacture</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Use appropriate industrial equipment and technologies safely and correctly</td>
</tr>
<tr>
<td>Be able to use equipment and technologies for garment manufacture</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Plan the order and methods of make, working from original designs and patterns</td>
</tr>
<tr>
<td>Be able to produce a capsule collection of finished garments</td>
<td>3.2 Produce a finished collection of garments to industry quality</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Critically evaluate the finished collection in terms of fitness for purpose, creativity and quality of manufacture</td>
</tr>
<tr>
<td>Understand the use of manufacturing equipment and technologies in creating and presenting a capsule collection</td>
<td>4.2 Evaluate the effectiveness of manufacturing equipment and technologies used.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 47: Techniques and Processes in Fashion
  - Unit 48: Production Techniques in Fashion
- Level 5:
  - Unit 50: Research and Development for Fashion Design
  - Unit 51: Pattern Construction in Fashion
  - Unit 61: Fashion Collection Realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Centres will need to provide adequate facilities for garment manufacture for all learners. Minimum requirements must include lockstitch and overlock machines, a coverstitch machine and suitable industrial standard pressing equipment. Centres also need to provide a full range of standard block patterns, correct height cutting tables, cutting equipment, dress stands of varying sizes, genders and scale. Access to pattern cutting paper will also be required.

It will be the decision of the individual centres which equipment and tools learners will be expected to provide for themselves.
Employer engagement and vocational contexts

Tutors are encouraged to include visits to manufacturers, so that learners can observe the application of cutting and grading operations in a commercial context. As this unit may be linked with the production of a fashion collection, learners should be encouraged to find their own commercial links for sponsorship or collaboration.

The National Centre for Work Experience (www.ncwe.com) can assist with placements and produces a free guide ‘Focus on Work Experience’.

The International Colour Authority (www.theinternationalcolourauthority.org) the premier body for trend and colour predictions for the coming season.

The British Fashion Council (www.britishfashioncouncil.com) promotes UK fashion in the global market.

The Ethical Fashion Forum (www.ethicalfashionforum.com) is a not-for-profit organisation focusing on social and environmental sustainability in the global fashion industry.

Fashion monitor (www.fashionmonitor.co.uk) lists all the fashion and related companies and media operating throughout UK and Europe. Is a comprehensive source of industry information, by subscription.
Unit 53: Clothing Manufacture Production Operations

Unit code: H/601/6429
Level: 5
Credit value: 15

Aim
The aim of this unit is to enable learners to develop their skills and understanding of the manufacturing and quality control systems and processes used in the clothing industry.

Unit abstract
This unit is investigative in nature and should focus on learners’ engagement with primary and secondary research relating to the clothing production industries. To fully meet the learning outcomes, learners will be encouraged to visit manufacturers and suppliers and to investigate, through extended study, the structures and operations currently in place in the clothing industry. These systems include not only the cutting, sampling and manufacturing processes, but also quality control, logistics, distribution, costing and purchasing.

It is expected that there will be some formal delivery at the start of this unit to give learners an understanding of the processes and activities that they will encounter on visits and in their enquiries. Tutors will need to monitor research and written skills, and give guidance on how learners should produce an extended study and structure a professional industry-focused report. Studies should be personalised to enable learners to research areas of interest, particularly where this could lead to possible employment.

The purpose of this unit is to give learners an in-depth understanding of the clothing and manufacturing industry. It is not a practical, hands-on unit, but learners should be encouraged to instigate links with a variety of companies and to gain first-hand knowledge of working practices. Combined with visits, learners will be expected to engage in extended research practices in order to investigate fully a range of contemporary global manufacturing methods and processes. Although evidence could be presented in a variety of ways, it is expected that learners will submit the work in the form of a written and illustrated report, of between 2,500 and 3,000 words. Content will vary depending on the links each individual learner has made with industry and with other units, which could serve to initiate interest in a specific area (eg lingerie, baby wear, active sports wear, men’s wear) but all learners should be encouraged to visit at least two manufacturing outlets, to enable better comparison and evaluation of the systems.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the systems currently used in the clothing industry for both pattern and garment production
2. Understand the costing and purchasing systems currently used in the clothing industry
3. Understand the merits of the different production systems currently used in the clothing industry
4. Be able to produce an evaluative report based on research and analysis.
Unit content

1 **Understand the systems currently used in the clothing industry for both pattern and garment production**

   Industry: small-scale; mass production; UK based; worldwide
   Patterns: checking; sizing; grading
   Cutting: preparation eg lay planning, spreading, cutting, considerations eg fabric width, cloth type, finish, stretch
   Sewing: eg systems for handling, assembly, line balancing, pressing, threads, treatments
   Method study: work study; work measurement; time standards; recording mechanisms
   Quality control: eg reporting on fabric, machinery, workers, materials, systematic examination, faults analysis, prevention, trouble shooting, unpicking, redoing
   Pre-manufacture: eg stock rotation, fabric care, handling, storage
   Post-manufacture: checking; labelling; bagging; boxing; distribution

2 **Understand the costing and purchasing systems currently used in the clothing industry**

   Costing and purchasing: samples; first; sealed; suppliers; needs; standards; expectations; approval

3 **Understand the merits of the different production systems currently used in the clothing industry**

   Advantages and disadvantages: to consumer; business; employer, employee; quality; quantity; timing
   Factors: costs; speed; efficiency; quality eg of product, of service; competition eg overseas

4 **Be able to produce an evaluative report based on research and analysis**

   Report format: purpose; research; analysis eg data, facts, insights, charts, comparisons, conclusions, visuals
## Learning outcomes and assessment criteria

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</tr>
</tbody>
</table>
| LO1 Understand the systems currently used in the clothing industry for both pattern and garment production | 1.1 Research and evaluate accurate information for pattern cutting and garment manufacturing in the clothing industries  
1.2 Research and evaluate storage, warehousing, distribution and logistics systems in contrasting clothing industries |
| LO2 Understand the costing and purchasing systems currently used in the clothing industry | 2.1 Research and evaluate systems currently used for costing and purchasing in contrasting clothing industries                                                                                                               |
| LO3 Understand the merits of the different production systems currently used in the clothing industry | 3.1 Analyse the merits of the different systems in current use in the clothing industry  
3.2 Critically evaluate and compare the current use of systems in different contexts, summarising the benefits |
| LO4 Be able to produce an evaluative report based on research and analysis        | 4.1 Produce and present a succinct report which provides an accurate and coherent account of current systems used in the clothing industry.                                                                                     |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 47: Techniques and Processes in Fashion
  - Unit 48: Production Techniques in Fashion
  - Unit 59: CAD/CAM For Fashion and Textiles
- Level 5:
  - Unit 51: Pattern Construction in Fashion
  - Unit 52: Garment Manufacture.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Learners will need access to research facilities and to computer software that supports professional report writing. Trade literature relating to clothing manufacture such as *Drapers* and *Men’s Wear* would be beneficial.

Employer engagement and vocational contexts

Learners will be expected to make contact with those manufacturers that relate to their particular areas of interest.

The following organisations may also be helpful:

- **The British Fashion Council** ([www.britishfashioncouncil.com](http://www.britishfashioncouncil.com)) is the association supporting and promoting British Fashion in the global marketplace
- **Free Index** ([www.freeindex.co.uk/categories/clothing_manufacturing](http://www.freeindex.co.uk/categories/clothing_manufacturing)) is the website listing the main clothing manufacturers in the UK
- **Kelly’s Industrial Directory** ([www.kellys.co.uk](http://www.kellys.co.uk)) is the UK directory of manufacturers and industrial services.
Unit 54: Fashion Promotion and Marketing

Unit code: Y/601/6430
Level: 5
Credit value: 15

Aim

The aim of this unit is to provide learners with an understanding of the essential elements of fashion promotion and its role within the fashion industry and to develop skills in developing a promotional campaign.

Unit abstract

This unit will introduce learners to the broad contexts relating to fashion promotion. It should begin with a critical engagement with the subject ‘Fashion’ in all its forms, including retail, press, advertising, public relations, branding, film, music, broadcasting and lifestyle. A series of lectures and seminars will introduce learners to the key concepts of fashion as a vehicle of cultural communication.

A successful practitioner in fashion promotion will always comprehend the complexities of the system of the contemporary fashion industry. The fast-changing nature of fashion in all its forms should be examined in the wider context of the creative industries and the way they integrate, as well as the outside influences which affect the discipline. Key to individual learners’ development is an understanding of the professional organisations that make up the fashion promotion industry. As well as an introduction to areas of marketing, advertising, media, press, editorial, broadcast, branding, illustration and journalism, learners will be introduced to more advanced digital methods of realising and manipulating imagery and text in order to communicate ideas.

Through this unit learners will come to understand the processes in fashion promotion as well as the role that personnel such as photographers, stylists, models, consultants, editors, art directors and others play in the promotion industry. Learners will extend research methods and strategies for study learned in previous units and these will be assimilated in an extended essay of between 2,000 and 2,500 words which will present an analysis and understanding of the fashion promotion industry. Formal lectures and seminars should be used to deliver the theoretical knowledge of fashion promotion interspersed with individual tutorials to guide the learners' personal exploration. Learners will be expected to make visits to various promotional companies, including press offices, public relations companies, magazines, newspapers and advertising agencies in order to gain primary research information. Learners will also produce a self-initiated promotional project which will be presented at a group critique.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the fashion promotion industry and its component parts
2. Be able to research and analyse promotional strategies and campaign planning
3. Be able to plan and execute a self-initiated promotional campaign
4. Be able to evaluate own promotion strategies.
Unit content

1 Understand the fashion promotion industry and its component parts

Components: eg marketing, advertising, branding, public relations, photography, styling, illustration, digital imaging, interactive media, journalism, press, in-store, mail order

Strategic mix: influences eg consumer, product, price, positioning, need, want, promotional methods

Concepts: communication eg innovation, fashion theory; contemporary influences eg global, cultural, political, environmental, ecological, television, film

Promotional planning: eg techniques, measurable objectives, coordination, timescale, the fashion cycle

Marketing: marketing theory eg segmentation, positioning, marketing mix, mass market, couture, niche markets, product life cycles, tactics, product innovation, analysis

Planning constraints: cost; timescale; target customer eg children, adult, men, families

2 Be able to research and analyse promotional strategies and campaign planning

Campaign analysis: success; strategies; campaigns; competition

Strategies: methods eg public relations, marketing campaigns, in-store promotion, web exposure, television advertising, endorsement, guerrilla marketing, posters; events eg parties, fashion shows, trade fairs, charity functions, sponsorship

Analysis: fashion media eg websites, magazines, supplements, newspapers, television; retail eg in-store magazines, catalogues, sales figures, exposure, celebrity ranges

3 Be able to plan and execute a self-initiated promotional campaign

Campaign requirements: methods eg public relations campaign; sponsorship eg endorsement, advertorial; visual solutions eg illustration, websites, photography, copywriting, editorial, press releases, brochures, flyers; advertising eg television, media, posters

Planning: scheduling eg events, parties, time scale, trouble shooting; commissioning eg market research, designs, adverts, press releases, press packs, photography, television interviews

4 Be able to evaluate own promotional strategies

Analysis: identify strengths; weaknesses; strategies used; campaign comparisons

Evaluate: own campaign; review results eg success, impact, fitness for purpose, further opportunities, potential, own intentions
### Learning outcomes and assessment criteria

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</table>

**LO1**  
Understand the fashion promotion industry and its component parts  
1.1 Research the promotional methods used by a selected product or service  
1.2 Produce a strategy and framework which will produce effective marketing communications  
1.3 Research and analyse the role of the fashion media within fashion promotion  
**LO2**  
Be able to research and analyse promotional strategies and campaign planning  
2.1 Demonstrate an understanding of interrelated fashion promotion strategies  
2.2 Research and evaluate creative processes and technologies in the production of a successful promotional campaign  
2.3 Research and assimilate a written and visual archive of fashion promotional material  
**LO3**  
Be able to plan and execute a self-initiated promotional campaign  
3.1 Create and manage a favourable image through consumer research and positive communication  
3.2 Plan and organise creative visual solutions for a promotional strategy for an identified campaign  
3.3 Produce a creative promotional campaign targeting potential consumers  
**LO4**  
Be able to evaluate own promotional strategies  
4.1 Evaluate promotion strategy in terms of fitness for purpose and effectiveness  
4.2 Critically evaluate and reflect upon own strategies, concepts, planning and execution of the promotional campaign.
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 59: CAD/CAM for Fashion and Textiles
- **Level 5:**
  - Unit 61: Fashion Collection realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Learners will be developing a self-initiated project for this unit therefore research will be individually sourced as appropriate. Learners will be encouraged to support theoretical material gained from lectures and seminars by further investigations into contemporary marketing and communication practices. Access to digital graphics packages, publishing and page layout software will be required.

Employer engagement and vocational contexts

It is essential for this unit that learners make contact with the fashion promotion industry and, wherever possible, make visits to a selection of companies. These could include PR companies, press offices (of retail outlets or designers) marketing companies, design consultancies, photography studios, stylists, journalists, magazines and newspapers, web designers, television and radio companies, fashion show producers and events organisers. The following may also be useful contacts:

- **Benns Media Directory** ([www.ubminfo.co.uk](http://www.ubminfo.co.uk)) lists all national and regional newspapers, consumer magazines, periodicals, media organisations worldwide
- **Fashion Monitor** ([www.fashionmonitor.co.uk](http://www.fashionmonitor.co.uk)) is the complete guide to the fashion industry covering PR companies, stylists, photographers, illustrators, UK media, trade and press and key overseas media. Subscription only, but some information available on the site
- **The Chartered Institute of Marketing** ([www.cim.co.uk](http://www.cim.co.uk)) site covers industry news, training and professional development
- **The Institute of Public Relations** ([www.ipr.or.uk](http://www.ipr.or.uk)) site has news, information and resources on all aspects of the PR industry.
Unit 55: Concepts for Costume Design

Unit code: H/601/6432
Level: 4
Credit value: 15

- Aim

This unit aims to offer learners the opportunity to develop the understanding and vocational skills required to develop costume design concepts in response to a director’s brief.

- Unit abstract

In this unit learners will develop an understanding of the design process through project-based work from the director’s brief, script analysis processes, analysing constraints, collaborating with the creative team and producing historical research and sketchbook work. The practical aspects of this unit will be largely developed through project-based work that explores different styles of costume design. The learner should seek to experiment to broaden the approaches to design concepts. As the unit progresses, the learner should build up a portfolio of designs. The unit should be a balance of theory and practice but with the assessment focused on the generation of ideas and the design process to the interim stage. The unit should be a mixture of teamwork and individual assignment with tutor support. Some of the projects may be integrated into the work of other units.

The unit should be delivered through a mixture of project, lecture/demonstration and simulation but should be largely project based and practical. Ideally, assignments should be supported by lectures, demonstrations and seminars dealing with issues related to the development of design concepts and processes, which broaden the learners’ response to the conceptual and aesthetic problems posed by the projects. Wherever possible the designs should be integrated into performance. Learners are expected to produce a portfolio of work related to specific design briefs. These should include work at the initial stages of research and development. This should show the range and variety of styles explored as well as evidence of research and development of initial ideas. A mix of working methods should be included in this portfolio. The process of the work of the creative team may be recorded in written, audio or visual form and evidence of the ability to analyse the process of design should be evident.

- Learning outcomes

On successful completion of this unit a learner will:

1. Understand the role of the costume designer
2. Be able to use text analysis to drive research and inform development of design concepts
3. Be able to generate design ideas from research and in response to a brief
4. Be able to develop draft design concepts for presentation.
Unit content

1 **Understand the role of the costume designer**

*Designer’s role:* research eg characters, periods, environments; development of portfolio; meeting brief requirements; directorial intent eg acting space, character, production style, meaning, total visual effect; constraints; potential design problems; costume lists; charts

*Collaboration:* communication eg production team, performers; financial restraints eg budgets, schedules, deadlines; negotiating; production style; visual effects; safe working practice

2 **Be able to use text analysis to drive research and inform development of design concepts**

*Text analysis:* eg mood, themes, historical period, contemporary locations, subtexts, visual style, quality, meaning, ‘scene-by-scene’ details of acting, costuming requirements

*Concept development:* research eg periods (historical, contemporary), characters, environments, space, style; design constraints eg performance space, costume changes, performance style, cast size

3 **Be able to generate design ideas from research and in response to a brief**

*Exploration of ideas:* brainstorming with creative team; visual aspects eg materials, colour schemes, shape, texture, lighting effects; technical processes eg production techniques, making

*Visual research:* eg drawing, mixed media, colour work; concept development eg sketchbook work, research sheets, mood boards

*Research sources:* eg libraries, galleries, newspaper archives, artworks, furniture, museums, paintings, photographs, internet; recording eg collating; annotating, research sheets

*Contextual references:* cultural; social; historical; research relationships eg to script, to character analysis; areas for further research

4 **Be able to develop draft design concepts for presentation**

*Design concepts:* 2D work eg sketchbooks, collages, mood boards, paintings, colour work, texture; annotated draft designs; character visuals; set constraints; material properties eg durability, surface finish, effects of lighting; costume changes

*Presentation:* analysis (script, design concept); visual presentation eg research, draft design concepts, materials

*Collaboration:* agree designs with creative team; discuss production issues

*Evaluation:* design proposals; potential refinements
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong>&lt;br&gt;Understand the role of the costume designer</td>
<td><strong>The learner can:</strong>&lt;br&gt;1.1 Clarify directorial intent&lt;br&gt;1.2 Analyse character, period and environments&lt;br&gt;1.3 Collaborate with members of the team to achieve desired outcomes within agreed time frame&lt;br&gt;1.4 Analyse potential design problems and constraints adhering to safe working practices</td>
</tr>
<tr>
<td><strong>LO2</strong>&lt;br&gt;Be able to use text analysis to drive research and inform development of design concepts</td>
<td>2.1 Analyse the script and record staging information and costuming requirements&lt;br&gt;2.2 Use research based on script analysis to inform development of design ideas&lt;br&gt;2.3 Address potential design issues and constraints related to total visual effect</td>
</tr>
<tr>
<td><strong>LO3</strong>&lt;br&gt;Be able to generate design ideas from research and in response to a brief</td>
<td>3.1 Collaboratively explore design ideas based on analysis of script and brief&lt;br&gt;3.2 Generate visual research material from primary and secondary sources&lt;br&gt;3.3 Explore production techniques with reference to materials and visual effects&lt;br&gt;3.4 Establish relevant contextual references</td>
</tr>
<tr>
<td><strong>LO4</strong>&lt;br&gt;Be able to develop draft design concepts for presentation</td>
<td>4.1 Produce annotated draft designs with necessary costume changes in response to research and analysis&lt;br&gt;4.2 Present final draft designs to the creative team and director with suggested materials, effects and costume changes&lt;br&gt;4.3 Evaluate design proposals and analyse potential refinements.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 3: Contextual and Cultural Referencing in Art and Design
  - Unit 45: Design Exploration in Fashion
  - Unit 46: Design Application in Fashion
  - Unit 57: Millinery and Headdresses
  - Unit 62: Costume Realisation

- **Level 5:**
  - Unit 56: Costume Production for Performing Arts
  - Unit 58: Cultural Understanding in Fashion.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Access to design/studio space or a similar area is essential. The area should be equipped with power and appropriate design equipment. Access to an area with theatre lighting would be useful.

Primary and secondary sources may be found in libraries, galleries, museums, on the internet, CD ROMs, specialist publications, exhibitions and specialist collections such as the Victoria and Albert Museum, The Theatre Museum and Snowshill Manor. Learners must record sources and cite them where referenced.
Employer engagement and vocational contexts

Centres should develop links with theatres, practising costume designers, set designers and other artists and designers to deliver assignments to learners or to provide work experience and workshops/master classes.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, regional business links – www.businesslink.gov.uk

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 56: Costume Production for Performing Arts

Unit code: M/601/6434
Level: 5
Credit value: 15

• Aim
This unit aims to develop skills in costume production together with proficiency in managing a wardrobe department on a day-to-day basis.

• Unit abstract
In this unit learners will develop the skills needed for costume production, from design to final use and storage. Learners will be able to construct, adapt and alter costumes. They will develop manual and machine-based skills used in the realisation of costume designs. This unit is also concerned with the day-to-day management and running of a wardrobe department during the run of a production and learners will gain an understanding of this side of the role. The unit is a mixture of skills development, practical work and performance/event-based projects. Learners must have the opportunity to practise and acquire appropriate skills. They should develop an individual portfolio of work to support their practice. Where possible, the designs should be integrated with performance.

Evidence for this unit should be presented as examples of finished work based on sound constructional techniques. Learners should gather a portfolio of evidence of examples of work either completed or at stages illustrative of different techniques. Learners’ evidence should be either the actual garments or a verified pictorial record. Items of costume should, where possible, be modelled live either at an arranged event or in performance. Supporting evidence of the ability to analyse the process of construction and operation will be required.

• Learning outcomes
On successful completion of this unit a learner will:

1. Be able to translate designs into working costumes for performance
2. Be able to develop and utilise skills for the production of costume designs
3. Be able to work as part of a wardrobe team
4. Be able to manage the running of a costume wardrobe.
Unit content

1 Be able to translate designs into working costumes for performance

Translation of designs: measuring; marking out; cutting patterns
Construction: analyse methods; identify stages; practical processes eg cutting, sewing, painting, dyeing, fitting
Hire and acquisition: alteration; adaptation
Support items: eg accessories, headgear, wigs, footwear
Professional practice: team work eg with designer, design team, model, performers; monitoring spending

2 Be able to develop and utilise skills for the production of costume designs

Construction: eg fabric treatment, dyeing, printing, painting, distressing; adaptation of existing costumes
Finishing: fitting; laundering; cleaning; dressing
Organisation: materials (selection, storage); logging of items

3 Be able to work as part of a wardrobe team

Wardrobe: buying; hiring; storage; retrieval; maintenance; maintaining records
Supporting others: eg the performance company, event team; making process; fitting; use of costumes; manage post-show wardrobe work in clear-up phase
Professional practice: budget; operation schedules; organising meetings

4 Be able to manage the running of a costume wardrobe

Manage day-to-day operations: eg hiring, cleaning, storage, maintenance, acquisition, cataloguing, collaborate on use of stock items in public use
Health and safety: maintain safe working practice
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
<th>The learner can:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>1.1</strong> Analyse methods of construction and the stages needed to translate final designs to finished articles</td>
<td><strong>1.1</strong> Analyse methods of construction and the stages needed to translate final designs to finished articles</td>
</tr>
<tr>
<td>LO1 Be able to translate designs into working costumes for performance</td>
<td><strong>1.2</strong> Employ construction and alteration techniques</td>
<td><strong>1.2</strong> Employ construction and alteration techniques</td>
</tr>
<tr>
<td></td>
<td><strong>1.3</strong> Work with designer, design team and the model in creating the finished article</td>
<td><strong>1.3</strong> Work with designer, design team and the model in creating the finished article</td>
</tr>
<tr>
<td>LO2 Be able to develop and utilise skills for the production of costume designs</td>
<td><strong>2.1</strong> Demonstrate construction and finishing skills</td>
<td><strong>2.1</strong> Demonstrate construction and finishing skills</td>
</tr>
<tr>
<td></td>
<td><strong>2.2</strong> Select appropriate materials and maintain costumes</td>
<td><strong>2.2</strong> Select appropriate materials and maintain costumes</td>
</tr>
<tr>
<td></td>
<td><strong>2.3</strong> Organise the storage and logging of wardrobe and costume products and materials</td>
<td><strong>2.3</strong> Organise the storage and logging of wardrobe and costume products and materials</td>
</tr>
<tr>
<td>LO3 Be able to work as part of a wardrobe team</td>
<td><strong>3.1</strong> Assume a role in a wardrobe and costume-making team</td>
<td><strong>3.1</strong> Assume a role in a wardrobe and costume-making team</td>
</tr>
<tr>
<td></td>
<td><strong>3.2</strong> Maintain effective team links with the whole production event</td>
<td><strong>3.2</strong> Maintain effective team links with the whole production event</td>
</tr>
<tr>
<td></td>
<td><strong>3.3</strong> Work to a budget and to schedule for the selected project</td>
<td><strong>3.3</strong> Work to a budget and to schedule for the selected project</td>
</tr>
<tr>
<td>LO4 Be able to manage the running of a costume wardrobe</td>
<td><strong>4.1</strong> Maintain wardrobe stock in day-to-day non-performance time operations</td>
<td><strong>4.1</strong> Maintain wardrobe stock in day-to-day non-performance time operations</td>
</tr>
<tr>
<td></td>
<td><strong>4.2</strong> Demonstrate safe working practices</td>
<td><strong>4.2</strong> Demonstrate safe working practices</td>
</tr>
<tr>
<td></td>
<td><strong>4.3</strong> Catalogue wardrobe stock and assess general condition of items.</td>
<td><strong>4.3</strong> Catalogue wardrobe stock and assess general condition of items.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 48: Production Techniques in Fashion
  - Unit 49: Pattern Drafting in Fashion
  - Unit 55: Concepts for Costume Design
  - Unit 57: Millinery and Headdresses
  - Unit 60: Fashion and Textiles Materials Understanding
  - Unit 62: Costume Realisation
- Level 5:
  - Unit 41: Specialist Textiles Techniques and Processes
  - Unit 58: Cultural Understanding in Fashion.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Access to a wardrobe-making area and store is essential. They should be equipped with power and appropriate areas for cutting, sewing by hand and by machine, painting, dyeing and cleaning. There should also be facilities suitable for fitting and for safe storage. Access to a theatre space with stage lights is important. The process of material selection and acquisition is a significant part of this unit. Learners should use specialist museum archives to further their understanding of construction and fabric. The recording of sources and references is important.
Employer engagement and vocational contexts

Centres should develop links with theatres, costume designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 57: Millinery and Headdresses

Unit code: R/601/6605
Level: 4
Credit value: 15

Aim
This unit aims to develop skills and understanding in the design and manufacture of headwear.

Unit abstract
Through the process of making, learners can develop an understanding of the potential of traditional and contemporary millinery materials and techniques. The unit allows centres to adapt the theme of headwear into a specialist area such as fashion, textiles or costume. Learners will explore traditional hat-making skills in addition to contemporary methods to gain the skills and knowledge necessary to realise innovative designs. Learners will be encouraged to choose individual pathways linking their millinery to a personally selected outcome. Learners will be required to write a personal statement to support their selected design outcomes and to complete personal research.

Studio time will involve workshops which will give learners knowledge of specialist materials and techniques. This will encourage experimental approaches which will enable learners to explore original ways of producing outcomes.

Assignments for this unit will focus around personal briefs and could be learner led. Learners should be encouraged to link their brief to their chosen field, eg a capsule collection of fashion hats, headdresses for a musical production, a series of textiles hats for an exhibition. Evidence could be recorded in sketchbooks/journals with an accompanying collection of sample headpieces and the final outcome.

It is important that learners gain a thorough understanding of historical and contemporary professional practice through visiting galleries, shops, exhibitions and high-profile retail fairs. In addition guest speakers, practical workshops, visits to design studios, workshops and appropriate industrial sites will contextualise practical studies.

Learning outcomes

On successful completion of this unit a learner will:
1. Be able to use traditional millinery techniques and materials
2. Be able to use contemporary materials and construction techniques
3. Understand how to research in order to inform design development
4. Be able to select and apply millinery techniques to realise design concepts.
Unit content

1 Be able to use traditional millinery techniques and materials

Traditional techniques: eg blocking, shaping, stiffening, boning; taking accurate measurements; pattern cutting; developing a professional finish

Traditional materials: eg straw, net, felt, buckram, fabrics, feathers

Health and safety: COSHH; current regulations; chemicals; production processes

2 Be able to use contemporary materials and construction techniques

Contemporary materials: experimentation eg paper, card, plastic, wire, elastic, found objects

Construction techniques: creating texture eg embroidery, quilting, pleating, folding, distortion, weaving, knitting

Surface decoration: creating colour and pattern eg painting, spraying, dyeing, printing

3 Understand how to research in order to inform design development

Historical and contemporary: research eg film, theatre, music, military, carnival, global influences, cultural influences; events eg fashion shows, Royal Ascot, bridal wear, mourning hats; artists and designers

Design development: drawing eg sketchbooks, design sheets; development (2D, 3D); materials sampling

4 Be able to select and apply millinery techniques to realise design concepts

Select: construction skills; processes; materials

Apply: construction skills; processes; materials

Presentation: final design outcome; supporting materials eg sketchbooks, journals, research sheets, design sheets, maquettes, sample pieces; oral presentation; personal statement
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| **LO1** Be able to use traditional millinery techniques and materials | 1.1 Explore structure and form through use of traditional millinery techniques  
1.2 Experiment with traditional millinery materials  
1.3 Demonstrate safe studio practice |
| **LO2** Be able to use contemporary materials and construction techniques | 2.1 Experiment with non-traditional materials to explore their potential use in headwear  
2.2 Apply surface manipulation techniques to create texture  
2.3 Create surface decoration through application of colour and pattern |
| **LO3** Understand how to research in order to inform design development | 3.1 Carry out independent research to support personalised investigation  
3.2 Produce effective original design ideas for a selected project |
| **LO4** Be able to select and apply millinery techniques to realise design concepts | 4.1 Produce a creative response through the exploration and manipulation of materials and techniques  
4.2 Present a final design outcome in an appropriate professional format. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 55: Concepts for Costume Design
  - Unit 62: Costume Realisation
- **Level 5:**
  - Unit 56: Costume Production for Performing Arts
  - Unit 61: Fashion Collection Realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Specialist resources will be necessary and studio space should be provided. Equipment should include shaped blocks, irons, pressing pads, access to sewing machines, millinery wire and stiffeners such as feltene for traditional methods of blocking felt, straw hoods, wire brims with the use of mixed media paper, plastics, buckram, boning and card.

Resources for research may include fashion magazines, fashion shows, media coverage of events such as Ascot, weddings, royalty, Hollywood and films, folk and historical images, exhibitions and the work of other designers and artists.
Employer engagement and vocational contexts

Centres should develop links with practising milliners and other artists and designers to deliver assignments to learners or to provide work experience and workshops/master classes.

Participation in national/international competitions, fashion shows and public events should be encouraged.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, regional business links – www.businesslink.gov.uk

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The British Fashion Council supports and promotes British fashion in the global market place (www.britishfashioncouncil.com).

The Textile Institute facilitates learning and achievement within the global clothing, textile and footwear industries (www.texi.org).
## Unit 58: Cultural Understanding in Fashion

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>T/601/6676</th>
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</thead>
<tbody>
<tr>
<td>Level:</td>
<td>5</td>
</tr>
<tr>
<td>Credit value:</td>
<td>15</td>
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</tbody>
</table>

### Aim

This unit aims to develop learners’ skills and understanding in fashion culture through investigation of contextual influences.

### Unit abstract

The primary aim of this unit is to develop skills in visual and textual analysis, as well as historical understanding of fashion. Learners will explore the effects of culture, sub-culture and lifestyle trends on the social, aesthetic and cultural aspects of fashion.

Broad areas of global culture will be researched to extend learners’ experience and understanding of the fashion environment. Learners will be encouraged to record and analyse the key drivers which influence fashion globally, including ecological, environmental, ethical, technological and aesthetic factors. In this context learners will also investigate the commercial impact of these influences on the fashion environment and the roles of personnel working across the sector.

Learners will study the work of historical and contemporary artists and designers and prepare presentations illustrating how this work inspires and influences current fashion, lifestyle and culture.

This unit will be a lecture- and seminar-based programme of study with learners working on individual and group projects. This will enable them to gain experience in preparing and presenting work to others in a variety of ways. Group discussion and individual critiques and presentations will form an important part of the delivery.

Research conclusions will be delivered through group and individual presentations, supported by essays and reports. Involvement in discussion and question and answer sessions is an essential element of the unit.

### Learning outcomes

**On successful completion of this unit a learner will:**

1. Be able to research and utilise data as reference for contemporary fashion trends
2. Understand the effects of cultural and global influences on contemporary fashion
3. Understand the role of fashion personnel within a contemporary context
4. Be able to produce a body of research-based work.
Unit content

1 Be able to research and utilise data as reference for contemporary fashion trends

Research and data: eg internet, libraries, newspapers, magazines, journals; data information services eg Market Intelligence (MINTEL), Verdict, Keynote, Snapdata, embassies, cultural centres; primary sources eg museums, galleries, exhibitions, interviews; professional bodies eg Textile Institute, Fashion and Clothing Council, Cotton Council; trend forecasters eg Carlin International, Peclers, The Bureau

Evaluate and assimilate data: collating; compiling; assimilating; analysing; interpreting; validity eg reliability, relevance, qualitative methods; critical appraisal

2 Understand the effects of cultural and global influences on contemporary fashion

Art and culture: eg artists; museums, galleries, exhibitions; media eg film, radio, television, music, popular culture; events eg fashion shows, carnivals, festivals, parades; popular culture; multicultural influences

Lifestyle trends: eg designers, music, theatre and film; style tribes eg teddy boys, mods, rockers, hippies, punk, new romantics, b-boys and girls, surfers, grunge, garage, emo, goth, fluro-punk

Global influences: eg carnival, national costume, Chinese new year, Russian circus, Kabuki, Fruits, Harjuku Girls, tribal dress, rituals, celebrations, religious parades, ecclesiastical dress, court dress, school uniforms, royal costume, regalia; ethical and moral issues eg child labour; working conditions; exploitation; under pricing

Contemporary fashion: couture; mass market; high street; designer label; mail order, e-tailing

3 Understand the role of fashion personnel within a contemporary context

Roles: eg designer, pattern cutter, textile designer, photographer, model, stylist, editor, broadcaster; career options eg marketing, buying, fashion graphics, illustration, journalism, writing, presenting, merchandising, retailing, public relations, advertising, broadcast, show production

Contemporary contexts: eg recession, disposable income; consumer trends eg shopping habits; industry shifts eg demise of UK manufacturing; rise in service industries; personal motivations eg fame culture, philosophy, fame culture, influences of personalities, media persuasion, personal style, friends, associates

4 Be able to produce a body of research-based work

Presentation tools: eg written submission, PowerPoint, audio-visual, handouts, abstracts, storyboards, selected images, layout, typeface choice, composition, charts, diagrams, individual and team presentation

Presentation methods: group presentation; individual presentation
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| **LO1** Be able to research and utilise data as reference for contemporary fashion trends | 1.1 Research, evaluate and analyse data for contemporary fashion trends  
1.2 Communicate knowledge and understanding of contemporary fashion trends |
| **LO2** Understand the effects of cultural and global influences on contemporary fashion | 2.1 Research and identify cultural and global trends in fashion  
2.2 Evaluate the relationship between art, design, society, lifestyle and fashion  
2.3 Analyse information based on targeted research to define future fashion trends |
| **LO3** Understand the role of fashion personnel within a contemporary context | 3.1 Analyse the role of personnel within the fashion industry  
3.2 Evaluate the impact of historical and contemporary issues on the fashion environment |
| **LO4** Be able to produce a body of research-based work | 4.1 Make a coherent, informed and professional presentation  
4.2 Communicate research, analysis and opinions in a confident manner. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 5:
  - Unit 50: Research and Development for Fashion Design
  - Unit 54: Fashion Promotion and Marketing
  - Unit 61: Fashion Collection Realisation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Textiles and Material Design.

Essential requirements

Learners will be expected to engage in self-directed research using a variety of sources and methods. Depending on individual selection, research guidance should be given in seminars and tutorials.

Employer engagement and vocational contexts

Learners will be encouraged to form links with appropriate areas of the fashion industry to gain knowledge of the roles and functions of a variety of personnel. This could include visits to press offices, public relations companies, marketing departments, design studios, manufacturing facilities, fashion forecasting agencies, magazines and newspapers.

Learners should also make contact with industry bodies eg:

- Skillset (www.skillset.org) is the sector skills council for fashion and textiles
- The British Fashion Council (www.britishfashioncouncil.com) supports and promotes British fashion in the global market place
- The Ethical Fashion Forum (www.ethicalfashionforum.org) is a not for profit network focusing on social and environmental sustainability in the fashion industry
- The Textile Institute (www.texi.org) facilitates learning and achievement within the global clothing, textile and footwear industries.
Unit 59: CAD/CAM for Fashion and Textiles

Unit code: K/601/6707
Level: 4
Credit value: 15

• Aim
This unit aims to give learners opportunities to develop practical skills and understanding of specialist computer applications used in the design and manufacture of clothing and textiles.

• Unit abstract
This unit explores the application of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) technology specific to fashion and textiles and gives learners the skills to exploit the technology within their own creative work.

The computer model is a flexible, responsive and multi-functional part of the design process in all areas of design including fashion and textiles. The ability to analyse and alter a ‘virtual’ object/image is invaluable to designers. This unit focuses on developing learners’ knowledge, skills and understanding of the principles and processes of computer modelling and image making for design development and visualisation. It offers opportunities for learners to study a range of applications whilst focusing on the use of specific tools and to achieve proficiency in using the relevant hardware and software applications. The software and hardware available will include specialist fashion and textiles software together with more generic software resources (eg for vector drawing, DTP applications).

Learners will develop the skills needed to enable them to manage the virtual environment; create, edit and combine CAD/CAM entities; create realistic, accurate and creative models and visuals for fashion and textiles. Formal delivery and workshop demonstrations of hardware and software applications will cover much of this unit.

It is important that learners gain a thorough understanding of the current and possible future use of technology in industry through visits to manufacturers, suppliers, trade fairs, exhibitions etc. in order to contextualise their studies.
• Learning outcomes

On successful completion of this unit a learner will:

1. Be able to use computer aided design (CAD) techniques to design and visualise for fashion and textiles
2. Be able to employ computerised systems in fashion and textiles production
3. Understand the role of computer technology in the commercial production of fashion and textiles
4. Understand how technological developments can be applied within the fashion and textile industry.
Unit content

1  Be able to use computer aided design (CAD) techniques to design and visualise for fashion and textiles

   Design: computer techniques eg CAD, drawing packages (vector, bitmap), scanning (2D/3D)

   Visualisation: computer techniques eg image and text; presentation eg storyboards, design concepts; visualisation eg image, text manipulation, digital photography

2  Be able to employ computerised systems in fashion and textiles production

   Production processes: eg garment construction, pattern manipulation (drafting, grading, sizing), fabric utilisation, lay planning, textile surface manipulation (knitted, woven, printed, embellished structures, repeats); colourways

3  Understand the use of computer technology in the commercial production of fashion and textiles

   Commercial production: eg industrial CAM processes (lay planning, cutting, sewing, pressing, mass production); costing

   Management systems: Computer Integrated Manufacturing (CIM) processes eg quick response systems, computer controlled cutting, made to measure, production planning, fabric production, sampling, delivery systems

4  Understand how technological developments can be applied within the fashion and textile industry

   Technology: IT systems eg internet, digital networks, data storage retrieval; communication systems, virtual reality

   Development: eg current, future, visualising (2D/3D/time-based), scanning technology (2D/3D), sizing, quick response systems

   Application: research applications eg design development, visualisation, business, commercial production, management systems
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
</table>
| **LO1** Be able to use computer aided design (CAD) techniques to design and visualise for fashion and textiles | **The learner can:**
| | 1.1 Develop designs to meet creative intentions using CAD software |
| | 1.2 Create professional format visualisations using digital means to clearly communicate design intentions |
| **LO2** Be able to employ computerised systems in fashion and textiles production | 2.1 Use CAM software to produce fashion and textiles |
| | 2.2 Use hardware and software to experiment with surface manipulation and colour in fashion and textile designs |
| **LO3** Understand the use of computer technology in the commercial production of fashion and textiles | 3.1 Evaluate the use of computer technology in commercial fashion and textile production |
| | 3.2 Analyse the use of Computer Integrated Management (CIM) systems in commercial production |
| **LO4** Understand how technological developments can be applied within the fashion and textile industry | 4.1 Analyse recent developments in the use, impact and potential of the internet and websites in the industry |
| | 4.2 Evaluate future uses for technological developments in the industry |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 12: Computers in Art and Design
  - Unit 30: 3D Computer Modelling
  - Unit 83: CAD/CAM for the Fashion Industry
- Level 4:
  - Unit 35: Design Exploration in Textiles
  - Unit 45: Design Exploration in Fashion
  - Unit 48: Production Techniques in Fashion
  - Unit 49: Pattern Drafting in Fashion
- Level 5:
  - Unit 41: Specialist Textiles Techniques and Processes
  - Unit 51: Pattern Construction in Fashion
  - Unit 54: Fashion Promotion and Marketing.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.
Essential requirements

Resources should include a computer resource for formal teaching, demonstrating and learner drop-in. This should have up-to-date hardware and software covering DTP applications, vector drawing and bitmap painting, and the following specialist fashion and textile CAD/CAM software:

- **DTP/Illustration software**: Adobe PageMaker, Quark Xpress, Adobe Illustrator, Adobe Photoshop, Adobe Freehand, Corel Draw, Micrografix Designer, Painter
- **Specialist fashion software**: Gerber, Lectra, Investronica, Ormus Fashion/Concept Design Studio.

Essential input devices include digitisers, colour scanner and digital camera. Essential output devices include a plotter and colour printer. The facilities should allow for the use of CD ROMs and internet access and offer access to specialist books and magazines.

Formal delivery and workshop demonstrations of hardware and software applications will cover much of this unit. Tutors should ensure that learners have access to sufficient numbers of technical and training manuals for the software with which they are working.

CAD work can be presented in a portfolio, file or on disc, eg writeable CD ROM, Zipdrive, memory stick, flash drive. Learners will need to produce written reports following visits to computer exhibitions, fashion/textile companies, trade shows and computer bureaux and surveys of manufacturers and suppliers.

Employer engagement and vocational contexts

Centres should develop links with practising artists, designers (not exclusively fashion and textile designers) as well as industry links (manufacturers and suppliers) to deliver assignments to learners or to provide work experience. Individual learners should be encouraged to develop their experience for this unit through company links and work experience opportunities.

Learners would benefit from industrial visits and visits to trade shows.

Vocational learning support resources:

- **Learning and Skills Network** – www.vocationallearning.org.uk
- **Business and finance advice**:
  - **Local, regional business links** – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

The British Fashion Council supports and promotes British fashion in the global market place (www.britishfashioncouncil.com).

The Textile Institute facilitates learning and achievement within the global clothing, textile and footwear industries (www.texi.org).

The Chartered Society of Designers (www.csd.org.uk) is a professional body for all designers. It provides portfolio ‘gyms’ for students and graduates, a work placement register for student members, careers and industry information plus regularly updated news and events pages.
Unit 60: Fashion and Textiles Materials Understanding

Unit code: R/601/6796
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ understanding of the properties and characteristics of fibres and fabrics and to develop skills in the application of these for different end uses.

• Unit abstract
In this unit learners will research, record and analyse the properties and characteristics of fibres and fabrics, and their suitability for different end uses. Learners will also develop a visual and tactile understanding of textile raw materials and fabrics. This will enable them to evaluate performance characteristics in fibres and fabrics in relation to commodity and processing costs.

Learners should examine methods of producing materials and the business practices that relate to the costing of manufacturing of both textiles and their end uses. Developing tactile and visual awareness of materials is the main focus of this unit and a broad range of learner-centred activities is encouraged.

This unit would benefit from a combined delivery of lectures and seminars with guidance to learners on individual research and the sourcing of samples from a variety of fibre processes, manufacturers, wholesalers and retailers. Learners may wish to research the work of practitioners in a specific field, for example knitwear, performance sportswear, natural fibres or technologically led fabrics.

Tutors should target primary research as good practice and this could include surveys, recorded visits, interviews and individual contact with companies and practitioners. The research element of the unit could provide a useful focus for team activities or group work and learners should be able to articulate their learning using appropriate language and terminology.

There are three focus points to this unit based around the examination of the qualities and characteristics of fabric and fibres; the manufacturing processes of fabrics, fibres and end products, and the costing processes of fabrics and end products.
• Learning outcomes

On successful completion of this unit a learner will:

1. Be able to exploit the properties of natural, manmade and sheet materials in their application to fashion and textiles products

2. Understand different systems of fabric manufacture and how these affect properties and characteristics

3. Be able to apply testing methods to assess textile performance in textile and garment production

4. Understand the relationship between properties of fibres, fabrics and processing methods, garment construction and the need for economically efficient manufacturing costing.
Unit content

1. **Be able to exploit the properties of natural, manmade and sheet materials in their application to fashion and textiles products**
   
   Visual properties: appearance eg colour, cross section, lustre, sheen, contrast, texture
   
   Practical properties: eg fibre diameter, fibre length, bulk, crimp, softness, handle, absorption, strength, heat resistance, insulation, dye absorption, elasticity; resistance to damage eg by light, chemicals, fire, corrosion, wear and tear, water
   
   Economic properties: eg cost, environmental sustainability, pollution, ecological implications, waste disposal, labour exploitation, available workforce
   
   Natural fibres: conventional eg wool, cotton, linen, silk, mohair; developing eg coconut fibre, hemp, banana leaf fibre, rubber derivatives
   
   Manmade fibres: eg regenerated cellulosic, polyamides, polyesters, polyurethanes, polypropylene, acrylics, elastomeric; technologically advanced eg ‘smart’ fabrics, impregnated fibres; performance enhancing fabrics eg for sport, for military use, protective, storm-proof
   
   Naturally occurring sheet material: skins eg hide, leather, ostrich, pig, alligator, crocodile, fish, snake, furs, pelts
   
   Man-made sheet material: eg rubbers, acetates, plastics, paper

2. **Understand different systems of fabric manufacture and how these affect properties and characteristics**
   
   Systems: production methods eg weaving, knitting, felted, non-woven, lace, corded; trimmings eg braids, ribbons, threads, tassels, toggles, fringing, motifs; manufacturing implications eg small quantity, bulk, hand-made, couture, commissioned, outsourced
   
   Fabric properties: eg weight, structure, appearance, drape, strength, elasticity, stability, aesthetic appeal
   
   Characteristics: visual appearance eg looped, warped, wefted, corded, dobby, jacquard; content eg fibres, spinning system, finishing treatment, surface embellishment

3. **Be able to apply testing methods to assess textile performance in textile and garment production**
   
   Testing methods: fibre identification eg abrasion, pilling, fraying, seam slippage, dye fastness, colour matching, tear strength, shrinkage
   
   Performance: eg durability, washability, colour fastness, appearance retention, comfort, longevity, fade
4 Understand the relationship between properties of fibres, fabrics and processing methods, garment construction and the need for economically efficient manufacturing costing

Raw materials: costs eg distribution, trade agreements, wages, minimum orders, lead-times, availability

Processing methods: specialist machinery; production eg flow, large/small batch, one-off

Processing costs: eg rates, power, labour, transport, warehousing, new equipment, production run, piece lengths, processing shrinkage, waste

Garment construction: methods of construction eg seam type, fastenings, trimmings, interlinings; costing methods eg direct, indirect, apportioned, split cost, sponsored
## Learning outcomes and assessment criteria

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<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
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</table>
| LO1 Be able to exploit the properties of natural, manmade and sheet materials in their application to fashion and textiles products | 1.1 Analyse the properties and characteristics of a variety of textiles and record specific information  
1.2 Analyse and record key information on a variety of textiles  
1.3 Evaluate the positive and negative characteristics of the major fibre types |
| LO2 Understand different systems of fabric manufacture and how these affect properties and characteristics | 2.1 Analyse the similarities and differences between fabric manufacturing methods  
2.2 Describe how methods of fabric manufacture affect fabric properties and characteristics |
| LO3 Be able to apply testing methods to assess textile performance in textile and garment production | 3.1 Carry out and record textile testing methods  
3.2 Select the test methods most suitable for a range of design outcomes  
3.3 Apply test results to the design and manufacturing process |
| LO4 Understand the relationship between properties of fibres, fabrics and processing methods, garment construction and the need for economically efficient manufacturing costing | 4.1 Research costing methods used by textile and clothing manufacturing businesses  
4.2 Analyse the connections between properties, processes, construction and cost in the commercial applications to the client industry. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 111: Fabric Manipulation
  - Unit 124: Production Techniques for Fashion and Clothing
- **Level 4:**
  - Unit 37: Techniques and Processes in Textiles
  - Unit 47: Techniques and Processes in Fashion
- **Level 5:**
  - Unit 40: Textile Manufacture Production Operations
  - Unit 41: Specialist Textiles Techniques and Processes
  - Unit 53: Clothing Manufacture Production Operations

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillfast-UK Sector Skills Council**
  - Textiles and Material Design

Essential requirements

Learners will need access to a range of manmade and natural fibres both in their raw state and at various stages of processing. Visits to manufacturers, suppliers, wholesalers and retailers would also be beneficial. Access to industry standard knitting and sewing machines and dyeing, weaving and printing facilities is also needed.

Employer engagement and vocational contexts

Links with industry which may be useful are as follows:

- **The British Fashion Council** www.britishfashioncouncil.com is the association supporting and promoting British Fashion in the global marketplace
- **Kelly’s Industrial Directory** www.kellys.co.uk the UK directory of manufacturers and industrial services
- **The Textile Institute** www.texi.org disseminates information on the textiles, clothing and footwear industries
• The British Wool Marketing Board www.britishwool.org.uk operates a central information and marketing service for fleece products
• Premiere Vision www.premierevision.fr the premier international textiles and fibres trade fair and exhibition held in Paris each February and September
• Pitti Filati www.pittimmagine.com The main Italian international textiles and fibres trade fair and exhibition held in Florence each January
• Publishers of Textiles View www.view-publications.com the cutting edge journal of textiles and fibres development
• Publishers of Textile www.bergpublishers.com the Journal of Cloth and Culture. A thoughtful insight to the textiles industry
• The Fashion and Textiles Museum www.ftmlondon.org 83, Bermondsey Street, London SE1 3XF
Unit 61: Fashion Collection Realisation

Unit code: F/601/6728
Level: 5
Credit value: 15

• Aim

The aim of this unit is to extend skills in research, design and production by giving learners the opportunity to design and produce a creative and professional fashion collection.

• Unit abstract

This unit will extend learners’ appreciation of the role of the designer and understanding of market sectors, production methods and related constraints. Learners will have the opportunity to demonstrate their creativity, personal vision, style and technical ingenuity through the design and realisation of a final collection. The unit integrates a variety of complex skills and knowledge to realise innovation through original designs.

The theme of the final collection will be identified by individual learners within centre-devised guidelines, and each will develop and instigate their own schedule and programme, demonstrating a mature application of project management skills.

Learners should be supported with tutorial guidance and technical support. Design work and toiles should be presented at group critiques for discussion and evaluation at key points during the unit, with an end of year final presentation or fashion show as a main focus for the unit. Learners will be expected to realise an innovative final collection supported by thorough market and contextual research.

Learners will be encouraged to draw on previous learning experiences to produce original concepts linked to practical strategies for design and production management. Experimentation with ideas and materials should be encouraged and learners will be expected to explain their work in the context of historical and contemporary influences. Opportunities for sponsorship of fabrics and other materials should be encouraged through work experience and industrial links. Visual and written research, design development, market reports and sample garments will need to be exhibited for assessment at the end of the unit.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to design and produce a collection to a self-initiated theme
2. Be able to apply market trends and contextual research to inform personal design solutions
3. Be able to synthesise and evaluate knowledge, understanding and skills to realise a final collection
4. Be able to present own work to a professional standard and critically evaluate finished results.
Unit content

1 Be able to design and produce a collection to a self-initiated theme

Requirements: individual input; concept; theme; originality; personal identity; brand; aesthetics; autonomy; prioritise

Design: eg through sketchbooks, photographs, screen-based, collage, montage, painting, drawing, photocopy, scanning, digital manipulation, 3D experimentation, mood boards, story boards

2 Be able to apply market trends and contextual research to inform personal design solutions

Research: fashion trends eg consumer behaviour, visual research, fabric sourcing, colour trends, predictions, forecasting

Sources: eg specialist journals, magazines and media, websites, questionnaires, fashion shows, trade shows, museums, galleries, exhibitions, fabric suppliers, internet; design eg historical, contemporary, alternative; contextual; global trends eg economic, political, social, cultural, environmental

Fitness for purpose: eg market constraints, design, make, suitability, affordability

3 Be able to synthesise and evaluate knowledge, understanding and skills to realise a final collection

Realisation process: eg working drawings, scale samples, fabric treatments, toiles, sample garments, prototypes, design development, sketchbooks, illustration, design sheets, presentation

Practical factors: methods eg choice of fabrics, trimmings, applications, lay planning, production, costings, manufacture, finishing, presentation, styling

4 Be able to present own work to a professional standard and critically evaluate finished results

Presentation methods: eg critiques, displays, exhibitions, fashion show, video, website, performance, styling, accessorising

Recording methods: design portfolio; digital; website; photographic; audio-visual

Evaluation: fitness for purpose; meeting own objectives; fulfilling expectations; supporting rationale; defining personal style; reaching goals; innovation
Learning outcomes and assessment criteria

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<thead>
<tr>
<th>Learning outcomes</th>
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<tbody>
<tr>
<td><strong>LO1</strong>&lt;br&gt;Be able to design and produce a collection to a self-initiated theme</td>
<td>The learner can:</td>
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<tr>
<td></td>
<td><strong>1.1</strong> Create original design ideas from a self-initiated theme which demonstrate individuality and innovation</td>
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<td></td>
<td><strong>1.2</strong> Collate and utilise appropriate visual research and imaging techniques</td>
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<tr>
<td><strong>LO2</strong>&lt;br&gt;Be able to apply market trends and contextual research to inform personal design solutions</td>
<td>2.1 Identify and synthesise appropriate research to inform and confirm personal design direction</td>
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<td></td>
<td>2.2 Select and apply appropriate materials, trimmings, accessories and finishes to enhance final designs</td>
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<tr>
<td><strong>LO3</strong>&lt;br&gt;Be able to synthesise and evaluate knowledge, understanding and skills to realise a final collection</td>
<td>3.1 Integrate a range of skills and knowledge to realise innovative designs</td>
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<td></td>
<td>3.2 Create a collection of designs which demonstrate originality and independence</td>
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<td></td>
<td>3.3 Produce and present a collection of designs which demonstrate clear understanding of techniques, processes and materials</td>
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<tr>
<td><strong>LO4</strong>&lt;br&gt;Be able to present own work to a professional standard and critically evaluate finished results</td>
<td>4.1 Apply appropriate and original presentation methods to final designs</td>
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<tr>
<td></td>
<td>4.2 Identify and evaluate design concepts, sources and themes and present these confidently and professionally</td>
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<td></td>
<td>4.3 Critically evaluate final collection in terms of the global fashion environment and personal direction.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 45: Design Exploration in Fashion
  - Unit 46: Design Application in Fashion
  - Unit 47: Techniques and Processes in Fashion
  - Unit 62: Costume Realisation
- Level 5:
  - Unit 54: Fashion Promotion and Marketing.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements

Learners will need adequate workroom space and equipment which will allow sustained manufacturing to be undertaken, particularly in the last two learning outcomes. Studio space will also be required in the early design stages.

A specialist library and research facilities providing a range of books, journals, publications, fashion magazines, websites, film, video, and photography should be available.

Learners should be encouraged to visit exhibitions, trade shows, fashion shows, manufacturing outlets, retail outlets, trend forecasting agencies, textiles, materials and trimmings suppliers.
Employer engagement and vocational contexts

For those learners wishing to design and produce commercially focused collections, seeking and gaining sponsorship from industry would be of great support, as would work experience in the industry. Also, as producing a collection can be costly, all learners should be encouraged to seek sponsorship from industry, or to collaborate on the final collection with a commercial partner. Tutors should be prepared to assist with these links. Links with industry which may be useful are as follows:

- The National Centre for Work Experience (www.ncwe.com) can assist with placements and produces a free guide ‘Focus on Work Experience’
- The International Colour Authority (www.theinternationalcolourauthority.org) the premier body for trend and colour predictions for the coming season
- The British Fashion Council (www.britishfashioncouncil.com) promotes UK fashion in the global market
- The Ethical Fashion Forum (www.ethicalfashionforum.com) is a not-for-profit organisation focusing on social and environmental sustainability in the global fashion industry
- Fashion monitor (www.fashionmonitor.co.uk) lists all the fashion and related companies and media operating throughout UK and Europe. It is a comprehensive source of industry information, by subscription only.
Unit 62: Costume Realisation

Unit code: Y/601/6685
Level: 4
Credit value: 15

• Aim

This unit aims to develop understanding and skills in the practice of costume design through a commercially focused project.

• Unit abstract

This unit is aimed to take learners through the linked processes of working to a commercially focused brief. The project will involve broad-based research which extends the learner’s approach to design development. This should be followed by the development of original concepts through sketchbook work, design development and sample production. Learners will be expected to engage fully with the text and meaning of the performance they are designing for, as well as with character development.

Whilst this unit is essentially design and sample based, it could be linked successfully to Costume Production for Performing Arts, in which case the designs and samples could be extended into full-scale costumes, and could be further enhanced by being integrated into performance in order to assess the true working and visual potential of the creations.

Learners should be encouraged to consider accessories including head wear and footwear, as well as styling and makeup in order to create a total visual effect. This unit is based around project work that explores different styles of costume design. Learners should seek to experiment and broaden their personal approaches to design concepts. As the unit progresses, the learner will build upon a portfolio of designs which can be adapted and refined for future use.

The unit should be delivered through a fusion of project, lecture, demonstration, field trips, workshops, performance and simulation. Evidence for the unit should be presented as a portfolio of 2D and 3D design work. This should show the range and variety of styles explored as well as evidence of a broad approach to research and the development of working ideas using a variety of media and methods.

This unit is aimed primarily at developing a personal response to an assignment brief and as such should emphasise the processes involved in this, such as client needs, practicality, cost, aesthetic values, stage presence and visual communication. Finished work should be displayed in a personal and original manner which enhances impact and message.
● Learning outcomes

**On successful completion of this unit a learner will:**

1. Be able to apply research in the development of draft costume designs through to the final solutions
2. Understand how to translate final designs into working costumes through a commercial brief
3. Be able to develop sampling skills in preparation for construction of costume designs
4. Be able to evaluate final costume designs.
Unit content

1 Be able to apply research in the development of draft costume designs through to the final solutions

Research: from a range of sources eg contemporary exhibitions, galleries, museums, libraries, costume collections, film, video, internet, stage; historical eg period, style, past productions; contextual influences eg global issues, current news, culture, society, place, time, setting

Project analysis: group activity eg discussion, interpretation, text analysis, contextualisation, costume plot, historical context, social context, messages, meanings, performance demands

Character development: character analysis eg social status, attitude, appearance, motivation, age, ethnicity, temperament, gender, class, language, personality

Final designs: visual and written description eg character detail, colour, material, techniques, applications, visual effects, answering assignment brief, practicalities eg movement, cost, fitting, robustness, comfort

2 Understand how to translate final designs into working costumes through a commercial brief

Translation: realisation eg design development, adaptation, samples, techniques, material selection, final patterns

Demands of costume: practicalities eg length of run, duplicate costumes, additional versions, location of performance, laundering, actors’ movement, stature, body temperature during performance, health and safety

Manufacturing methods: making up eg cutting, sewing, painting, dyeing, stapling, wiring fastenings, finishing, fitting

Selection of accessories: support items eg headwear, wigs, footwear, jewellery, scarves, wraps, gloves, bags, fans, canes, spectacles, lingerie, underwear, corsets, stockings

Budgeting: eg agreeing, presenting, monitoring, extending, cost effectiveness

Materials: understanding and application eg costume construction, underpinning, supporting, boning, wiring, alternative materials, laundering, flexibility, durability, fireproof qualities, performance demand, decorative finishes, health and safety

3 Be able to develop sampling skills in preparation for construction of costume designs

Construction and finish: fabric treatment eg dyeing, printing, painting, distressing, adaptation, recycling, laundering, cleaning, dressing, fitting

Selection and storage: cataloguing eg size, production, gender, number of pieces, performer’s name, code; special instructions eg fastenings, layering, ties, bows
4 Be able to evaluate final costume designs

Presentation methods: eg sketchbook, portfolio, character boards, story boards, mood boards, notes, set dressing, hangings, lighting effects, music, models, actors, actresses, dancers, in-character, video, PowerPoint, web page, blog, vlog

Evaluation: fitness for purpose; practical applications; accessorising; styling; overall aesthetics; materials; construction methods; enhancement of theme and text
## Learning outcomes and assessment criteria

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<thead>
<tr>
<th>Learning outcomes</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| **LO1** Be able to apply research in the development of draft costume designs through to the final solution | 1.1 Apply appropriate information in the development of costume design solutions  
1.2 Demonstrate cohesive working processes from design concepts to final solutions  
1.3 Develop original concepts through to practical working end products |
| **LO2** Understand how to translate final designs into working costumes through a commercial brief | 2.1 Utilise professional and interpersonal skills to produce realistic design solutions  
2.2 Analyse the constraints of a commercial project to produce original design solutions  
2.3 Demonstrate project management skills through the organisation and scheduling of a commercial project |
| **LO3** Be able to develop sampling skills in preparation for construction of costume designs | 3.1 Apply manufacturing techniques appropriate to selected designs and themes  
3.2 Use colour, texture, materials and construction techniques to express character  
3.3 Utilise accessories, props, styling and makeup to create a total image |
| **LO4** Be able to evaluate final costume designs | 4.1 Present final designs in an innovative and engaging way, giving impact and support to the character  
4.2 Demonstrate working processes and justify creative decisions through debate and reasoning  
4.3 Demonstrate fitness for purpose and the final outcome relative to the set project |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 55: Concepts for Costume Design
  - Unit 57: Millinery and Headdresses
- Level 5:
  - Unit 56: Costume Production for Performing Arts

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Textiles and Material Design

Essential requirements

Learners will need access to a design studio, designing materials, research, resources and storage for completed design work. Access to wardrobe facilities and art studio space or a similar area is essential. The area should be equipped with power and appropriate design equipment, including digital design software. The wardrobe area should contain material samples and manufacturing facilities. Access to an area with theatre lighting would be useful, as would photographic facilities and equipment to record project work in character.

Primary and secondary sources may be found in libraries, galleries, museums, and specialist collections such as the Victoria and Albert Museum, The Theatre Museum and Snowshill Manor. Learners must record sources and cite them where referenced.
Employer engagement and vocational contexts

It would be beneficial to learners if this unit was delivered as a live project. This could be done through collaboration with a local theatre, dance group or film society. It could also work well as an inter-departmental exercise for those centres which offer theatre, film studies or performance arts on the curriculum. If these options are not available, then the project should be simulated to represent as near as possible a live scenario. This could also be achieved through national or international competition work.

It would be beneficial to learners to be able to visit a theatre or television studios to experience costume design and production first hand. This could also be delivered through visiting practitioners from across the entertainment industry.
Unit 63: Interactive Media Design and Prototyping

Unit code: K/601/6528
Level: 4
Credit value: 15

• Aim
This unit will enable learners to develop skills and understanding in designing and evaluating a prototype interactive media system using an interactive approach.

• Unit abstract
Managing an interactive media project, whether for education, training, or entertainment purposes, requires careful consideration of the various elements. In working through this unit learners will gain knowledge and skills in assessing intended users’ needs as well as producing an interactive media prototype, from concept through to completion.

Through research and practice learners identify users’ needs and use this information to inform their design work and content. Learners’ design work should include the structure, interaction and components of the interface. A physiological approach should be encouraged, to give learners a broad understanding of the potential use of colour, metaphors and navigational systems.

Concept designs may be provided in the form of sketches, notes, scripts, flow diagrams, charts, screen designs, storyboards, animatics, visual and audio materials. Learners should develop their prototype designs through exploration of software prototyping tools and techniques. Learners should reflect on how screen design should show consistency, organisation and prioritisation of information, and how they can ensure usability and the appropriate use of colour and text. Learners should consider the overall aesthetic appeal of their design work, and strive for innovation and creativity. Learners may conclude the unit by evaluating the strength of their design work and the prototype in meeting the needs of the intended users.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand user requirements for an interactive media product
2. Be able to design an interface for an interactive media prototype
3. Be able to assemble audio and visual components for a prototype
4. Be able to develop an interactive media prototype.
Unit content

1 **Understand user requirements for an interactive media product**

Research: literature; publications; journals; electronic data; observation; questionnaire; interview; survey

Users’ needs: content; existing systems; constraints (physical, perceptual); delivery platform; input; output devices; interface; purpose; intention

Task analysis: observations; tasks performed; difficulties encountered; visual perception; organisation; memory constraints

Audio components: sound eg sampled, generated, digital audio, synthesised sound, audio feedback

2 **Be able to design an interface for an interactive media prototype**

Screen design: quantity; information; presentation; grouping; prioritising; highlighting techniques; standardisation; screen display; layout; typography; graphics; colour; GUI; navigation systems; animation; video; guides; agents; feedback (visual, aural); language; dynamics; innovation; creativity; rewards eg intrinsic, extrinsic

Communication styles: menus; windows; navigation systems; direct manipulation; completing online documents; user input; question and answer dialogues

3 **Be able to assemble audio and visual components for a prototype**

Plan structure: system diagram; flow chart; storyboard; animation; sequences; video; sound track; screen design; interaction; navigation system; flow chart; system eg depth, breadth of system; linking eg screens; information flow; input elements; output elements

Prototype system: user-centred design; storyboards; flow diagrams; scripts; musical scores; structure map; design standards; guidelines; copyright laws

Prototyping tools: software eg Flash format (Adobe Air, Flash Player, Flash Lite), peripheral languages (Actionscript, HTML, Javascript, XML), proprietary drawing, painting, audio, image capture

Visuals: elements eg graphics, text, links, layout, image

Audio: sound eg effects, intros, audible warning, instructions
4 Be able to develop an interactive media prototype

Develop: improve; amend; refine; edit; rearrange; replace; effects eg visuals, sound, moving image, animation, information, links, interface

Evaluate: reflect eg user feedback, pilot, target users, computer users, non-computer literate users; planning; intuition; response; technological; communication; content; format; intentions; reaction

Technical factors: cross-platform file compatibility; file formats eg Mac OS, Windows; browser friendly palettes; files eg size, economy, quality; compression techniques; frames; internet browsers; methods eg assessing, evaluating, checking requirements, usability, accuracy

Presentation considerations: file size; format eg screen size, applications for mobile formats (iPhone, Android, Java); compression techniques; stand-alone applications; compiling; application eg screen-based, point of sale, educational, entertainment, information kiosk, CD ROM, DVD, USB device, hand-held device, internet publishing (video, audio, simple games, advertising, data visualizations)
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1  Understand user requirements for an interactive media product</td>
<td>1.1 Identify needs of intended users</td>
</tr>
<tr>
<td></td>
<td>1.2 Apply task analysis to inform planning for an interactive product</td>
</tr>
<tr>
<td>LO2  Be able to design an interface for an interactive media prototype</td>
<td>2.1 Conceptualise the intended interactive media system</td>
</tr>
<tr>
<td></td>
<td>2.2 Design an interface for the media system</td>
</tr>
<tr>
<td>LO3  Be able to assemble audio and visual components for a prototype</td>
<td>3.1 Select and assemble audio and visual components for the prototype</td>
</tr>
<tr>
<td></td>
<td>3.2 Produce a plan detailing the structure of the prototype</td>
</tr>
<tr>
<td>LO4  Be able to develop an interactive media prototype</td>
<td>4.1 Prepare files for presentation</td>
</tr>
<tr>
<td></td>
<td>4.2 Develop the intended interactive media prototype</td>
</tr>
<tr>
<td></td>
<td>4.3 Evaluate the development cycle of the prototype.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 38: Human Computer Interfaces
  - Unit 113: Computer Game Design
- **Level 4:**
  - Unit 67: Interactive Media Principles
  - Unit 76: Interactive Media Technology
- **Level 5:**
  - Unit 64: Interactive Media Web Authoring
  - Unit 70: Computer Interface Design Principles.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.
Employer engagement and vocational contexts

Centres should develop links with practising interactive designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 64: Interactive Media Web Authoring

Unit code: F/601/6535
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ skills in producing web pages containing effective interactive media content.

• Unit abstract
The ability to be able to design for web-based work is an essential skill in interactive media web-based authoring. This unit covers the creation of advanced HTML (Hypertext Markup Language) code through to the inclusion of Java Applets to enhance web page design and production. The development of web page design and production skills should form the basis of the learners’ experience, and should be practically based, supported by relevant theories.

Learners need to consider the factors and elements of web pages, and explore how to create basic web pages, developing their effectiveness using advanced techniques. By working through the different stages in this unit learners should gain skills and understanding in recognising the technical requirements of web page design and authoring, and develop their abilities in using programming codes to bring to fruition their personal intentions. Learners should record all technical information in order to develop skills in further interactive media work as required.

• Learning outcomes
On successful completion of this unit a learner will:
1. Be able to design web pages using HTML code
2. Be able to enhance web pages using advanced HTML code
3. Be able to produce web pages using JavaScript and Java Applets
4. Be able to publish web pages on an intranet/internet.
Unit content

1 **Be able to design web pages using HTML code**

   Web page design: elements; user needs; interface; constraints eg hardware, software limitations; factors eg page level, cueing, publication; editor eg Dreamweaver, Eclipse, TextMate, TextWrangler, BBEdit

   Markup languages: development; rules; writing HTML; using tags; formatting HTML text

   Structure tags: definition lists; unordered lists; ordered lists

   Style tags: text styles; images; colours; anchors; lists; lines

   Linking: layout eg areas, same page; internet pages; intranet; visuals eg images, text, buttons, animations

2 **Be able to enhance web pages using advanced HTML code**

   Advanced HTML: elements eg tables, forms, targets; CGI scripts (Common Gateway Interface); XHTML; HTML5, CSS

   3D vector graphics: formats eg VRML (Virtual Reality Modeling Language), X3D: virtual reality browsers; HTML markup; graphics; buttons; animations

   HTML editors: text editors; editing tools

3 **Be able to produce web pages using JavaScript and Java Applets**

   Scripts: JavaScript; HTML; event handlers; write; dialog boxes; status line; colours; comments; different browsers

   Variables and values: types of data; creating variables; assigning values; calculations; operator precedence; arrays; array methods; arrays of elements; strings

   Program flow: testing values; loops; break; continue; branching; multiple branching with if; conditional operator; functions

   Active pages: dates; time; timeout; scrolling text; sounds; controlling sound; embeds array

   Working with images: image files; image objects; animation; animated gifs; image maps

   Interactive systems: checkboxes; radios; links from lists; feedback online; checking entries; working in frames; window control; JavaScript URL

   Java Applets: Java programming language; developing Applets; creating threaded Applet; sending parameters to Applets; using fonts; colours; Java security

4 **Be able to publish web pages on an intranet/internet**

   Server configuration: uploading HTML; FTP; Wordpress; file conventions; standardising structures; links to folders; directories; maintaining pages; web server eg internet based, intranet based; registering URL (Uniform Resource Locator); homepage; hierarchies; browser awareness; domain; IP (Internet Protocols); testing
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
<th>The learner can:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Be able to design web pages using HTML code</td>
<td>1.1 Create HTML code using an editor</td>
<td>1. Produce web pages using HTML code</td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to enhance web pages using advanced HTML code</td>
<td>2.1 Edit HTML code using advanced HTML code</td>
<td>2.2 Enhance web pages by incorporating visual elements</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to produce web pages using JavaScript and Java Applets</td>
<td>3.1 Edit HTML code to include JavaScript and Java Applets</td>
<td>3. Produce web pages using JavaScript and Java Applets</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to publish web pages on an intranet/internet</td>
<td>4.1 Access a web server in order to establish URL</td>
<td>4.2 Upload HTML, test and evaluate related files to web server.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4
  - Unit 63: Interactive Media Design and Prototyping
  - Unit 67: Interactive Media Principles
  - Unit 76: Interactive Media Technology
- Level 5
  - Unit 75: Website Creation and Management.

Links to National Occupational Standards

This unit provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills**
  - Design
- **Skillset Sector Skills Council**
  - Interactive Media and Computer Games
- **e-Skills Sector Skills Council**
  - IT Users.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising interactive designers, to deliver assignments to learners or to provide work experience. A lecture by or visit from a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 65: Animation Techniques for Interactivity in Art and Design

Unit code: J/601/6763
Level: 4
Credit value: 15

Aim
This unit aims to develop learners’ skills and understanding in a variety of interactive animation techniques for use in art and design.

Unit abstract
Animated interactive applications are designed to bring to life choices for users and to give them a degree of control over how they work with environments, items, people and situations. As web-based commerce and virtual businesses continue to expand so the demand for visual material to support these virtual enterprises increases. Customers and consumers are demanding more sophistication from the virtual world, and businesses require interactive interfaces to meet this increased traffic and awareness. The world of e-learning also requires interactivity to meet this increased traffic and awareness. The role and potential of animation to develop art and design products should also be explored. Artists and designers also continue to develop new approaches to using interactivity and combinations of media-based imagery.

In this unit learners should explore the concepts of animation and how it can be applied in different contexts. The role and potential of animation to develop art and design products should also be explored. Learners should work with 2D and 3D software to produce digital animation work. Imagination and creativity should be balanced alongside the technical requirements of being able to work effectively in these areas. Work produced will be used to develop a virtual environment, offering interactivity for the user, and locating learners’ exploratory work within contemporary practice.

Learning outcomes
On successful completion of this unit a learner will:
1. Understand interactive animation concepts
2. Be able to use 2D digital animation techniques for interactivity in art and design
3. Be able to produce 3D animation work
4. Be able to present outcomes to industry standards.
Unit content

1 Understand interactive animation concepts

Concepts: motion; movement; sequence; persistence of vision; cel animation; stop motion; claymation; bitmap graphics; vector graphics; modeling; rendering; 12 basic principles
Storyboarding: planning; animation sequence; narrative; keyframes; characterisation
Sequential imagery: paper-based; flip books; techniques eg erasure; paint on glass; pinscreen; multi-sketching; animatronics
Applications: computer games; consoles; kiosks; hand held devices; web; 3D effects; special effects; input eg touch screen, motion sensing
Technical issues: digitising images; sequential imagery; scanning; file formats; graphics; framerate; lighting; camera position

2 Be able to use 2D digital animation techniques for interactivity in art and design

Techniques: layering images; animation effect; stop-motion; video editing software; web-based animation; vector-based software; tweening; keyframing; rendering; timeline; morphing; reefing; adapting
Technical issues: file formats; compression; output; memory requirements; streaming; downloading; uploading; resolution
Target audience: choices eg imagery, style, subjects; needs eg clarity, definition, instruction, entertainment; delivery package; location; access

3 Be able to produce 3D animation work

Tools: V plane; H plane; scale; stretch; link; unlink; render; zoom; navigate
Objects: primitive objects eg cube, sphere, cylinder, organic modeling; mesh; light objects; camera objects
Render modes: ray trace; shade best; phong; gouraud; wireframe
Techniques: select; link; unlink; rigging; gravity; particle simulators; capture eg motion, performance, chromakey; render
4 Be able to present outcomes to industry standards

Presentation: preparation; files; consideration eg final output, physical size, resolution; files eg combining, compatibility, economy, physical size, palette, screen resolution

Combine: elements eg drawn vector-based imagery, graphics, text

Evaluate: planning; intuition; response; technological; communication; content; format; intentions; reaction

Technical issues: equipment; technique; constraints; plug-ins; speed; RAM; usability

Advanced features: hotspots; interactivity: nodes; scenes; onion skinning

Images: sources eg photography, film, rendered animation, 3D environments
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
<th>The learner can:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Understand interactive animation concepts</td>
<td>1.1 Analyse the application of animation in interactive media design</td>
<td>1. Analyse the application of animation in interactive media design</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate technical constraints affecting production</td>
<td>2. Evaluate technical constraints affecting production</td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to use 2D digital animation techniques for interactivity in art and design</td>
<td>2.1 Develop an animation using 2D software techniques</td>
<td>1. Develop an animation using 2D software techniques</td>
</tr>
<tr>
<td></td>
<td>2.2 Identify characteristics of target audience</td>
<td>2. Identify characteristics of target audience</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to produce 3D animation work</td>
<td>3.1 Create an animated sequence using 3D animation software</td>
<td>1. Create an animated sequence using 3D animation software</td>
</tr>
<tr>
<td></td>
<td>3.2 Identify technical requirements for 3D modeling</td>
<td>2. Identify technical requirements for 3D modeling</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to present outcomes to industry standards</td>
<td>4.1 Research approaches to using interactive software</td>
<td>1. Research approaches to using interactive software</td>
</tr>
<tr>
<td></td>
<td>4.2 Combine elements into interactive software</td>
<td>2. Combine elements into interactive software</td>
</tr>
<tr>
<td></td>
<td>4.3 Present final outcomes</td>
<td>3. Present final outcomes</td>
</tr>
<tr>
<td></td>
<td>4.4 Evaluate final outcomes</td>
<td>4. Evaluate final outcomes.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 65: Animation Techniques for Interactivity in Art and Design
  - Unit 67: Interactive Media Principles
  - Unit 76: Interactive Media Technology
- **Level 5:**
  - Unit 69: 3D Computer Modelling and Animation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Specialist staffing, resources and materials relevant to the art and design pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture by or visit from a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 66: Interactive Media Presentation

Unit code: A/601/6775
Level: 5
Credit value: 15

• Aim
The unit will enable learners to further develop knowledge, understanding and skill in the planning and production of interactive media presentations.

• Unit abstract
Interactive media presentations have now become an accepted aspect of contemporary life. The applications for these range from fields as diverse as presentations relating to architecture, retail, design, product development, transport, advertising, point of sale, education, games and training. This sector is fed by a stream of designers and practitioners who work with any combination of sound, image, text and time to produce presentations that are informative, instructional, entertaining and diverse. User-interfaces and interactivity are vital aspects of interactive media presentations, as delivery may be designed for small-screened mobile devices, on a home computer, in a car, as a presentation to a large audience or in a retail setting.

In this unit learners will gain knowledge and understanding of various systems available for planning and producing interactive media presentations. Knowledge gained will be applied to the development of a personal plan for an interactive media presentation, which will be carried through to conclusion. Key factors such as communication, message, intention, audience reaction and client need will all be considered through research and then transposed to the practical arena. Practical skills can be developed though importing and exporting images, sound and files, and using software packages to develop presentations.

Learners will explore the dynamic ways of thinking required to maintain a grip on creative intentions whilst exploring alternative approaches and managing technical issues. They will reflect on the fitness for purpose of their approaches in meeting their creative intentions, and how well they communicated their intended message.

• Learning outcomes
On successful completion of this unit a learner will:
1 Understand interactive media systems
2 Understand client and audience needs
3 Be able to plan interactive media presentations
4 Be able to deliver interactive media presentations.
Unit content

1 **Understand interactive media systems**

Production: linear; non-linear; projector arrays; computer; software eg Flash; video transfer; software generated; compression; import; export

Presentation: screen; projector; web; DVD; installation; exhibition; visuals; sound; interactivity; instruction; broadcast; satellite

Client: sector eg educational, training, information, promotional, retail, commercial, entertainment, television, communication

Equipment: cameras; microphones; editing suite; lighting rig; tripod; video playback; digital; projectors; screen-based; presentation tools eg chroma key, green screen; portable device eg phone, iPAD; audience interaction eg sensors (light, sound, movement)

2 **Understand client and audience needs**

Client needs: format; cost; deadlines; audience; distribution; communication; message

Potential audience: specialist eg education, professional, training, instructional; general eg point of sale, retail, promotion, product launch

Audience needs: information; demonstration; narrative; clarity; text; image; user interface; display

3 **Be able to plan interactive media presentations**

Planning: proposal; treatments; synopsis; drafting scripts; scenario; storyboarding; shot list; script breakdown; records; meetings; pitching to clients; agreements; permissions; model release

Script: prompts; length of shot; sound; effects; dialogue; voice-over

Organisation: roles; responsibilities; teamwork; project management; time management

Non-traditional techniques: eg image manipulation, computer-generated, imagery, content, projection

Technical systems: format eg web based, software, interface, animation, live feed

4 **Be able to deliver interactive media presentations**

Production: image selection; production; exposure; process; image control; research sources; record sound; editing; output; compression; transfer

Editing requirements: needs eg client, audience; original script; technical specifications; adaptations; design decisions; cost factors; client review; copyright; legislation

Evaluate: client feedback; audience feedback; creative intentions; communication; image use; text use; interactivity; interface design
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand interactive media systems | 1.1 Carry out research into interactive media systems  
1.2 Present results of research, reaching conclusions |
| LO2 Understand client and audience needs | 2.1 Identify client needs in commissioning interactive media presentations  
2.2 Complete audience needs when engaging with interactive media presentations |
| LO3 Be able to plan interactive media presentations | 3.1 Develop a creative strategy to meet interactive media presentation briefs  
3.2 Identify technical systems to be used |
| LO4 Be able to deliver interactive media presentations | 4.1 Use technical systems to deliver interactive media presentations  
4.2 Evaluate creative and technical approaches used to meet specific briefs. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 107: Visual Language in Photography
  - Unit 110: Photographic Techniques
- Level 5:
  - Unit 85: Video Production
  - Unit 108: Advertising Photography
  - Unit 115: Specialist Practice in Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway, including software required for integrating moving image and computer generated images with web-based and interactive presentations.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a photographer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme. Centres may benefit from opportunities offered by membership of professional organisations; the Professional Lighting and Sound Association (PLASA) publish information related to this area (www.plasa.org).
Unit 67: Interactive Media Principles

Unit code: L/601/6778
Level: 4
Credit value: 15

Aim

The aim of this unit is to introduce learners to the potential of interactive media, and to widen appreciation of the genre for communication purposes.

Unit abstract

Interactive media products are widely used in commerce, business, entertainment and communication related industries. The role of the designer is to bring fitness for purpose and usability to the forefront of the process of interactive product development. To achieve this, practitioners need to have an understanding of the key principles of design for interactivity.

This unit involves learners studying the use and production of interactive media products. This unit should help learners assess the potential for career opportunities incorporating interactive media in the fields of leisure, business, design and industry. The importance of the design process in the creation of interactive media products should be highlighted. Learners should also develop their understanding of interactive media as a communication tool. Generating simple elements and bringing them together in a prototype may introduce the potential of interactive media products in a practical way.

The importance of design to these products should be emphasised and applied in learners’ practical work. Learners should consider the factors and components of interactive systems, and hardware and software design techniques, and develop personal skills in working though basic authoring tasks.

Learning outcomes

On successful completion of this unit a learner will:

1. Understand contemporary interactive media communication forms
2. Understand the uses of interactive media
3. Be able to identify the requirements for an interactive outcome
4. Be able to assemble an interactive presentation.
Unit content

1 **Understand contemporary interactive media communication forms**

*Communications*: historical; contemporary; theories; processes; social; ideological; information sharing; instructional; educational; entertainment; interactive media approaches

*Translating communication*: interpreting; decoding; implied meanings; specific works eg historical, contemporary

*Research*: sources; information; inspiration; current trends

*Contemporary media formats*: film; web; CD-ROM; DVD; blog; vlog; networking; online communities eg forums, social networks; art works

*Oral skills*: communication; presentation; propositioning; persuading; teaching; explaining

2 **Understand the uses of interactive media**

*Applications of interactive media*: presentations; database retrieval; information kiosk; computer games; Portable Assistant Devices; industrial simulation; point of sale; reference sources; design; education; entertainment; networking; medical; fine art

*Development*: technology for viable industry; mobile equipment; portability; wireless, Bluetooth; media storage; media transfer; file sharing; information access

*Career paths*: advertising; games development; programmer; animator; graphic design; product design; broadcasting; business; leisure; industry; education; training; subcontracting specialists

3 **Be able to identify the requirements for an interactive outcome**

*Influencing technology*: data transfer; enabling technology; peripheral devices; hardware; networks; software packages; mobile devices; file compression; portability; access

*Media types*: text characteristics; graphics eg vector, bitmapped; sound eg capture, quality; moving image eg capture, incorporation; file formats eg PDF, JPEG, mov; data compression eg MPEG, QuickTime

*Quality factors*: typographic design; colour; use of space; psychology of design; screen size; definition; compression; resolution eg SD, HD; sound quality; video playback

*Purpose*: users; needs; target audience; application; constraints
4 Be able to assemble an interactive presentation

Design process: ideas generation; synopsis; storyboards; structure; conceptual framework; interactivity

Presentation: processes eg scanning, digital photography, frame grabbing, music sampling, sound recording, editing, animating

Effective authoring: combining assets; articulating design; meeting requirements; incorporating interactivity

Programming features: scripting statements; looping; volume control; roll-overs

Health and safety issues: risk assessment; VDU regulations; computer environment

Delivery systems: hardware factors eg cross-platform, visibility, file recognition; browser types; internet; authoring eg CDROM, DVD; web-based
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of this unit a learner will:</td>
<td>The learner can:</td>
</tr>
<tr>
<td><strong>LO1</strong> Understand contemporary interactive media communication forms</td>
<td>1.1 Critically evaluate contemporary interactive media formats</td>
</tr>
<tr>
<td></td>
<td>1.2 Analyse historical and contemporary methods of communication</td>
</tr>
<tr>
<td><strong>LO2</strong> Understand the uses of interactive media</td>
<td>2.1 Report on the applications of interactive media</td>
</tr>
<tr>
<td></td>
<td>2.2 Analyse specific interactive media career pathways</td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to identify the requirements for an interactive outcome</td>
<td>3.1 Identify quality factors used in interactive media applications</td>
</tr>
<tr>
<td></td>
<td>3.2 Select technologies to enable an interactive outcome</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to assemble an interactive presentation</td>
<td>4.1 Design an interactive presentation</td>
</tr>
<tr>
<td></td>
<td>4.2 Assemble an interactive presentation.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 73: Networks and Operating Systems
  - Unit 76: Interactive Media Technology
  - Unit 82: Computing Fundamentals
- **Level 5:**
  - Unit 64: Interactive Media Web Authoring
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis
  - Unit 75: Website Creation and Management.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Interactive Media and Computer Games.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 68: Interactive Media Teamwork

Unit code: J/601/6892
Level: 5
Credit value: 15

● Aim

This unit aims to develop learners’ skills in undertaking a professional interactive media project, working as part of a team to meet a client’s requirements.

● Unit abstract

With the ever-increasing demand for interactive media on the web, in education and industry, learners studying in this field should have an awareness of the needs of different user groups, and how an interactive media product is developed. Learners will design for ease of understanding and for users’ needs.

In this unit, learners will initiate a live project through interaction with clients. The project may require learners to work with others from areas such as computing, audio/video, media, and possibly commission other experts. Users’ needs should be defined through first-hand enquiry, observation, and questionnaires. Observations, evaluations, team meetings, and user feedback should be recorded by video (or audio where video is not appropriate) or as written minutes.

Managing an interactive media project, whether for education, training or entertainment purposes, requires careful consideration of the various elements. Learners should demonstrate the ability to work with others and adopt specific roles within a development team. Learners should be able to track a budget, manage a production schedule, and interact with clients professionally. Presentation and persuasion techniques are practised using video feedback and discussion. All development team meetings, evaluations, usability trials, client meetings and outcomes from these events must be documented and provided as evidence in a report or presentation. This unit will provide an understanding of the various forms of intellectual property rights (for example copyright, patent and trademark) and will enable learners to investigate and understand how these rights are created, protected, acquired and exploited.

● Learning outcomes

On successful completion of this unit a learner will:

1. Be able to negotiate the requirements of a live interactive media brief with a client
2. Be able to adopt a role within a development team
3. Be able to produce an initial prototype
4. Be able to produce a completed interactive media outcome.
Unit content

1  **Be able to negotiate the requirements of a live interactive media brief with a client**

   **Target user group:** research; define users; needs; identify level of computer literacy; group information requirements

   **Brief:** eg live project, client led, work with others, learners, professionals, purpose, intention

   **Initial production schedule:** meeting minutes; discussion with client; presentation to team; time management; production plans; job descriptions; initial description eg target users; system requirements; time limits; deadlines; stages; communications; contact details eg addresses, phone numbers, email; legal requirements; legislation; health and safety

   **Negotiating contracts:** finance; timescale; target user group; fee structure; terms and conditions

   **Task analysis:** feasibility study

   **Management:** tracking budgets; production schedule; interacting with clients; contacts eg sub-contracting, outside experts; assessing eg clients’ requirements, resources; commissioning others; logistics; location

2  **Be able to adopt a role within a development team**

   **Identification of own skills:** own role; formal learning; subject specific expertise; experiential learning; wider skills eg communication, management, organising, chairing, coordinating; assigning roles/responsibilities/adopting positions within a team

   **Person analysis/criteria:** Belbin team roles; Myers Brigg psychological type; awareness of learning methodologies eg self-organised learning (SOL), problem-based learning (PBL), computer-based learning (CBL)

   **Initial concepts recording:** flow charts; storyboards; screen content; concept imagery; sound eg audio scripts, musical scores, sound samples; video samples; design examples; scripting; structure diagrams; charts

   **Production schedule:** key stages; development time, full project timetable; job allocation, deadlines; prototype testing; creative opportunity
3 Be able to produce an initial prototype

Preliminary work: programmed skeletal structure; navigational palettes; search procedures; completing information from online documents; databases; graphics; copy; visual material; sound; animation; moving image

Interactive media components: screen design; visual imagery; text; graphics; audio samples; video samples; photographs; interface

Constraints: copyright licensing; laws; production constraints; acquiring content; clearing rights; permissions; intellectual property eg securing, protecting; publishing; distribution arrangements; contextual sensitivity eg social, sexual, religious, ethnic and political awareness

Prototyping: paper-based; interface design; digital; sound eg production, manipulation software

Prototype phases: conceptual; development; evaluation; second development; further evaluation; production; testing; evaluation trials; presentation; outcomes

Users: computer literate; non-computer literate

4 Be able to produce a completed interactive media outcome

Hardware and software specifications: operating systems; performance considerations; RAM; bandwidth; wireless connectivity; installation eg software, fonts, files, third-party files; 'help' documents; websites

Technology: files; formats; differences; palettes; colour correction; digital eg audio, video, animation; platforms eg Macintosh, Windows; instructions; installation; CDROM; DVD; considerations eg streaming, downloading, compression, uploading; systems requirements

Publication: format eg website, CDROM, intranet, DVD, USB device, mobile phone, Portable Digital Assistant (PDA)

Evaluation: users' requirements; usability; improvement eg original product, existing systems; aesthetic quality eg screen, visuals, layout, imagery, sound; speed; information eg usability trials, pilot presentation; fitness for purpose; meeting brief; contextual sensitivity; special needs; disabilities awareness
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 | 1.1 Identify client requirements  
 | Be able to negotiate the requirements of a live interactive media brief with a client  
 | 1.2 Define and analyse target group to identify user needs  
 | 1.3 Clarify creative intentions through recorded communication with client |
| LO2 | 2.1 Identify and apply own area of expertise  
 | Be able to adopt a role within a development team  
 | 2.2 Clarify own role within team-driven development schedule |
| LO3 | 3.1 Produce preliminary components for an initial prototype  
 | Be able to produce an initial prototype  
 | 3.2 Evaluate and confirm prototype in relation to constraints  
 | 3.3 Reflect and record on feedback from prototype phases |
| LO4 | 4.1 Develop a fully working interactive media product that meets clients’ needs  
 | Be able to produce a completed interactive media outcome  
 | 4.2 Evaluate and record interactive media outcomes against constraints and requirements of the brief. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 67: Interactive Media Principles
  - Unit 76: Interactive Media Technology
  - Unit 77: Audio Visual Techniques in Interactive Media
  - Unit 82: Computing Fundamentals
  - Unit 86: Digital Media in Art and Design
- Level 5:
  - Unit 70: Computer Interface Design Principles
  - Unit 83: Project Management for Learning Using Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

Realistic briefs are essential to the delivery of this unit.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture from or visit by a designer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
## Unit 69: 3D Computer Modelling and Animation

**Unit code:** J/601/6780  
**Level:** 5  
**Credit value:** 15

### Aim

This unit aims to develop learners' skills and understanding of the principles and practical applications of 3D modelling and animation.

### Unit abstract

The unit supports learners in visualising and designing three-dimensional space and object forms that exist within it. An appreciation of the requirements and applications of computer modelling and animation in commercial contexts may be used to inform learner’s development of personal animation work. Learners will consider the technical requirements for producing and distributing digital animation effectively. Learners should gain a working knowledge of 3D computer modeling and animation software, through applying techniques in their own animation work. Research elements of the unit allow learners to review the work of 3D computer artists.

Learners should develop creative responses to a set or self-generated brief, through exploring the potential offered by digital animation. Whilst the technical requirements of this field are demanding, learners should also be encouraged to reflect on creative approaches. Learners should work through stages such as visualisation and identifying technical requirements for scenes and models. Animation is a dynamic process and learners may need to explore alternative approaches to be able to realise their creative intentions.

### Learning outcomes

**On successful completion of this unit a learner will:**

1. Understand how 3D computer modelling and animation are applied in commercial contexts
2. Be able to create a complex 3D scene
3. Be able to create a 3D model within a scene
4. Be able to produce 3D animations to meet a creative brief.
Unit content

1 Understand how 3D computer modelling and animation are applied in commercial contexts

Productions: interactive media; video; web; television; film; CGI; gaming; special effects; animation

Production resources: machine specification; memory requirements; rendering time; software

Output: download time; web-based; machine specification; end-user; interface

Formats: models; animations; environments; factors eg compression, workflow, assets, deliverables

Output requirements: frames eg per second, size, rate; resolution; colour depth; initialising; bandwidth, real-time; streaming; downloading

Evaluate: purpose eg commercial, artistic, target audience, interactivity; context eg communication, entertainment, promotion, marketing, advertising; references eg work of others, animation studios, mainstream studios, independent animators

2 Be able to create a complex 3D scene

Tools: V plane; H plane; scale; stretch; link; unlink; render; zoom; navigate

Objects: geometric eg cube, sphere, cylinder; light objects; camera objects; adding; deleting; naming; aiming

Lights: colours; intensity; types; invisible; positioning; rotating

Render modes: ray trace; shade best; phong; gouraud; wireframe

Techniques: select; link; unlink; render

Scene: visualise; location eg interior, exterior; type eg natural, scientific, imaginative, realistic, architectural, environment; references eg historical, contemporary; textures

Technical issues: files; formats; compression; output; memory

3 Be able to create a 3D model within a scene

Objects: extrude; freeform; spline; lathe

Editing objects: spline form; path view; cross-section

Linking: hierarchy eg parent, child; grouping; ungrouping

Surfaces: applying; editing; composing; properties; maps; images; layers

Techniques: Boolean facility; environment maps; rigging; motion capture

Create: visualise; select sources eg subject, photography, drawings, models, own work, work of others; apply visual language eg shape, form, scale, colour, contrast
4 **Be able to produce 3D animations to meet a creative brief**

*Animation tools*: sequencer eg preview, spool, time bar, timelines, eventmarks; adding; deleting; overlapping; motion paths eg spline-based, linear; velocity eg graphs, control; keyframes; gravity control; simulators

*Types*: animation eg character, product; capture eg motion, performance

*Animation techniques*: morphing; kinematics; animating lights; texture mapping; rigging, tweening

*Produce*: sources eg images, characters, subject; themes eg narrative, action; factors eg clarity, detail, sound, humour, irony

*Evaluate*: planning; intuition; response; choices eg technology; format, visual language
## Learning outcomes and assessment criteria

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<td><strong>The learner can:</strong></td>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tbody>
</table>
| LO1 Understand how 3D computer modelling and animation are applied in commercial contexts | 1.1 Evaluate the application of 3D computer modelling and animation in a commercial context  
1.2 Analyse technical requirements for 3D computer modelling and animation in a commercial context |
| LO2 Be able to create a complex 3D scene | 2.1 Develop a complex scene using available geometric objects  
2.2 Select tools and techniques appropriate to creative intentions |
| LO3 Be able to create a 3D model within a scene | 3.1 Use editing tools to create custom objects  
3.2 Apply knowledge of hierarchy and linking  
3.3 Modify an existing preset object to meet creative intentions |
| LO4 Be able to produce 3D animations to meet a creative brief | 4.1 Use camera views creatively and effectively  
4.2 Apply morphing techniques  
4.3 Produce effective animation work that combines scenic and character elements. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 65: Animation Techniques for Interactivity in Art and Design
  - Unit 67: Interactive Media Principles
  - Unit 82: Computing Fundamentals
  - Unit 84: 2D, 3D and Time-based Digital Applications
- Level 5:
  - Unit 64: Interactive Media Web Authoring.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a web designer or design practitioner local to the centre may provide useful and pertinent information on working practice.

- Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Aim

This unit aims to develop learners’ skills and understanding through investigation of the design elements of user interfaces for interactive systems.

Unit abstract

Human computer interface designs are linked with design for both interactive media presentations and online documentation. The continued growth in web-based and digital entertainment provides challenges for the designer in creating interfaces that are fit for purpose and visually engaging.

In this unit learners can develop concept designs in the form of sketches, notes, scripts, flow diagrams, charts, screen designs, storyboards, animatics, visual and audio materials. Storyboards can be used to visualise sequential information, such as screen designs, animation sequences showing key frames, or video sequences. Learners can develop personal ideas for screen designs, addressing areas such as consistency, organisation and prioritisation of information, as well as usability and appropriate use of colour and text.

Learners may demonstrate their understanding and skills through any effective combination of audio feedback, music or speech, visual feedback, animation and video. Other factors addressed should include aesthetic appeal, innovation and creative thought.

Learners will select and decide an appropriate use of colour, animation, screen metaphor, navigational devices, visual and audio feedback, according to end-user needs. Through this unit learners should gain a broader understanding of the psychology, the principles and the practice of user interface design.
Learning outcomes

**On successful completion of this unit a learner will:**
1. Understand interface design in interactive media
2. Be able to investigate audio in an interactive interface context
3. Be able to investigate visual cues in an interactive interface context
4. Be able to produce an interactive interface.
Unit content

1  **Understand interface design in interactive media**

   Analyse: screen components; user input; information output; LCD displays; symbols eg controls, buttons, switches; end-users eg understanding, access, controls, fitness for purpose, efficacy, general usability

   Task: instructions; systems; operations eg simple, complex; feedback to user eg audio, visual, combinations

   Interactive media: web-based eg search engines, email, podcasts, digital distribution, online shopping, social networking, catalogues, auctions, medical, maps, travel, downloads, conferencing; educational eg training, demonstration; device led eg recorder, calculator, phone, handset, in-car, navigational aid, camera, pager, cashpoint, ticket dispenser, vending machine; entertainment; gaming eg console, on-screen graphics, peripherals; DVDs; CD ROMs

2  **Be able to investigate audio in an interactive interface context**

   Record: research eg notes, sketches, audio-taped conversations, videotaped events

   Familiar sounds: sampled music; environmental sound effects; audio feedback eg objects, events, camera clicks, page turning, button clicks, switch clicks; audio reinforcement eg user action, task, result, conclusion

   Use of sound: recorded; digitised; computer; MIDI; synthesised sound; audio feedback; volume changes; innovation; alternatives; background; foreground; signature

   Interface context: websites; database; software eg music; help systems; routines eg search, find, tools; gaming; entertainment; training; educational; instructional; advertising; networking

   Sound editing: recording eg mini-disc, mics; editing eg software, industry standard, free, downloads

3  **Be able to investigate visual cues in an interactive interface context**

   Visuals: colour; indication eg red-stop, green-go; highlighting text; attracting attention; identifying; prioritising; scale; prominence; text and image; aesthetic appeal

   Effects: drop shadows; frames; 3D graphics eg represent depth, distance, perspective, reality, 3D objects; animation; attracting attention; indicating event; time-lapse; associations eg humour, seriousness, professional; aesthetic appeal

   Interactive media: web authoring; prototyping; tools; video editing; recording software; industry standards

   Screen design: information eg presentation, volume, grouping, prioritising; hierarchies; highlighting techniques eg colours, symbols; screen display; text eg presentation, combined with image; illusion eg lighting, 3D illusion; graphics; animation; video; visual feedback, search engines; navigation devices; screen metaphors; language; dynamics; innovation; creativity
4 Be able to produce an interactive interface

Conceptualise: system diagram; flow chart; storyboard; information eg depth, breadth, language; links eg screens, content; information eg input, output, design

Design: images; graphics; text; interactive areas; tools; icons; metaphors; tools eg navigation, search, help tools; layout; balance; colour; aesthetics; visual effects; compression; optimised; streamed

Communication methods: menus; windows; navigation systems; direct manipulation; form filling; questioning; answer fields; dialogues; video; aural; tactile eg touch screen

Evaluate: target user group eg computer literate, non-computer literate, technology natives, technology refugees; usability; enjoyment; learning experience; aesthetics; design; qualities; cross-platform; stability; technical requirements; speed; cost; planning; intuition; response; communication; content; format; intentions; reaction

Evidence: modes eg audio, video, questionnaires, observations sheets, written feedback, seminars; presentations eg peers, tutors, clients

Present: on-screen; development work; flow charts; concepts; research; screen designs
## Learning outcomes and assessment criteria

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<tr>
<td>LO1</td>
<td>1.1 Identify interactive media systems</td>
</tr>
<tr>
<td>Understand interface design in interactive media</td>
<td>1.2 Evaluate constraints affecting interface design</td>
</tr>
<tr>
<td>LO2</td>
<td>2.1 Evaluate potential of audio for an interactive interface project</td>
</tr>
<tr>
<td>Be able to investigate audio in an interactive interface context</td>
<td>2.2 Record sound for an interactive interface project</td>
</tr>
<tr>
<td>LO3</td>
<td>3.1 Investigate the use of visual cues in interactive contexts</td>
</tr>
<tr>
<td>Be able to investigate visual cues in an interactive interface context</td>
<td>3.2 Develop screen design work for a personal interactive interface project</td>
</tr>
<tr>
<td>LO4</td>
<td>4.1 Conceptualise an interactive interface system</td>
</tr>
<tr>
<td>Be able to produce an interactive interface</td>
<td>4.2 Use software to produce an interactive interface</td>
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<td>4.3 Evaluate own interactive interface design work.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 63: Interactive Media Design and Prototyping
  - Unit 67: Interactive Media Principles
  - Unit 71: Sound Production and Editing Using Interactive Media
- Level 5:
  - Unit 68: Interactive Media Teamwork
  - Unit 70: Computer Interface Design Principles
  - Unit 85: Video Production.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Interactive Media and Computer Games.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture from or visit by a designer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 71: Sound Production and Editing Using Interactive Media

Unit code: R/601/6782
Level: 4
Credit value: 15

• Aim

This unit highlights the importance of the sound component in interactive media and enables learners to use digital sound recording, editing and processing.

• Unit abstract

In this unit learners will further develop knowledge of the factors influencing sound design and production for interactive media products. Research skills should be applied to developing a working knowledge of sound in use. The scope of potential applications is wide ranging and continues to develop further as technology enables sound quality to be improved through faster processing times and more efficient devices. The different functions of sound and its specific relationship to visuals should also be explored.

Learners should be encouraged to adopt an active experimental approach, in order to broaden their thinking and creativity in this area. Learners may need to demonstrate a variety of research methods, and should involve themselves in discussions with tutors, professional practitioners and peer groups. Through research, learners should be encouraged to develop their skills of critical analysis and to acquire an understanding of the background issues of successful and creative sound usage. Learners should be encouraged to experiment in their own work so they may develop a deeper understanding of digital editing software and exercise their creativity and editing skills. In studying this unit learners should develop their awareness of sound-related issues such as genre, form and audio cohesion, and their understanding of the close relationship and interdependence of sound and other media.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand how sound is used in contemporary interactive media
2. Be able to capture sound for interactive media work
3. Be able to manipulate captured sound to evoke responses
4. Be able to edit captured sound for inclusion in interactive media work.
Unit content

1 **Understand how sound is used in contemporary interactive media**

   Genre: science fiction; horror; adventure; war, period; romance; mystery; video game; documentary; news; radio

   Terms: diegetic; non-diegetic; synchronous; non-synchronous

   Applications of sound: successful; unsuccessful; effect; efficacy; intention; defining eg reinforcing, action, event, character; prime eg mood, setting, idea; themes; signatures; realistic; abstract; enhance eg visual effect, movement, actions; attract attention; distraction; information; instruction; Soundscape; narration; musique concrete; incidental; Foley sound

   Audience involvement: create scene eg environmental, spatial, ambience

   Factors: audio files size; internet applications; connection speed; bandwidth; streaming; CD-ROM drives eg reading time; games consoles eg processing times; quality eg sample rates; data compression; developments eg hand-held PC, iPAD, mobile phones, wireless connectivity

2 **Be able to capture sound for interactive media work**

   Sound: incidental; atmospheric; environmental; voice; artificial, tonal; foreground; background

   Experimental: recording; sampling; sample rates; cutting; pasting; volume modulation; reverberation; delay; blending; reversing; pitch shifting; chorusing; layering

   Digital application: editing; with video eg adding to, stripping from; audio with image slideshows

   File formats: lossy compression; quality; size; compatibility; platforms, video, tapes, Digital Audio Tapes (DAT); MP3; firmware

3 **Be able to manipulate captured sound to evoke responses**

   Responses: manipulating eg editing, treating, re-recording, combining; priming eg moods, atmospheres; juxtaposition; transitions; reinforcing eg action, event, characterization, setting, time; create eg tension, interest, suspense, drama, clam, relaxation; pace; speed; realism eg effect, action

   Potential: support eg creative intentions, actions, events, visualization; sound image eg pattern, rhythm, colour; signalling; symbolizing; representing

   Evaluate and document: eg source material prior to re-working, objectives, genre, efficacy, failings
4 **Be able to edit captured sound for inclusion in interactive media work**

Plan: creative intentions; communication; audience; concept; approach; working practices; technical factors eg software, size, platform, playback

Influences: starting points eg own work, work of others, historical, contemporary

Develop: edit decision list; storyboard; score; special effects; time lines

Sound cohesion: audio trail; sound logic; form eg sound component; synchronisation

Timing: hit points; tempo; rhythm; use of silence;

Evaluate: planning; intuition; response; technological; communication; content; format; intentions; reaction
## Learning outcomes and assessment criteria

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<tr>
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Analyse how sound is used in contemporary media</td>
</tr>
<tr>
<td>Understand how sound is used in contemporary interactive media</td>
<td>1.2 Evaluate factors affecting application of sound in contemporary media</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Record examples of sound for use in interactive media work</td>
</tr>
<tr>
<td>Be able to capture sound for interactive media work</td>
<td>2.2 Experiment with sound by applying digital treatments</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Identify desired responses for own interactive media presentations</td>
</tr>
<tr>
<td>Be able to manipulate captured sound to evoke responses</td>
<td>3.2 Explore the potential of manipulated sound to evoke responses</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Plan the synchronisation of events to sound</td>
</tr>
<tr>
<td>Be able to edit captured sound for inclusion in interactive media work</td>
<td>4.2 Edit and evaluate sound for interactive media work.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 84: 2D, 3D and Time-based Digital Applications
- Level 5:
  - Unit 80: Professional Sound Production Using Interactive Media

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Design for the Moving Image
  - Interactive Media and Computer Games

Essential requirements
Learners will need access to recording equipment and digital studios in which to edit and manipulate captured sound. The basis and relationship of sound and visuals will need to be explored in seminar/lecture or similar formats, where specific examples from a wide range of contexts can be explored. Links to gaming devices and their use of sound may be particularly useful to highlight the dynamic application of sound in media.

Employer engagement and vocational contexts
Centres should develop links with practising artists, craftspeople and designers to deliver assignments to learners or to provide work experience. A lecture or visit by a designer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’, for example, to support the vocational content of the unit and programme.
Unit 72: Computer Programming Principles

Unit code: Y/601/6783
Level: 4
Credit value: 15

Aim
This unit aims to develop learners’ understanding of principles within computer programming and to develop skills in their application.

Unit abstract
Computers are dependent on the design and creation of software to implement processes that meet user requirements. Programming must address the needs of the user alongside factors such as technical requirements, platforms, cost and access. The user interface requires testing and user acceptance to validate its fitness for purpose. Visual and aural information is used to direct the user through the different stages of using software, towards a desired outcome.

In this unit learners can develop understanding and skills in the key principles and concepts of computer programming, as applied in interactive media. The unit focuses on the use of software and operating systems, and how these interrelate. Learners may consider the factors and components of operating systems and software design techniques, and develop personal skills in working through tasks involving programming and testing. Learners should examine the features and areas of application for different programming languages. They can study and develop methodologies to apply formal testing procedures to gauge the effectiveness of their programming work. On completion of the unit learners should be able to produce well-defined, accurate design and code completed in an appropriate medium.

Learning outcomes

On successful completion of this unit a learner will:

1. Understand concepts of operating systems
2. Be able to use software design techniques
3. Be able to apply programming techniques
4. Be able to implement formal testing procedures.
Unit content

1 Understand concepts of operating systems

Operating systems: purposes; functions; advantages; disadvantages; structure; flow
Programming origins: historical; contemporary; development
Programming: languages; syntax; textual; in-use eg Postscript, Java, Actionscript; commands; scripting; type based; type theory; object orientated; interface
Factors: speed; size; user friendliness; simplicity; stability

2 Be able to use software design techniques

Formal design: concepts; methodologies; writing eg requirements, specification; syntax; semantics; hierarchies eg system, subsystem, task, frame, unit, procedure, copy member; design notation; complexities eg time, user-friendliness, maintenance, access
Patterns: designs eg structural, behavioural, creational, object-orientated, interaction, classification
Activities: identify eg tasks, frames, units, procedures, common software, language, control logic, database access, performance requirements

3 Be able to apply programming techniques

Construction: constructs eg sequence, selection, iteration; programming code; variables
Coding: simple programs; designs; implementation eg graphics, sound; commenting programs; errors eg logical, compiler; streamlining; redundancy object orientated; polymorphisms; threads; thread safety; problem domain; solution domain; hierarchies; interfaces; third party libraries; initialisers
Graphics: screens eg text, links, layout, image, navigation
Audio: sound eg effects, intros, audible warning, instructions

4 Be able to implement formal testing procedures

Testing methodologies: concepts; formal notations; test eg designing data, formal plan, documentation, tools, execution, models; review plans; end users eg acceptance, access, requirements, interface, speed; technical eg memory requirements, software, multi-use
Evaluate: planning; response; technological; communication; content; format; intentions; reaction
Learning outcomes and assessment criteria

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<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1 Understand concepts of operating systems</td>
<td>1.1 Analyse the functions of an operating system</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate and apply programming languages used in operating systems</td>
</tr>
<tr>
<td>LO2 Be able to use software design techniques</td>
<td>2.1 Produce defined designs using formal techniques</td>
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<tr>
<td></td>
<td>2.2 Articulate and present the concepts of formal design methodologies</td>
</tr>
<tr>
<td>LO3 Be able to apply programming techniques</td>
<td>3.1 Apply programming language to code designs</td>
</tr>
<tr>
<td></td>
<td>3.2 Use graphics and sound in program code presentation</td>
</tr>
<tr>
<td>LO4 Be able to implement formal testing procedures</td>
<td>4.1 Apply the concepts of testing a program</td>
</tr>
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<td>4.2 Use formal notation to test a program</td>
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<td></td>
<td>4.3 Evaluate and present test data.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 12: Computers in Art and Design
  - Unit 57: Human Computer Interfaces for Computer Games
  - Unit 74: Principles of Software Design and Development

- **Level 4:**
  - Unit 73: Network and Operating Systems
  - Unit 82: Computing Fundamentals

- **Level 5:**
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Design for the Moving Image
  - Interactive Media and Computer Games

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer/programmer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 73: Networks and Operating Systems

Unit code: D/601/6784
Level: 4
Credit value: 15

• Aim

This unit aims to develop learners’ understanding of the principles of both network and operating systems, and to develop skills in setting up a working system.

• Unit abstract

In this unit learners will develop skills in recognising the components of an operating system and showing how these interrelate. Learners’ study may include research into networks and the requirements for networking computers and devices. In doing this they should consider the needs of the user as well as the technical requirements. The unit is useful for those needing skills in system administration.

In computing the operating system acts as the interface between hardware, software and the user. The range of activities available in computer-led design requires access to different types of software, and the successful application of these to achieve end results. Activities that are central to the design environment, such as image manipulation, desktop publishing, video use, sound capture as well as interfacing with devices, transferring information and communicating, rely on the stability and functionality of the operating system.

Through gaining an understanding of the concepts of networking and operating systems, learners could apply this to install and configure a working system of their own design, addressing both software and hardware constraints and requirements.

• Learning outcomes

On successful completion of this unit a learner will:

1 Understand the principles of operating systems
2 Be able to configure an operating system
3 Understand the concepts of networked systems
4 Be able to implement a network system.
Unit content

1 Understand the principles of operating systems

Principles: building workflows for different environments eg Final Cut (network drive, multiple computer access, data rates, packet sizes); relationships eg user, applications, systems, hardware, software; interface eg GUI, compatibility, standards, components, hardware, end-user, task management, coordination, activities

Operating systems: system components eg service, calls, commands, batch; interface eg command line, graphical user; real-time; multitasking; multi-user eg Unix-based (Linux, Ubuntu), DOS, Windows, Mac OS; security; licenses; Random Access Memory (RAM); memory requirements; kernel; virtual memory; directories; file systems

Applications: computers; phones; consoles; domestic appliances; business; commerce; education; entertainment

2 Be able to configure an operating system

Install: administrator role; create disc image; loading eg CD, DVD, external hard-drive cloning

Configure: memory; kernel parameters; allocating disk space; optimising performance; determining parameters eg partitioning, paging, segmentation, time slicing, priority of tasks

3 Understand the concepts of network systems

Networks: requirements eg physical, communication; participation eg computing, printing, scanning, capturing, accessing files; Personal Area Networks (PANS) eg wireless, domestic, Local Area Networks (LANS) eg intranets, school, college, office, design group; Wide Area Networks (WANS); control eg access, login; files eg type, size, identify

Concepts: communication; transfer eg information, data; connect eg people, computers, access, resources, services

Guidelines: instructions; search; find; access; links

4 Be able to implement a working system

Implementation: install network devices; configure devices; evaluate eg different user demands, produce guidelines

Hardware: drives; servers; IPS; shared drives; remote systems; local systems; disc image; printing

Software: VNC; hierarchies; install drivers eg scanning, printing; set-up security eg login, logout; word processing; image eg capture, manipulation, editing; browsing

Communication standards: protocols eg connections, transmission, hardware, software
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Analyse components in an operating system</td>
</tr>
<tr>
<td>Understand the principles of operating systems</td>
<td>1.2 Evaluate requirements for an operating system</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Install an operating system</td>
</tr>
<tr>
<td>Be able to configure an operating system</td>
<td>2.2 Configure an operating system</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Differentiate between local and wide area requirements</td>
</tr>
<tr>
<td>Understand the concepts of networked systems</td>
<td>3.2 Analyse requirements for a specified network</td>
</tr>
<tr>
<td></td>
<td>3.3 Produce guidelines for users of a specified network</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Install network devices for a working system</td>
</tr>
<tr>
<td>Be able to implement a network system</td>
<td>4.2 Configure network devices for specified end users</td>
</tr>
<tr>
<td></td>
<td>4.3 Implement communication standards for a working system</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 12: Computers in Art and Design
  - Unit 67: Computer Game Engines
  - Unit 68: Computer Game Design
  - Unit 74: Principles of Software Design and Development
- Level 4:
  - Unit 72: Computer Programming Principles
  - Unit 82: Computing Fundamentals
- Level 5:
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Design for the Moving Image
  - Interactive Media and Computer Games

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture from or visit by a designer/programmer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 74: Computer Systems Requirements Analysis

Unit code: H/601/6785
Level: 5
Credit value: 15

● Aim

This unit aims to develop learners’ skills in analysing and reporting on the requirements of an organisation when developing interactive media applications.

● Unit abstract

Organisations use computer systems in a variety of ways. Interactivity and the user are central to the functionality of the system, as well as technical requirements. Developments in technology have enabled computer-driven design and communication to continue to grow in both volume and sophistication. Subsequent developments offer yet more potential for the transmission and sharing of text, data, image and sound.

In this unit learners should develop skills in conducting an analysis of an organisation’s computer systems in use, and apply research methodologies to identify strengths and weaknesses in the system. This should introduce learners to the procedures involved in assessing a computer system, and to the approaches needed to develop designs in order to create new applications. They should develop a strategy that identifies the requirements for improving an existing computer system, and conduct a feasibility study, embracing such factors as cost, interface design and cycle of renewal for hardware and software. Using information gained, learners should develop a design for the structure of a system, addressing data flow, hardware and software considerations.

● Learning outcomes

On successful completion of this unit a learner will:
1 Be able to analyse an existing computer system
2 Be able to identify requirements for a computer system
3 Be able to undertake a feasibility study
4 Be able to produce a design for a computer system.
Unit content

1. Be able to analyse an existing computer system

- Operating systems: purposes; functions; advantages; disadvantages; structure; flow
- Functions: purpose; data; platforms; search; volume; connectivity; access eg office, remote, studio; retrieve
- Users: needs; security; applications; interface; shared resources eg drives, partitions; web-based applications; intranet applications; email; online resources
- Factors: speed; size; user friendliness; simplicity; stability
- Technical: hardware; computers; peripherals; printing; data retrieval; storage; running time
- Analyse: faults; recurring problems; clarity; user feedback eg interviews, questionnaires, online survey; reach conclusions

2. Be able to identify requirements for a computer system

- Architecture: structure eg Instruction Set Architecture (ISA), computer organisation, system design
- Requirements: hardware; software; central server; subsidiary servers; networks; web access; intranet facilities; cross platform connectivity; libraries; data storage, retrieval; costs; security
- Activities: users eg tasks, procedures, common software, database access, performance

3. Be able to undertake a feasibility study

- Feasibility study stage: analysing eg terms of reference; defining exit criteria; reviewing eg scope, objectives; developing eg model of system, alternative physical solutions; cost-benefit analysis; requirements specification; feasibility study report
- Factors: input; processes; output; fields; programs; procedures; cycle of renewal; frequency of updating

4. Be able to produce a design for a computer system

- Outputs: specifying eg form, type, frequency, volume; selecting eg appropriate output media
- Inputs: designing eg data collection, validation methods; identifying eg available input media; estimating eg input files, volume of documents; designing input layouts
- Files: selecting eg storage media; designing structures; access methods; specifying security; procedures; record layouts; interface software files
- Procedures: identifying; documenting; manual; computer based; selecting eg program design method, refined program module; system specification eg contents, purpose
Learning outcomes and assessment criteria

<table>
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<th>Learning outcomes</th>
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</thead>
<tbody>
<tr>
<td>On successful completion of this unit a learner will:</td>
<td>The learner can:</td>
</tr>
<tr>
<td>LO1 Be able to analyse an existing computer system</td>
<td>1.1 Analyse the functions of an existing computer system</td>
</tr>
<tr>
<td></td>
<td>1.2 Identify potential problems affecting system performance</td>
</tr>
<tr>
<td>LO2 Be able to identify requirements for a computer system</td>
<td>2.1 Identify user needs for a computer system</td>
</tr>
<tr>
<td></td>
<td>2.2 Identify technical requirements for a robust computer system</td>
</tr>
<tr>
<td>LO3 Be able to undertake a feasibility study</td>
<td>3.1 Apply research methodologies to collect data</td>
</tr>
<tr>
<td></td>
<td>3.2 Produce a feasibility report</td>
</tr>
<tr>
<td>LO4 Be able to produce a design for a computer system</td>
<td>4.1 Produce an effective model for data flow for a computer system</td>
</tr>
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<td></td>
<td>4.2 Design an effective computer system using a structured approach.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 67: Computer Game Engines
  - Unit 68 Computer Game Design
  - Unit 74: Principles of Software Design and Development
- **Level 4:**
  - Unit 73: Networks and Operating Systems
  - Unit 82: Computing Fundamentals
  - Unit 86: Digital Media in Art and Design
- **Level 5:**
  - Unit 70: Computer Interface Design Principles
  - Unit 78: New Technologies in Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

As this unit involves the analysis of an existing computer system, centres will need to provide learners with the opportunity to conduct a review of a suitable system. It may be possible for learners to conduct an analysis of a system within the centre; appropriate subsets of the main institution system could be the marketing department, or the art, design or media department. Learners will need to have access to a system incorporating hardware, software and peripherals as well as functional needs such as data retrieval, storage and sharing requirements, in order to conduct a full analysis. Tutors should provide access to computers for learners to produce and present their feasibility report and system design.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 75: Website Creation and Management

Unit code: K/601/6786
Level: 5
Credit value: 15

- **Aim**

This unit aims to develop learners’ skills and understanding to successfully create and manage web-based applications.

- **Unit abstract**

The web is an integral component for communication in art and design disciplines and applications. Through online galleries, practitioners’ websites, agencies, graphic and new media creatives, to aspects of social networking and communication, media and entertainment the web is central to how we communicate today. This unit allows learners to work in a web-based context, by posting a website on the internet or an intranet.

In this unit learners should conduct research into the content and structure of websites. Understanding gained should be applied to learners developing their designs for web pages. Learners may develop a website that includes interactive elements. Learners should understand the technical requirements for server interaction and be able to manage the setting up of third party files and database access. Learners may also be expected to be involved in managing associated servers. In addition to addressing technical aspects, learners should be guided in ensuring that the web pages they produce are functional and interfaces are user friendly.

- **Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand the requirements for interactive websites
2. Be able to produce interactive web pages
3. Be able to build a website
4. Be able to develop interactive applications on a web server.
Unit content

1 **Understand the requirements for interactive websites**
   
   Design: page; factors eg page level, cueing, publication; hardware constraints; software constraints; users' needs; interface; usability; scalability; stability
   
   Mark-up languages: XML; HTML; XHTML; types eg presentational, procedural, descriptive; structure eg tags, documentation, labels; features eg tables, frames, annotations; presentation semantics
   
   Browsers: characteristics; types eg Safari, Firefox, Internet Explorer, Chrome; Uniform Resource Identifier (URI); Uniform Resource Locator (URL); hyperlinks; user interface eg address bar, status bar, homepage; JavaScript; Java Applets; Postscript
   
   Server interaction: links; messages; requests; searches; access libraries; information retrieval eg databases, get, post mailto, isindex, query, ODBC
   
   Interactive applications: scripting; functionality eg gaming, messaging; purpose; intention

2 **Be able to produce interactive web pages**
   
   Structure tags: definition lists; unordered lists; ordered lists
   
   Style tags: text styles; images; colours; anchors; lists; lines
   
   Advanced HTML: tables; forms; CSS eg choices, targets; Common Gateway Interface scripts (CGI)
   
   3D vector graphics: formats eg VRML (Virtual Reality Modelling Language), X3D: virtual reality browsers; HTML markup; graphics; buttons; animations eg Flash, Adobe Air, Silverlight, JavaFX

3 **Be able to build a website**
   
   Construction: constructs eg sequence, selection, iteration; programming code; variables
   
   Graphics: screens eg text, links, layout, image
   
   Audio: sound eg effects, intros, audible warning, instructions
   
   Specification: website software; server operating system; hardware; communications requirements; performance; loading; navigation
   
   Server organisation: structure of services eg Internet, ftp, gopher; data; areas; aliases; management systems; performance analysis tools; portability
   
   Security and integrity: backup; user access rights; file management; testing integrity eg third party supplied web pages; protection against attack eg firewalls

4 **Be able to develop interactive applications on a web server**
   
   Server side interaction: accepting data from users; applying the CGI eg responding, actions, responses, downloading, retrieving, sharing
   
   Database connectivity: accessing databases from CGI applications eg ODBC, JDBC, SQL
Learning outcomes and assessment criteria

<table>
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<tr>
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<tbody>
<tr>
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<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1  Understand the requirements for interactive websites</td>
<td>1.1 Analyse the functions of interactive websites</td>
</tr>
<tr>
<td>LO2  Be able to produce interactive web pages</td>
<td>1.2 Identify programming requirements for website creation</td>
</tr>
<tr>
<td>LO3  Be able to build a website</td>
<td>2.1 Produce interactive web pages using mark-up language</td>
</tr>
<tr>
<td>LO4  Be able to develop interactive applications on a web server</td>
<td>2.2 Apply appropriate language to interact with a web server</td>
</tr>
<tr>
<td><strong>LO1</strong>  Understand the requirements for interactive websites 1.1</td>
<td><strong>LO2</strong>  Be able to produce interactive web pages 2.1 Produce interactive web pages using</td>
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<td>mark-up language</td>
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<tr>
<td><strong>LO2</strong>  Be able to produce interactive web pages 2.2 Apply appropriate language</td>
<td><strong>LO3</strong>  Be able to build a website 3.1 Identify web server resources required for website</td>
</tr>
<tr>
<td><strong>LO3</strong>  Be able to build a website 3.2 Use web server to deliver specified services</td>
<td>3.2 Use web server to deliver specified services to users</td>
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<td></td>
<td>3.3 Manage the security of files on the server</td>
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<td>3.4 Manage the inclusion of third party files on the server</td>
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<tr>
<td><strong>LO4</strong>  Be able to develop interactive applications on a web server 4.1 Design</td>
<td><strong>LO4</strong>  Be able to develop interactive applications on a web server 4.1 Design and test</td>
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<td>and test an effective interactive application in an appropriate language</td>
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<td>4.2 Link mark-up language requests to databases to provide an interactive service to users</td>
</tr>
</tbody>
</table>
Guidance

Links

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 63: Interactive Media Design and Protoyping
  - Unit 73: Networks and Operating Systems
- **Level 5:**
  - Unit 64: Interactive Media Web Authoring
  - Unit 70: Computer Interface Design Principles.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

This unit should be delivered in a practical way, supported by workshops as required by the level of learners’ programming knowledge.

Learners will require dedicated access to personal computers, supported by technicians/tutors. Learners will need to use hardware and software including access to a LAN with a suitable web server, ML tools, relevant server operating system and appropriate CGI compatible language. Tutors will need to provide technical information through demonstrations and supporting literature. Manuals and operating instructions may also be sourced to allow learners to develop independent study as they progress through the unit.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftsmen and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.
Unit 76: Interactive Media Technology

Unit code: M/601/6787
Level: 4
Credit value: 15

● Aim

This unit aims to develop learners’ understanding of the essential technology components that an interactive media developer will need to use and to develop skills in using them.

● Unit abstract

The range of potential applications for interactive media technology continues to expand. We are able to share increasingly larger and more complex files, information and images with ever increasing speed. This allows businesses, commerce, individuals and art and design practitioners to transmit information both textual and visual to a wider audience. Data sources have also become more widely available; as choice increases for the consumer of information so does the requirements for the designer to develop interfaces and products to meet this demand. Interactive media development and production needs the application of technology at all stages.

In this unit learners may consider the types of technology available for the developer to use in the production of an interactive media product or artefact. In doing this they should consider user needs and technology requirements, and develop strategies through which they can balance these factors. Learners should consider how to choose the most appropriate technology interfaces for interactive media products or artefacts. Learners should use knowledge gained through research to inform the development of an interactive media product, and evaluate its fitness for purpose.

● Learning outcomes

On successful completion of this unit a learner will:

1. Understand interactive media technologies
2. Be able to identify users’ needs for the development of an interactive media product
3. Be able to develop an interactive media product
4. Be able to select technologies for an interactive media application.
Unit content

1 **Understand interactive media technologies**

Technology constraints: cost; availability; speed; time; facilities; capacity; resolution; functionality

Technologies: hardware eg scanner, computer, digital camera, CD ROM, DVD, BluRay, mobile devices (phones, PDAs), screen, server, wireless; software eg operating systems, graphical user interface, web software

Storage devices: CDs; DVDs; USB; external hard drives; card readers; network drives; local drives

2 **Be able to identify users’ needs for the development of an interactive media product**

Activities: identify eg tasks, frames, units, procedures, common software, language, control logic, database access, performance requirements

User needs: requirements analysis eg purpose, function, access; information eg data, images, text, spreadsheets; soft systems; prototyping; specifying; navigation; protection; social networking

Technology needs: technical specs; model numbers; version numbers; ancillary learning products eg book, video, CD; leased line; speed; memory capacity; data feed; compression factors

Matching needs: user; technology; options; rudimentary systems eg simple website built using HTML, static website, homepage, hyperlinks

3 **Be able to develop an interactive media product**

Planning and designing: purposes; technologies; design; layout; configuration; links; structure; cost; timescale; prototypes

Prototypes: functionality; ease of use; non-functional requirements eg response times; interaction eg with client, user, prototype refinement, design acceptance

Development: build eg website, interactive application; scan eg photography, captured imagery, moving image, animated sequences; compression; file conversion to HTML; build on prototypes

Applications: marketing eg CV, online portfolio, gallery page, showreel; promotion eg graphics, point of sale, textual, illustrational; entertainment eg game, puzzle, downloading; information gathering eg question and answer, form filling
4 Be able to select technologies for an interactive media application

Learning applications: self-awareness; learning styles; contextualisation; analysis; organisers; instructional; manuals; tutoring videos; web-based instructional

Entertainment applications: gaming; music; video; performance; capture; social networking

Commercial applications: office based eg information sharing, data retrieval, communication, interface use, access cross platform

Evaluate: classify; contextualise; scenario analysis; planning; intuition; response; technological; communication; content; format; intentions; reaction
Learning outcomes and assessment criteria

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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
<tr>
<td>LO1 Understand interactive media technologies</td>
<td>1.1 Analyse key technologies used by interactive media designers</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate the effect of constraints on interactive media technologies</td>
</tr>
<tr>
<td>LO2 Be able to identify users’ needs for the development of an interactive media product</td>
<td>2.1 Analyse user needs for building an interactive media artefact</td>
</tr>
<tr>
<td></td>
<td>2.2 Analyse technology needs for an interactive media artefact</td>
</tr>
<tr>
<td></td>
<td>2.3 Match user and technology needs to generate ideas for a prototype</td>
</tr>
<tr>
<td>LO3 Be able to develop an interactive media product</td>
<td>3.1 Design an artefact within a range of user constraints</td>
</tr>
<tr>
<td></td>
<td>3.2 Develop an interactive media product that addresses users’ needs and technology constraints</td>
</tr>
<tr>
<td>LO4 Be able to select technologies for an interactive media application</td>
<td>4.1 Select technologies for use in an interactive media application</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate use of technology in meeting needs of users.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 57: Human-Computer Interfaces for Computer Games
  - Unit 67: Computer Game Engines
  - Unit 68: Computer Game Design
  - Unit 74: Principles of Software Design and Development

- **Level 4:**
  - Unit 63: Interactive Media Design and Prototyping
  - Unit 67: Interactive Media Principles

- **Level 5:**
  - Unit 64: Interactive Media Web Authoring
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis
  - Unit 75: Website Creation and Management
  - Unit 83: Project Management for Learning Using Interactive Media

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 77: Audio-Visual Techniques in Interactive Media

Unit code: T/601/6788
Level: 4
Credit value: 15

- **Aim**

This unit aims to develop learners’ skills and understanding through the production of an audio-visual interactive media product.

- **Unit abstract**

In this unit learners will have the opportunity to develop ideas for an audio-visual interactive media product, through to a final product. This unit provides endless opportunities for the development of creative ideas.

Learners are introduced to the roles of audio and video communication tools. It enables learners to appreciate the importance of pre-production, planning, design and digitisation.

There are many opportunities for the learner to develop and utilise skills in using industry standard audio and visual software to realise their ideas. The final product created in this unit must then be exported in the correct format for industry use in the interactive media market.

- **Learning outcomes**

**On successful completion of this unit a learner will:**
1. Understand the techniques involved in pre-production and production
2. Be able to digitise audio and video materials
3. Be able to use post-production facilities to communicate audio and visual ideas.
Unit content

1 **Understand the techniques involved in pre-production and production**

Pre-production: eg research, ideas, narrative, non-narrative, experimental, animation, web, games, proposals, target audience, storyboards, scripts, shooting scripts, production logistics, location scouting; permissions (permits, access), schedules, budgets, costume, props, sets, casting, crew, pitching, equipment, designs, health and safety

Production: shooting eg location, studio; image eg animated images, web design, games design; shot types eg close-ups, mid shots, long shots; cut aways; establishing shots; audio recording devices eg portable digital recorders; to schedule; on budget; continuity; production notes; pick-ups; production logs

2 **Be able to digitise audio and video materials**

Software: current industry; broadcast standard

Video: eg SD, HD, 2K, 4K; source type eg tape, DV Cam, Digi Beta, RED; digital storage device eg SD/XD cards, compact flash, solid state, P2 cards, SXS card; Video codec's eg H.264/263, DV PAL, DV NTSC, Apple pro res 422/444, XDCAM PRO, Jpeg motion, HDV 480,720,1080 i/p file formats eg TIFF, JPEG, DV Stream, AVI, .Mov, .FLV, MPEG, Quicktime; quality

Audio: eg AIFF, WAV, MP3, WMA; source eg digital recorder, computer, tape, disk, card

Technical issues: eg use of timecodes, microphone types and uses, recording levels, stereo/mono audio, formats

Digitise: eg editing software, audio software; levels of professionalism; connections eg USB, Firewire, XLR, SVideeo, AV cables

Capturing: methods eg log and capture, transfer and capture, batch capture, import file/multiple, EDL, XML

Settings: system setting; capture scratch; user settings eg auto save, render settings; frame size; frame rate; sampling rate; key frame; resolution; format; compression
3 Be able to use post-production facilities to communicate audio and visual ideas

Audio and visual ideas: sound eg wild track interview, sound scape, abstract, stereo, mono, SFX; camera shots eg angles, jump cuts, juxtaposition, genre, narrative, non-narrative, establishing shot, SFX, colour balance; target audience; output eg playback, resolutions, location, buffering, storage

Software: variety eg web, games, animation, video, audio

Organise: storage eg bins, labels, USB, hard drive, file, master, sequence, layers, clips, channels; managing; organising types of information eg video, audio, saving, capture scratch, render files

Meeting requirements: eg output, playback, resolutions, location, buffering, storage

Titling: captions eg motion graphics, still, crawl, roll, animated, 3D, 2D; software

Output: client requirements eg file; format eg DV Stream, AVI, .Mov, MPEG, Quicktime, web formats; storage eg hard drive, external drive, DVD, digital tape, solid state, network; broadcast safe; regional video standards eg NTSC, PAL; recording levels eg normalise; channels eg stereo/mono, surround sound
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand the techniques involved in pre-production and production | 1.1 evaluate appropriate uses of pre-production techniques  
1.2 assess industry standard production techniques to realise audio and visual ideas in interactive media |
| LO2 Be able to digitise audio and video materials | 2.1 produce digitised material to meet audio and visual product requirements  
2.2 carry out capturing of material using appropriate devices |
| LO3 Be able to use post-production facilities to communicate audio and visual ideas | 3.1 demonstrate coherent organisation of captured post-production materials  
3.2 demonstrate industry standard editing techniques to meet product requirements  
3.3 produce an interactive media product that communicates audio and visual ideas to the intended target audience. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 67: Interactive Media Principles
  - Unit 71: Sound Production and Editing using Interactive Media
- Level 5:
  - Unit 78: New Technologies in Interactive Media
  - Unit 80: Professional Sound Production Using Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

This unit requires learners to have access to current industry standard software and hardware, camera equipment and digital audio recording devices. Learners will have different requirements as each of the software programmes caters to different industry requirements and so the list is not exhaustive as this is a fast-paced developing industry.

- **Industry audio software examples:**
  - Pro-tools
  - Cubase
  - Audition
  - Logic and Nuendo
- **Industry video software examples:**
  - Avid
  - Edius
  - Final Cut Pro
  - Premiere Pro
• Games, animation and web software examples:
  - Maya
  - Dream Weaver
  - Flash
  - Director
• Industry hardware examples:
  - Computers
  - Cameras
  - Storage devices
  - Audio recorders
  - Microphones
  - Monitors.

Employer engagement and vocational contexts

Setting this unit in the context of a client brief or live scenario will give the learners a context for their learning. Meeting visiting lecturers, industry professionals and working with local and national organisations related to their field will strengthen opportunities for employer engagement and vocational learning.
Unit 78: New Technologies in Interactive Media

Unit code: A/601/6789
Level: 5
Credit value: 15

● Aim
This unit aims to develop learners’ understanding of new developments in interactive media-related technologies and to develop skills in the use of them.

● Unit abstract
Technology is constantly evolving, changing and re-defining the way that we use it. It is important to keep abreast of new developments and view them in the context of previous releases. In this unit learners will research aspects of existing interactive media products and consider how emergent technologies can develop specific aspects such as access, speed, usability and portability.

Learners will consider how interactive media products continue to evolve, and identify the user demand and technological advances that drive these developments. Learners will reflect on how technology has enabled the sophistication of hardware devices and operating systems to become widely available. They will evaluate the role of software development in the growth of products such as virtual businesses, as well as areas such as fine art practice, graphic communication and educational materials. Learners will produce a proposal for an interactive product that embraces aspects of new technological developments, and evaluate how their proposal improves the existing product in this field.

● Learning outcomes
On successful completion of this unit a learner will:

1. Understand recent hardware and software developments related to interactive media
2. Be able to explore the potential of new technology
3. Be able to produce a proposal for an interactive media product using new technology
4. Be able to evaluate the current impact of new technology on interactive media products.
Unit content

1 **Understand recent hardware and software developments related to interactive media**

   Hardware: sound; video; graphics; cards; CD ROMs; DVD; internet; intranets; networks eg LANs, PANs, WANs; devices eg phones, cameras, iPAD; entertainment eg video game consoles, MP3 players, smart phones; wireless

   Software: applications; cross-platform; interactivity; graphical interface; data; information; entertainment; commerce; image editing; educational; computer games; medical software; simulations; modelling; decision making

2 **Be able to explore the potential of new technology**

   Technology: cable; wireless; home entertainment; web browsers; HTML; physical computing; interaction design; user interface; prototyping; social interaction design; RFID

   Types: 3rd generation communications; interactivity eg graphical user interface, interactive art, 3D technology; multi-use web-linked environments; new media art; wireless; identification; tracking; information

   Analyse: user needs; technological requirements; strengths; weaknesses; potential; cost; deconstruct existing models

3 **Be able to produce a proposal for an interactive media product using new technology**

   Application: product eg games, display, teaching tool, storage device, music player, visual playback, interactive on-screen display, virtual business, catalogue, interface; art eg image, animation, modelling, installation, collection, online display; instructions

   Proposal: purpose; intended audience; user needs; focus; scope; aims; technological requirements; envisaged cost; outline description

4 **Be able to evaluate the current impact of new technology on interactive media products**

   Evaluate: response; technological; communication; content; format; reaction; compare with existing

   Storage: CD ROMs; DVD; hard drives; USB; servers; disk technology, archiving; compressing data

   Operating environments: Windows; MAC OSX; UNIX; LINUX; inter-platform transferability

   Developments: portability; usability; file transfer; data transfer; physical size eg component, processor, screen; touch screen; applications; streaming; downloading; uploading; networking; virtual eg environments, entertainment, businesses; CE compliance (European standards); component interchange; radio frequency; voice recognition; art practice eg installations, web based; assisting design eg modelling
## Learning outcomes and assessment criteria

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</tr>
</tbody>
</table>
| **LO1** Understand recent hardware and software developments related to interactive media | 1.1 Evaluate recent developments in software technology  
1.2 Evaluate potential of recent hardware developments for interactive products |
| **LO2** Be able to explore the potential of new technology | 2.1 Analyse existing technology used in interactive media products  
2.2 Research new technologies in interactive media products |
| **LO3** Be able to produce a proposal for an interactive media product using new technology | 3.1 Define specific technical requirements for an interactive media product using new technology  
3.2 Produce a proposal for an interactive media product using new technology |
| **LO4** Be able to evaluate the current impact of new technology on interactive media products | 4.1 Report on current developments in interactive media technology  
4.2 Evaluate current impact of developments of new technology |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 67: Interactive Media Principles
  - Unit 76: Interactive Media Technology
- Level 5:
  - Unit 64: Interactive Media Web Authoring
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis
  - Unit 83: Project Management for Learning Using Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Interactive Media and Computer Games.

Essential requirements

Whilst this unit has a strong research base, it is important that learners can access relevant theories and concepts regarding new developments in interactive media. This can be effectively delivered through analysis of practical examples of existing interactive products, and research into new developments. Understanding gained can be applied to learners’ developing ideas and conclusions about the potential impact of new technologies on current modes of communication, data transfer, entertainment and graphical user interfaces. A visit to contemporary exhibitions of interactive design and artwork can aid learners’ conceptual thinking. Global design trends should also be considered. The proposal for an interactive media product using new technology can be diagrammatical or on screen.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 79: Marketing Development Using Interactive Media

Unit code: M/601/6790
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in the concepts of marketing development using interactive media.

• Unit abstract
Business success requires effective marketing of products and services. The media play an important role in most marketing plans, and interactive media technologies have enhanced the vitality and immediacy of marketing strategies. Producers of digital media goods and services have to market themselves to gain audiences and clients. Traditional physical distribution channels are in some ways being replaced, particularly for services and entertainment, by digital distribution channels such as the internet.

In this unit learners will develop knowledge and skills in the key principles and concepts of marketing strategies, leading onto advertising campaigns. Learners will explore the nature of marketing strategies and the factors that influence their content and direction. Learners should apply their understanding to inform the development of their own marketing strategy, applying interactive media techniques to produce an advertising product.

• Learning outcomes
On successful completion of this unit a learner will:
1. Be able to prepare a marketing strategy for the launch of an interactive media service
2. Be able to plan advertising campaigns using interactive media
3. Understand the changes affecting distribution channels for digital media products
4. Be able to use interactive media tools to create advertising products.
Unit content

1 **Be able to prepare a marketing strategy for the launch of an interactive media service**

Marketing: functions; roles; contributions; internal eg in-house; external eg agencies, consultants; target markets

Concepts: customer focus; the marketing mix; segmentation; branding; promotion; quality

Research: methods; agencies eg different media, press, magazines, radio, television; standards councils; existing advertising; current marketing approaches; campaigns eg given market

Markets and channels: web-based advertising; sound; graphics; commerce eg selling software, games, chat lines, financial services, virtual companies; interactive television eg satellite, cable; digital payment systems; debit cards; credit systems eg accounts

2 **Be able to plan advertising campaigns using interactive media**

Strategy: objectives; plans; customer needs; USP; market position

Elements: image; content; market spread; segmentation; market share; the marketing mix

Plan: scheduling; advertising; booking space; methods eg direct response marketing, subliminal marketing; budgets; analysing eg client brief, identifying audience characteristics, identifying product, service characteristics; determine eg message, content; delivery channels; advertising campaign; case studies

Promotional work: promotion eg public relations, supplementary, advertising, sponsorship, ‘plugs’, gifts, prizes, corporate hospitality, tagging to celebrities, staged events

3 **Understand the changes affecting distribution channels for digital media products**

Changes: digitalisation; globalisation; forces (social, political, economic); spending power; political policies eg liberalisation; political realignment; competition; society convergence eg agrarian to industrial to technological

Distribution channels: traditional; non-digital goods; mass-production; wholesaler; retailer

Transportation approaches: road; rail; sea; air; letter; parcel post

Digital distribution: radio; television; cable; satellite; telephone; email; web; WebTV

Digital business and businesses: selling services; on demand; call centres; radio; television; call minding services; information service providers; digital online ticket sales; e-commerce; TV shopping channels; virtual eg malls, stores; web name registration services; news services eg Reuters, financial services; digital betting eg lotteries; promotional support eg email, web, digital cash; secure transaction payment systems eg PayPal; diversification; digitisation; disintermediation; globalisation
4 Be able to use interactive media tools to create advertising products

Interactive media: tools eg animation, colour, rendering, authoring, interactivity, programming, Applets, editing, modelling, sound files, video, sound editing

Creativity and design: ideas generation; strategies; pairing eg commercial artist and copy writer, producer and director; creative agencies; production house eg pre, post; power eg idea, brand, symbol, reinforcement; concept; reality

Digital advertising products: digitised image eg posters, covers, books, CDs, flyers; digitised logo eg animated; digitised voice-over; titling eg 3D effects for icons; home entertainment eg still image camera, downloading, printing, web-based sharing; moving image eg capture, editing, blogging, vlogging, viral marketing; uploaded files eg QuickTime movies; commercial products eg advertising, cable TV, registration page, movie clip, digital images, costs, customer reviews, rating, feedback

Own work: process eg planning, coordinating, roles, contribution, problem solving; products eg animations, images, designs, models, websites, outcomes
Learning outcomes and assessment criteria

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<tr>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 conduct research into a market</td>
</tr>
<tr>
<td>Be able to prepare a marketing strategy for the launch of an interactive media service</td>
<td>1.2 examine existing marketing campaigns</td>
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<tr>
<td></td>
<td>1.3 position a marketing strategy within a conceptual framework</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 construct a plan for an advertising campaign</td>
</tr>
<tr>
<td>Be able to plan advertising campaigns using interactive media</td>
<td>2.2 critically evaluate the elements in the marketing strategy</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 analyse changes in the networked interactive media world</td>
</tr>
<tr>
<td>Understand the changes affecting distribution channels for digital media products</td>
<td>3.2 critically evaluate distribution channels for advertising purposes</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 use interactive media authoring tools</td>
</tr>
<tr>
<td>Be able to use interactive media tools to create advertising products</td>
<td>4.2 create design work for products in digital media for an advertising campaign</td>
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<td></td>
<td>4.3 critically evaluate own work and propose further development.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 63: Interactive Media Design and Prototyping
  - Unit 67: Interactive Media Principles
  - Unit 76: Interactive Media Technology

- Level 5:
  - Unit 68: Interactive Media Teamwork
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- Skillset Sector Skills Council
  - Interactive Media and Computer Games
  - Essential requirements.

The delivery of this unit may be managed through small group-based work, where learners form small teams to develop a marketing strategy and advertising campaign for a specified product. Alternatively, learners may develop individual responses to set or self-generated briefs.

Learners must research examples of advertising campaigns that use interactive media principles, and use information gained to inform their own ideas generation and design work.

Learners will be expected to use basic levels of interactive media authoring tools in the development of their advertising product. A balance should be maintained between technical considerations and creative approaches.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
# Unit 80: Professional Sound Production Using Interactive Media

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>T/601/6791</th>
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<tbody>
<tr>
<td>Level:</td>
<td>5</td>
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<td>Credit value:</td>
<td>15</td>
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- **Aim**
  This unit aims to develop learners’ skills and understanding through experimentation with the manipulation of sound and image and the creation of interactive media installations or presentations.

- **Unit abstract**
  In this unit learners will experiment with the diverse nature of image and sound manipulation. A research portfolio will initially inspire the product created by the learner and instil a greater understanding of the creative complexities of sound and image combinations.

  Learners will have the opportunity to develop skills in the use of industry-standard sound and image manipulation software. This will enable the learner to communicate their ideas in an effective manner, ensuring an industry-standard outcome. This experimental approach allows for endless creative interactive media opportunities. The final outcome for this unit requires learners to install or present their work for viewing by an audience. Learners will collate audience feedback and be able to articulate their ideas and thinking using appropriate language in the form of a product analysis.

- **Learning outcomes**

  **On successful completion of this unit a learner will:**
  1. Understand the use of sound and sound manipulation
  2. Be able to experiment with combining sounds
  3. Be able to experiment with combining sound and image
  4. Be able to present, install and analyse own work.
Unit content

1 **Understand the use of sound and sound manipulation**

- Research: sound styles eg narrative, non-narrative, spoken, non-spoken, sung, dialects, force, dominance, ambient, abstract; analyse eg delivery, speed, rhythm, tone, volume, pace, projection; audience response
- Sound manipulation: create or acquire sound eg experimental, electronic, analogue, digital, foley, vocal, environmental, instrumental
- Capturing: materials; industry standard software eg Pro Tools, Cubase, Nuendo, Logic, Audition
- Sound processing techniques: eg de-essing, noise gates, pitch shift, equalising, normalisation, mixing, sampling, panning, reverberation, echo, distortion, modulation, delay, chorus
- Sound editing techniques: eg cut, paste, loop, sample rates, frequency; digital file formats

2 **Be able to experiment with combining sounds**

- Sound types: combinations eg synergistic sound pairs, ambient, narration, music, electronic, environmental
- Conventions: audience expectations eg evocation, priming, atmosphere, action reinforcement, connotations, psychological, physical
- Composition and interplay: combinations eg form, logic, coherence, structure
- Spatial context: placement eg panning, frequency, mixing, mono, stereo, surround
- Volume modulation: eg complementary, increase, decrease, variation, interplay

3 **Be able to experiment with combining sound and image**

- Sound and image: research eg advertising, web, games, film, art, TV, concerts, VJing; types eg montage, juxtaposition, displacement, fragment, abstraction, experimental
- Mood: eg anticipation, evoking response, transitions, timing, reinforcement, affirmation
- Software: eg Avid, Edius, Final Cut Pro, Premiere Pro
- Export: appropriate format; industry standard

4 **Be able to present, install and analyse own work**

- Organise: presentation or installation eg logistics, equipment, health and safety, environment, professionalism, layout, technical requirements, rehearsal, staging, introduction, explanation
- Presentation or installation: suitable location; audience
- Feedback: audience response eg peers, tutors, public, industry professionals; methods eg questionnaire, interviews, viva voce, recordings, social networking, blog, discussion,
Analyse: eg strengths, weaknesses, improvements, critique, technical proficiency, expectations, actuality, audience response
Learning outcomes and assessment criteria

<table>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Analyse research findings to inform project development</td>
</tr>
<tr>
<td>Understand the use of sound and sound manipulation</td>
<td>1.2 Evaluate capturing and editing techniques to creatively manipulate sound</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Demonstrate experimentation with creative use of sound composition and interplay</td>
</tr>
<tr>
<td>Be able to experiment with combining sounds</td>
<td>2.2 Design sound to evoke an intended emotional response</td>
</tr>
<tr>
<td></td>
<td>2.3 Demonstrate awareness of spatial context and volume modulation</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Carry out research to inform sound and image combinations and their efficacy</td>
</tr>
<tr>
<td>Be able to experiment with combining sound and image</td>
<td>3.2 Demonstrate creative application of editing techniques in audio and video to realise intentions</td>
</tr>
<tr>
<td></td>
<td>3.3 Perform industry-standard production techniques</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Report on audience response in a creative and effective manner</td>
</tr>
<tr>
<td>Be able to present, install and analyse own work</td>
<td>4.2 Present final product in a professional manner</td>
</tr>
<tr>
<td></td>
<td>4.3 Analyse project and propose further development.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 71: Sound Production and Editing Using Interactive Media
- Level 5:
  - Unit 78: New Technologies in Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

This unit requires learners to have access to current industry standard software and hardware, camera equipment and digital audio recording devices. Learners will have different requirements as each of the software programmes caters to different industry requirements and so the list is not exhaustive as this is a fast-paced developing industry.

- Industry audio software examples:
  - Pro-tools
  - Cubase
  - Audition
  - Logic and Nuendo
- Industry video software examples:
  - Avid
  - Edius
  - Final Cut Pro
  - Premiere Pro
• Games, animation and web software examples:
  - Maya
  - Dream Weaver
  - Flash
  - Director
• Industry hardware examples:
  - Computers
  - Cameras
  - Storage devices
  - Audio recorders
  - Microphones
  - Monitors.

Employer engagement and vocational contexts
Setting this unit in the context of a client brief or live scenario will give the learners a context for their learning. Meeting visiting lecturers, industry professionals and working with local and national organisations related to their filed will strengthen opportunities for employer engagement and vocational learning.
Unit 81: Digital Video Post-production and Editing

Unit code: A/601/6792
Level: 5
Credit value: 15

- **Aim**
This unit aims to develop learners’ skills in planning, preparing and presenting digital production for the moving image.

- **Unit abstract**
This unit gives learners opportunities to develop products from conception, through the production phases to the export of a final product. The products made in this unit range from experimental, factual, fictional, narrative, non-narrative, art and client led. Learners will need to consider designing for very different uses, for example on small handheld devices, through to cinema screens or other large-scale projection.

Learners have the opportunity to be exceptionally creative. During production and post-production the technical skills that can be developed are highly specialised and focused. The nature of this unit means that it is possible that the production phase of the product to be created through the collaboration of a small team, in this instance, individual contributions must be evidenced.

This unit allows learners to gain a deeper understanding of the application of industry standard communication, equipment and software. Learners should follow working practices of industry professionals. Learners are required to create a product that is fit for purpose and which meets professional expectations.

- **Learning outcomes**
**On successful completion of this unit a learner will:**
1. Be able to plan and create material
2. Be able to digitise material
3. Be able to perform post-production processes
4. Be able to export files to meet industry requirements.
Unit content

1 Be able to plan and create material

Pre-production: planning eg client brief, research, ideas, narrative, non-narrative, experimental, proposals, target audience, storyboards, scripts, shooting scripts, production logistics, schedules, budgets, costume, props, sets, casting, crew, pitching, equipment, health and safety

Production: shooting eg location, studio; footage eg still images, found images, animated images; to schedule; on budget; continuity; production notes; pick-ups; production logs

2 Be able to digitise material

Software: current industry; broadcast standard

Video: eg SD, HD, 2K, 4K; source type eg tape, DV Cam, Digi Beta, RED; digital storage device eg SD/XD cards, compact flash, solid state, P2 cards, SXS card; Video codec’s eg H.264/263, DV PAL, DV NTSC, Apple pro res 422/444, XDCAM PRO, Jpeg motion, HDV (480, 720, 1080 i/p)

File: formats eg TIFF, JPEG, DV Stream, AVI, .Mov, .FLV, MPEG, Quicktime, AIFF, MP3, WAV, WMA

Capturing: methods eg logging, import file/multiple, EDL

Settings: capture settings; timeline settings; frame size; frame rate; sampling rate; key frame; resolution; format; compression

3 Be able to perform post-production processes

Editing: digital post-production facilities (non-linear; multi-track); processes eg edit decision lists (EDL), time codes, tape logs, storyboards, camera scripts; output to broadcast standard

Effects: eg chroma key, black and white, sepia, tone, motion, filters, blur, border

Transitions: eg cut, fade, wipe, dip to colour, dissolve

Modifications: image eg size, speed, motion, colour correct, direction, opacity, luminance, key, layers, rotation

Flow: eg pace; continuity, jump cutting; effects, transitions, narrative, non-narrative

4 Be able to export files to meet industry requirements

File: format eg DV Stream, AVI, .Mov, MPEG, Quicktime, web formats; storage eg hard drive, external drive, DVD, digital tape, solid state, network; broadcast safe

Frame rates and scan lines: regional video standards eg NTSC, PAL; HD (progressive, interlaced); film effect

Image manipulation software: further editing eg Photoshop, compositing, matte, chroma key, Maya, 3D Studio Max, networking
## Learning outcomes and assessment criteria

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</tr>
</tbody>
</table>
| LO1 Be able to plan and create material | 1.1 Plan creative material that is fit for intended purpose  
1.2 Demonstrate the ability to produce industry standard imagery consistently |
| LO2 Be able to digitise material | 2.1 Follow guidelines to select and set up appropriate equipment for intended requirements  
2.2 Demonstrate understanding of edit suite capabilities to ensure high quality digitised material and optimum compression |
| LO3 Be able to perform post-production processes | 3.1 Perform post-production processes creatively to generate broadcast quality editing efficiently |
| LO4 Be able to export files to meet industry requirements | 4.1 Produce exported files to meet industry requirements effectively |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 71: Sound Production and Editing using Interactive Media
  - Unit 76: Interactive Media Technology
- Level 5:
  - Unit 78: New Technologies in Interactive Media
  - Unit 80: Professional Sound Production Using Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Interactive Media and Computer Games.

Essential requirements

Learners will need access to specialist industry standard equipment and software to complete this unit. To complete the production requirements, learners will need access to: digital stills cameras; DV/HD cameras; lighting; camera support systems; chroma key facilities; copyright free images and sound.

For post-production, learners will need access to industry standard editing facilities. The types of editing software that could be used for this unit are Avid, Final Cut Pro, Adobe Premiere Pro or Edius. Learners may progress their work further in image manipulation packages such as Photoshop, Adobe After Effects, Motion, Maya, 3D Studio Max. They may also require further compositing, matte and chroma key facilities.

Employer engagement and vocational contexts

Working with local or national creative businesses will enable learners to meet industry professionals. Working to client briefs or pitching ideas to a panel of experts will give learners valuable feedback on their progress. Final outcomes could be screened at a local cinema to give learners an experience of working in the industry.
Unit 82: Computing Fundamentals

Unit code: H/601/6768
Level: 4
Credit value: 15

- **Aim**

This unit aims to develop learners’ understanding of the fundamentals of computer systems and associated hardware and software.

- **Unit abstract**

Computers are an essential component of everyday life and form the basis for many aspects of design, media, graphic communication and visual arts practice. They are also central to business, commerce, education and communication in general.

The unit looks at systems, their operational characteristics and appropriateness for different applications. The unit also examines networked computer systems and their purposes. Operating systems and programming languages should also be considered. Learners should work through the process of analysing a system in use, supported by knowledge and understanding gained in developing their conceptual awareness of computer systems. The unit will enable learners to place the different components of a computer system into context, and develop their understanding of how these components interrelate in terms of function, purpose and technical requirements.

- **Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand computing fundamentals
2. Understand the concept of a networked system
3. Understand the functions of operating systems
4. Understand data communication.
Unit content

1 **Understand computing fundamentals**

Operating systems: purposes; functions; advantages; disadvantages; structure; flow
Factors: speed; size; user friendliness; simplicity; stability
Hardware: computers; scanners; printers; servers; displays; user-input; cameras; network
Software: applications; database; text; word processing; image reader; picture; 3D; animation; film; browsers; search; retrieve
Platform: combinations; Windows; Mac OS; UNIX; LINUX; operational characteristics; architecture; programs; run-time
Programming techniques: overview eg machine code programming, assembly language programming; translation of high-level languages; sequence selection; iteration; variables, simple programs; designs; code

2 **Understand the concept of a networked system**

Concept: connectivity; shared access; data storage; retrieval; security; purpose; logistics; complexities eg time, user-friendliness, maintenance, access; performance requirements; common software; procedures; language, control logic
Network: connection methods eg wired, wireless; Ethernet; hubs; switches; bridges; routers; Bluetooth; area networks eg Local Area Networks (LANs); intranet; internet protocols; network card; interface card
CPU architecture: Pentium; Power PC; Mips; CHRP; processing eg dual core, single core, quad core; cache; speed; power requirements; capabilities

3 **Understand the functions of operating systems**

Functions: interface; provide services; applications; programs; support end users; commands; sharing eg resources, data, imagery; host; program execution; interrupts; administrator mode; virtual memory; servers
Graphics: screens eg text, links, layout, image
Audio: sound eg effects, intros, audible warning, instructions
Analysis of operating systems: development of operating systems; W/MP; analysis of platform specific operating systems eg Windows, NT, Mac OS, UNIX, LINUX, Real-Time
4 **Understand data communication**

**Evaluate:** planning; intuition; response; technological; communication; content; format; intentions; reaction

**COMMS standards:** modes of transmission; communication lines; interface; usability; access rights; updating; backing-up; security; protection

**Network considerations:** LAN; WAN; hardware; software; requirements; cabling; wireless; servers; network operating systems; network topologies; protocols
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
<th>The learner can:</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>LO1</strong> Understand computing fundamentals</td>
<td>1.1 Analyse the components of a computer system</td>
<td>The learner can:</td>
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<tr>
<td></td>
<td>1.2 Identify technical requirements for a computer system</td>
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<td></td>
<td>1.3 Evaluate programming techniques used in computer systems</td>
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<tr>
<td><strong>LO2</strong> Understand the concept of a networked system</td>
<td>2.1 Examine architectural configurations</td>
<td></td>
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<tr>
<td></td>
<td>2.2 Analyse factors affecting performance of systems</td>
<td></td>
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<tr>
<td></td>
<td>2.3 Describe the conceptual framework for a computer system</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Understand the functions of operating systems</td>
<td>3.1 Analyse the functions of an operating system</td>
<td></td>
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<tr>
<td></td>
<td>3.2 Evaluate an operating system in use</td>
<td></td>
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<tr>
<td><strong>LO4</strong> Understand data communication</td>
<td>4.1 Evaluate different transmission communication lines</td>
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<tr>
<td></td>
<td>4.2 Analyse data flow within an existing networked system.</td>
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</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 12: Computers in Art and Design
  - Unit 67: Computer Game Engines
  - Unit 68: Computer Game Design
  - Unit 74: Principles of Software Design and Development

- Level 4:
  - Unit 72: Computer Programming Principles
  - Unit 73: Networks and Operating Systems
  - Unit 86: Digital Media in Art and Design

- Level 5:
  - Unit 70: Computer Interface Design Principles
  - Unit 74: Computer Systems Requirements Analysis.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Interactive Media and Computer Games.

Essential requirements

This unit should be delivered in a practical way. Learners will need to have access to a working computer system in order to be able to evaluate its purpose, functions and effectiveness. An intranet within the centre, with administration rights, will prove useful for this purpose.

Learners with a wide range of programming ability would benefit from appropriately developed learning support materials. It is expected that most centres will provide personal computers. The delivery of the unit does not require a particular platform, but a mix of platforms would be beneficial for providing the learners with experience of different systems. Learners will need to alter the configuration of platforms.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 83: Project Management for Learning Using Interactive Media

Unit code: D/601/6767
Level: 5
Credit value: 15

• Aim
This unit aims to develop the learner’s understanding of management and management issues and skills in the development of an interactive media product.

• Unit abstract
In this unit learners will work in teams to develop management skills for the successful development or improvement of an existing interactive media product. This will involve detailed research and understanding of personal learning, aspirations and motivation to ensure the successful development of a management project. The project itself will derive from a brief, either learner initiated, tutor devised or preferably employer identified. In teams learners will be required to research, identify, plan and develop solutions for the interactive media product. They will be required to gain acceptance of their product in an industry-based situation. Finally, learners will present their management project from initiation to completion, to a panel or employer. In team scenarios learners must provide individual evidence of all learning outcomes.

• Learning outcomes
On successful completion of this unit a learner will:
1. Understand personal learning, aspirations and motivation
2. Be able to propose and initiate change in an interactive media product
3. Be able to plan the systematic development and delivery of an interactive media product
4. Be able to manage project budgets and logistics for an interactive media product.
Unit content

1 Understand personal learning, aspirations and motivation

Learning: research eg self-organised, active generative learning, problem-based learning, articulation of purpose, choosing to learn, psychology of learning, Myers Brigg’s psychological types, Belbin’s team roles, Honey and Mumford learning styles

Aspirations: eg success, fulfilment, achievement, accolade, determination, drive, motivation, development, quality, equality, professionalism, creativity, impression

Motivation: theories eg Abraham Maslow ‘hierarchy of needs’, George Kelly ‘personal scientist’; personality types; psychological types; team roles; preferences; leadership; team work; management

2 Be able to propose and initiate change in an interactive media product

Projects: interactive media; client or shortlist; project management techniques and systems eg soft systems approach, learner-generated personal criteria, selection techniques

Presentations: skills eg oratory, planning, articulation, initiative, confidence, selection criteria, scoring criteria, results analysis, creating visuals

System demonstration: eg testing, acceptance, user guide, alpha/beta testing

Project feasibility: eg terms of reference, requirements analysis, impact analysis, fact finding, fault finding, systems analysis, flow diagrams

Sources and resources: eg help systems, manuals, software, computer systems, information retrieval, databases, spreadsheets, capture techniques, risk management, website registration, hosting, copyright, data protection law

3 Be able to plan the systematic development and delivery of an interactive media product

Planning: eg Gantt charts, project activities, critical path analysis, activity on arrow and activity on node

Estimating: assessing eg effort, time, delivery, explanation

Project management methodologies: users eg business, technical, quality assurance; scale eg small, large project; resources

Preparation: project shape; interaction costs; communication overheads; effort over time eg PNR curve, level straight line manpower loading; slippage; testing; prototyping

Demonstration and acceptance: eg documentation report, user guides, screen shots, test data, costing, maintenance, user acceptance, user friendly
4 Be able to manage project budgets and logistics for an interactive media product

Personnel: eg leadership, delegation, collaboration, employment law, terms of employment, code of conduct, ethics, interpersonal skills, teamwork, workforce management

Time management: eg effective, time keeping, reliability, consistent, cost models, learning development, estimating, tasks

Costs: constraints eg budgeting, billing, workforce, utilities, rental, time, financial incentives, insurance, contracts, risk, market, equipment

Physical resources: eg backups, hard drives, systems, security, volumetrics, compression, maintenance, equipment configuration
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand personal learning, aspirations and motivation | 1.1 Analyse research findings and evaluate the factors that affect personal learning, aspirations and motivation  
1.2 Explain how research findings can be applied to the development of an effective team to produce an interactive media product |
| LO2 Be able to propose and initiate change in an interactive media product | 2.1 Persuade, select and initiate possible reasons and changes for an interactive media product  
2.2 Present plans and system demonstrations to illustrate feasibility of interactive media product  
2.3 Demonstrate a range of sources and resources required for the management of an interactive media product |
| LO3 Be able to plan the systematic development and delivery of an interactive media product | 3.1 Carry out research and planning for the systematic development and delivery of an interactive media product  
3.2 Produce estimates assessing project development timescales  
3.3 Demonstrate project management methodologies in preparation and production of an interactive media product, incorporating demonstrations of product development and acceptance evidence |
| LO4 Be able to manage project budgets and logistics for an interactive media product | 4.1 Create budgets and plan logistics for the management of an interactive media product  
4.2 Demonstrate effective and realistic timescales for the development of an interactive media product  
4.3 Plan the requirements for physical resources to support the development of an interactive media product  
4.4 Present management project from initiation to completion in a professional manner. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 76: Interactive Media Technology
- **Level 5:**
  - Unit 75: Website Creation and Management
  - Unit 78: New Technologies in Interactive Media.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

This is a largely research based unit so access to a range of information including case study material is required. Learners should have contact with design professionals who can give industrial updating on how project management is used to develop new products in Interactive Media.

Employer engagement and vocational contexts

In this unit it may enhance learner opportunities and professionalism for projects to be employer-led, this would give scenarios a realistic context to work within. Employers could therefore provide valuable feedback about project feasibility and management.
Unit 84: 2D, 3D and Time-based Digital Applications

Unit code: F/601/6793
Level: 4
Credit value: 15

● Aim
This unit aims to develop learners' skills in using a broad set of software applications through the use of 2D, 3D and time-based digital techniques.

● Unit abstract
This unit introduces learners to 2D, 3D and time-based digital applications. The scope offered to the designer working with these interactive tools is wide ranging. Creative approaches can be applied to exploring the potential of software applications in extending drawing and painting techniques. There are possibilities for both artists and designers to develop new strategies in working practices through reflection and reaction to the results of digital experimentation. In this unit learners should explore bitmap and vector graphic applications, and address the constraints associated with modelling 3D. They should also reflect on the potential of time-based software to be applied to creative and effective presentations of these elements.

An active experimental approach should encourage learners to broaden their visual thinking and creativity. The potential of combining drawing techniques and digital technology should be promoted widely to cross-fertilise creativity and to explore ways to integrate computer applications with art and design practice involving hand-made imagery. Learners should explore 3D computer modelling techniques to create a basic 3D model or environment. This work should be combined with 2D digital artwork and incorporated in a presentation that uses time-based software.

● Learning outcomes
On successful completion of this unit a learner will:
1. Be able to carry out a sustained exploration of 2D mark making techniques using software tools
2. Be able to develop the potential of images using digital techniques
3. Be able to carry out a sustained exploration of 3D modelling software
4. Be able to present outcomes creatively and effectively using time-based presentation software.
Unit content

1 Be able to carry out a sustained exploration of 2D mark making techniques using software tools

2D software: industry standard; vector; compositional; image manipulation
Bitmap and vector graphics: pixels; picture elements; painting; objects; bounding boxes; stretch; distort; paths; pen tool; file formats; digital mark-making techniques
Drawing devices: graphics tablet; light pen; mouse; touch-screen; touch pad; stylus; puck; interactive whiteboard

2 Be able to develop the potential of images using digital techniques
Manipulation: adjust colour; contrast; brightness; size; resolution; texture; form; cut; copy; paste; repeat; collage; layer; add text; cyclical process eg print out, rework printed copy, re-scan
Use techniques: distortion; filters; curves; crop; adjust; enhance; styles; palettes; channels; transparency; opacity; invert; posterise; additive; reductive
Document: record; stages; saving protocols; versions; sequential eg development, layering; additive; reductive

3 Be able to carry out a sustained exploration of 3D modelling software
Simple objects: articulation; pivotal motion; axis; rotation; objects eg toy, sunglasses, tool, hinge, wheel, door, can opener
Animation: movement; tween; morph; keyframe; timeline
Render: modelling; surfaces eg textures, colour; light sources; reflective light; colour theory

4 Be able to present outcomes creatively and effectively using time-based presentation software
Presentation: preparation; files; consideration eg final output, physical size, resolution; printing requirements; files eg combining, compatibility, economy, physical size, palette, screen resolution
Combine: elements eg drawn vector based imagery, graphics, text
Software: eg presentation, movie, video log, sound; format eg projection, installation
Evaluate: planning; intuition; response; technology; communication; content; format; intentions; reactions
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td>The learner can:</td>
</tr>
</tbody>
</table>
| LO1 Be able to carry out a sustained exploration of 2D mark making techniques using software tools | 1.1 Research examples of 2D digital-based mark making techniques using software tools  
1.2 Use 2D software tools to produce digital artwork |
| LO2 Be able to develop the potential of images using digital techniques | 2.1 Use digital image manipulation techniques to create effective images  
2.2 Document the image manipulation process |
| LO3 Be able to carry out a sustained exploration of 3D modelling software | 3.1 Model simple objects using 3D modelling software  
3.2 Render models with surface texture and lighting  
3.3 Animate models using accurate parameters of movement |
| LO4 Be able to present outcomes creatively and effectively using time-based presentation software | 4.1 Research approaches to using time-based presentation software  
4.2 Combine 2D and 3D elements into time-based presentation software  
4.3 Present final outcome  
4.4 Evaluate final outcome. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 52: 3D Animation
  - Unit 53: 2D Animation Production
  - Unit 59: Stop Motion Animation Production

- **Level 4:**
  - Unit 65: Animation Techniques for Interactivity in Art and Design
  - Unit 86: Digital Media on Art and Design

- **Level 5:**
  - Unit 69: 3D Computer Modelling and Animation
  - Unit 74: Computer Systems Requirements Analysis.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway including equipment, software and access to up to date industrial standards.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
### Unit 85: Video Production

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>Y/601/6766</th>
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<tbody>
<tr>
<td>Level:</td>
<td>5</td>
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<tr>
<td>Credit value:</td>
<td>15</td>
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</table>

- **Aim**

  This unit aims to develop learners' skills and understanding in video production to a client-led specification.

- **Unit abstract**

  This unit gives learners the opportunity to work from a client-led 'live' or 'client simulated' brief. They will then develop a product from concept through to a final product. Learners may have the opportunity in this unit to create cross-platform products.

  This unit allows learners to face real constraints placed on production companies by the client. Not only will learners develop a high level of production skills, but they will also develop communication and liaison skills to meet client expectations. During production and post-production the technical skills that can be developed are highly specialised and focused. Due to the nature of this unit it is possible that the production phase of the product may be created by the collaboration of a small team; in this instance, individual contributions must be evidenced. When working in teams, learners will need to be flexible with the roles they take on. For example, a three-person crew may comprise a producer/editor, a director/camera operator and a presenter/researcher. This unit allows learners to gain a deeper understanding of the application of industry standard communication, equipment and software. This unit emulates the working practice of industry professionals, therefore where centres deliver this unit in-house links with clients and industry professionals are hugely beneficial. It is also possible that this unit can be completed as part of work placement or internship. In either scenario learners are required to create a product that is fit for purpose, which meets professional expectations and outcomes.

- **Learning outcomes**

  **On successful completion of this unit a learner will:**

  1. Be able to establish client and audience requirements
  2. Be able to plan and produce a video production to meet requirements
  3. Be able to apply post-production techniques
  4. Understand own video production.
Unit content

1 **Be able to establish client and audience requirements**

Client: eg live brief, simulated brief; purpose eg educational, training, documentary, promotional, leisure, entertainment, experimental, factual, fictional; requirements eg format, budget, deadlines, audience, distribution, cross platform

Audience: eg education, professional, general, point of sale, categorised demographic; research eg primary, secondary

2 **Be able to plan and produce a video production to requirements**

Ideas: eg mood boards, thought showers, thumbnails, sketches, proposals, treatments, storyboards, scripts; product approval eg pitch to client, pitch to a panel, via email, via telephone

Pre-production: revised eg storyboards, scripts, treatments, camera scripts (with timeline, individual shots, length of shots, sequences); planning eg crew, cast, locations, budget, permissions, security checks, reconnaissance, records of meetings, logs, schedule, copyright free material, costume, props, budget, floor plans, equipment, rehearsal

Organisation: eg roles, responsibilities, teamwork, project management, time management, logistics

Production: shooting eg location, studio, lighting, sound; footage eg still images, found images, animated images; to schedule; on budget; continuity; production notes; pick-ups; production logs

3 **Be able to apply post-production techniques**

Editing: techniques; post-production eg digital post-production facilities (non-linear, multi-track); processes eg edit decision lists (EDL), time codes, tape logs, storyboards, camera scripts; output to broadcast standard

Effects: eg chroma key, black and white, sepia, tone, motion, filters, blur, border

Transitions: eg cut, fade, wipe, dip to colour, dissolve

Modifications: image eg size, speed, motion, colour correct, direction, opacity, luminance, key, layers, rotation

Flow: eg pace, continuity, jump cutting, effects, transitions, narrative, non-narrative

Exports: File: client requirements; format eg DV Stream, AVI, .Mov, MPEG, Quicktime, web formats; storage eg hard drive, external drive, dvd, digital tape, solid state, network; broadcast safe

Frame rates and scan lines: regional video standards eg NTSC, PAL; HD (progressive, interlaced); film effect
4 Understand own video production

Video production: own work eg working to client brief, short film, promotional video, campaign, fiction, non-fiction, advert, show reel, narrative piece; others work eg historical, contemporary

Evaluation: client feedback; peer to peer; critique; audience response; self reflection
Learning outcomes and assessment criteria

<table>
<thead>
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<tbody>
<tr>
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<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Be able to establish client and audience requirements | 1.1 Analyse client and audience requirements  
1.2 Interpret and negotiate client and audience requirements to agree specification |
| LO2 Be able to plan and produce a video production to meet requirements | 2.1 Plan creative material fit for intended purpose  
2.2 Produce creative video production to meet client requirements |
| LO3 Be able to apply post-production techniques | 3.1 Carry out post-production techniques creatively to realise a broadcast quality programme fit for client purpose |
| LO4 Understand own video production | 4.1 Evaluate use of equipment and techniques  
4.2 Evaluate production in terms of meeting the client brief. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 67: Interactive Media Principles
  - Unit 84: 2D, 3D and Time-based Digital Applications
- Level 5:
  - Unit 81: Digital Video Post-production and Editing.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Learners will need access to specialist industry standard equipment and software to complete this unit. To complete the production requirements, they will need access to: digital stills cameras; DV/HD cameras; lighting; camera support systems; chroma key facilities; copyright free images and sound.

For post-production learners will need access to industry standard editing facilities. The types of editing software that could be used for this unit are Avid, Final Cut Pro, Adobe Premiere Pro or Edius.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice. For example a short show reel or series of interviews with local artists could be a good way to encourage learners to make links with the local creative community.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and program.
Unit 86: Digital Media in Art and Design

Unit code: H/601/6608
Level: 4
Credit value: 15

Aim

The aim of this unit is to develop learners' understanding of the scope and potential of digital media in art and design, coupled with the application of skills in and detailed knowledge of software applications in a specialist pathway.

Unit abstract

The aim of this unit is to develop learners' skills with digital media, combined with the ability to translate ideas from research and drawings into computer-aided design work and visuals. Learners should be given the opportunity to develop their in-depth knowledge of software and be able to communicate ideas using a variety of specialist CAD packages.

Learners should broaden their awareness of the benefits of using digital media inside and beyond the remit of art and design. The range of devices and software mentioned is not exhaustive and learners are encouraged to research beyond design applications to gain a broader view.

The aim is to ensure that learners are familiar with a wide range of essential technology and are able to translate these skills into their own work. As technology develops and moves on, learners must be familiar with current software and emerging trends in digital technology.

A creative experimental approach is required to encourage learners to broaden their design work and to understand how digital media can be used in art and design in a variety of situations, e.g. creating and developing images, using text and images, creating documents and creating design work, producing professional standard visuals, concept sheets, design work, environments, renders, fly-throughs, storyboards. Learners should be able to use digital media as a tool to produce supporting documents, e.g. publicity and promotional materials, presentations, professional materials.

Learning outcomes

On successful completion of this unit a learner will:
1. Understand the scope and potential of digital media in art and design
2. Know how to apply and utilise software in specialist pathway
3. Be able to exploit the potential of software applications creatively and effectively
4. Be able to present design work using digital applications.
Unit content

1 **Understand the scope and potential of digital media in art and design**

**Scope**: application eg illustration applications, interior design, background, render, CSS, moving image, environments, games levels, database driven, collaborative, reactive, 3D, graphic products, product design, web-based design, interactive media, marketing, business administration

**Resources**: hardware eg digitising tablet, pressure sensitive stylus, mouse, touch-screen, motion sensor, camera, projector, printer, scanner, hard drive, laser cutter

2 **Know how to apply and utilise software in specialist pathway**

**Software applications**: manipulate eg capture, distort, scale, warp, contrast, invert, palette, create swatches, repeat tiles, mask, vector, layer, filter

**Digitise**: capture eg digital photography, scan

**Objects**: primary sources eg found objects, natural objects, domestic tools, own work

**Image**: visuals eg photographs, found images, own visual work, hand-written text, word-processed text

**File format**: industry standards eg tiff, png, jpeg, gif, pdf, high resolution, low resolution, dpi, pixel size, international paper size, web page, web format, print format

**Pathway**: specialism eg fine art, fashion, textiles, design, graphics, photography, 3D craft, art and design management, interior design, product design, manufacturing, printmaking, sculpture, interactive media

3 **Be able to exploit the potential of software applications creatively and effectively**

**Text editing**: word processing eg word count, spell checker, grammar checker, formatting styles, font styles, headers and footers, page layout, columns, table, track changes

**Image creation**: specialist output eg CSS, moving image, environments, games levels, design led, 3D rendering, repeat patterns, freehand files; traditional eg drawn images, sketches, 3D, photographs

**Creative use of software**: personal approach eg layering, masking, visual language, personal style, innovation, originality, observation, fluency, confidence

4 **Be able to present design work using digital applications**

**Present visuals**: presentation materials eg slide-show, projection, folio, illustration, concept boards, design sheets, orthographic drawings, scale plans, layout, floor-plan, storyboard, render, mock-up; evaluation eg justification, development of ideas, application of software, skills development, communication of intended message, audience feedback, annotation, self-evaluation
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1  Understand the scope and potential of digital media in art and design</td>
<td>1.1 Research and evaluate the use of digital media in art and design</td>
</tr>
<tr>
<td>LO2  Know how to apply and utilise software in specialist pathway</td>
<td>2.1 Create complex and original imagery using specialist software</td>
</tr>
<tr>
<td></td>
<td>2.2 Exploit potential of specialist software</td>
</tr>
<tr>
<td>LO3  Be able to exploit the potential of software applications creatively and effectively</td>
<td>3.1 Produce creative and effective design work using software applications</td>
</tr>
<tr>
<td></td>
<td>3.2 Prepare image, graphic and text files for output</td>
</tr>
<tr>
<td></td>
<td>3.3 Produce a comprehensive portfolio that shows the creative application of specialist software</td>
</tr>
<tr>
<td>LO4  Be able to present design work using digital applications</td>
<td>4.1 Present visual design work</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate the use of digital media in creating successful art and design outputs.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 1: Visual Communication in Art and Design
  - Unit 12: Computers in Art and Design
  - Unit 29: Image Manipulation Computer Applications
- **Level 4:**
  - Unit 11: Design Principles
  - Unit 88: Product Design
- **Level 5:**
  - Unit 33: Art, Design and Media Practice within the Digital Environment
  - Unit 101: Exhibition and Retail Design
  - Unit 125: Fine Art Digital Applications.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
- **Skillfast-UK Sector Skills Council**
  - Textiles and Material Design.
Essential requirements

This unit requires access to computer suites with current software and a range of hardware including scanners, cameras, A3 colour printers and graphic tablets. Access to drawing studios is also necessary to enable learners to translate ideas from drawing to designs. Research tools include the internet, CD ROMs, databases, specialist publications, galleries, exhibitions, questionnaires and interviews with practitioners, software manuals, trend forecasting, graphic design magazines.

Employer engagement and vocational contexts

Off-site visits, work experience or visiting speakers related to the concept of digital media in art and design will help to contextualise this unit for learners and see the benefits on their future career aspirations. Competence and fluency with software is a skill that employers will be looking for and which will be useful to learners wishing to work for themselves in the future.

- Business – day-to-day business administration, finance and budget management
- Design – surface pattern design, fabric design, fine art, 3D design, graphic products, interior design
- Marketing – producing publicity materials, keeping databases, producing blogs, advertising
- Presentation – creating mood boards, concept boards and presentation images.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 87: 3D Animated Products

Unit code: M/601/6613
Level: 4
Credit value: 15

• Aim

This unit aims to develop learners’ skills in designing and constructing products for 3D animation. This can be applied to products for the theatre, media and moving image.

• Unit abstract

In this unit learners will investigate the design and production of 3D animated products. Learners should research the context and evolution of 3D animated products and use an analytical and investigative approach to understanding developments in materials and new technology. The unit focuses on applying and developing design skills to a range of products which incorporate movement. These will be combined with the skills and knowledge of the materials and techniques necessary for controlling and effecting movement. Learners should address safety and reliability issues and explore the commercial and contemporary context for 3D animated products.

The unit deals specifically with the design, construction and control of real-time animated devices such as puppets, marionettes, automata, toys, kinetic art objects and point-of-sale devices. The unit is intended to develop visual, theoretical and practical skills relating to design, and would be of value to specialists in commercial model making, design for performance, exhibition and retail design, and product design. Learners should investigate the links between animation and moving image and developments in new materials and computer technology which are continually breaking new ground in the sector. Learners should be fluent with translating their ideas from designs into finished work using traditional and innovative ways of working.

All evidence should be presented to a professional standard showing 2D and 3D work, arranged to emphasise the range of skills required to create 3D real-time animated outcomes.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand the scope of animated products
2. Be able to design and develop an animated product
3. Be able to produce creative and effective 3D animated products
4. Be able to employ professional practice for 3D animation.
Unit content

1 **Understand the scope of animated products**

Types of animated product: eg interactive, independently controlled, automatic, stop frame, green screen, manual, automata, toys, animation models, promotional items, fine art, product design, theatre, moving image

Contexts of use: eg theatrical, circus, satire, political, comedy, television, film, fine art, entertainment, communication

Audience: eg adults, children

Distribution channel: eg live performance, advert, film, TV, social networking, internet, interactive event

2 **Be able to design and develop an animated product**

Mechanics: eg springs, elastic materials, gravity, motors, gears, moving parts

Mechanical devices: eg levers, springs, cams, pulley systems, gear systems

Movement: eg rotary, oscillating, reciprocating, angular, rapid, slow, repetitive, animal, human, insect

Technology: eg electronic, hydraulic, pneumatic, computer generated, computer aided, internet, remote control, movement sensor controlled

Control: eg interactive, manual, remote, timed, mechanically or electronically sequenced

Appearance: eg figurative, representational, imagination; surface quality eg tactile, scale, materials, finish, characteristics

3 **Be able to produce creative and effective 3D animated products**

Precision: eg component fit, movement, reliability, durability, motion

Model-making processes: eg laser cutting, cutting, removing, redistributing, joining, assembling, finishing, sewing, moulding, carving

Appearance: eg figurative, representational, imagination; surface quality eg tactile, scale, materials, finish, characteristics

Quality: eg finish, component fit, reliability, safety

Safety: construction processes; in operation; health and safety legislation
4 Be able to employ professional practice for 3D animation

Professional practice: scheduling; research; making; development; refining stages; time management; communication; strategy

Cost: eg materials, budget, processes, job time, fixed overheads, competing products, defined limits

Career pathways: eg visual effects designer, mechatronics engineer, electrical/electronics engineer, designer, modeller, costume maker, sound and visual effects engineer, systems engineer, project engineer, accountant, puppeteer, theatrical designer
Learning outcomes and assessment criteria

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<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tbody>
</table>
| LO1 Understand the scope of animated products | 1.1 Research and evaluate the scope of real-time animated products  
1.2 Identify visual characteristics and features which are enhanced by movement |
| LO2 Be able to design and develop an animated product | 2.1 Research and explore surface qualities, movement and motion to produce designs  
2.2 Apply mechanical design principles to achieve desired movements  
2.3 Use technology and processes to control movements |
| LO3 Be able to produce creative and effective 3D animated products | 3.1 Use materials and processes to produce creative and effective 3D animated products  
3.2 Use materials and processes to achieve motion in animated products  
3.3 Comply with safe working practices in the construction and operation of real-time animated products |
| LO4 Be able to employ professional practice for 3D animation | 4.1 Evaluate project management skills in relation to the design of animated products  
4.2 Evaluate communication and project management within the commercial environment interactions. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 45: Digital Storytelling
  - Unit 53: Design for Moving Parts
  - Unit 121: 3D Animation
- Level 4:
  - Unit 95: Marketing for 3D Design
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 89: Commercial Model-Making
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.
Essential requirements

This unit requires learners to have access to a broad range of specialist 2D and 3D facilities and equipment, and good storage options for design work and 3D work at different stages of design and production. This should include access to design tools, technology, current software, photographic studio and processing facilities, sculpture and metal working and 3D finishing areas. Learners will need access to specialist machinery to produce models and where this is not available at the centre links with local business should be made in order to give learners a broad range of contemporary skills in this unit.

Required specialist resources may include: computer suites with up-to-date 3D drawing systems, image manipulation packages, cameras and software editing packages, background and lighting rigs, photographic studios, A3 colour printers, vacuum forming, plaster lathes, plaster mould making facilities, rubber mould making equipments, fibreglass, resin workshop, laser cutter, CNC milling, welding, rapid prototyping equipment.

Employer engagement and vocational contexts

Links with local business or industry will help strengthen the vocational nature of this unit and there is flexibility to respond to local employment needs through specialist pathways. Live assignments and client briefs as well as guest lecturers, off-site visits and access to emerging technology will greatly enhance the delivery of this unit. The Internet Movie Database is a useful starting point for learners wishing to research animated films and the techniques used (www.imdb.co.uk). Skillset and the British Film Institute have developed a website together with industry information related to careers and the scope of animation (www.skillset.org/animation and www.bfi.org.uk).
Unit 88: Product Design

Unit code: A/601/6615
Level: 4
Credit value: 15

• Aim

This unit will enable learners to understand the factors relevant to product design, and to develop skills in planning and producing prototypes.

• Unit abstract

This unit will guide learners to consider the utilitarian and creative principles of product design. They will explore materials and manufacturing methods to inform the development of their own ideas. Learners should investigate ergonomics in design, form, function, aesthetics and reliability. There should be consideration for the needs of the end user and for the way a product will be marketed. Work-related learning activities should be deployed to give a true vocational context to this unit. Live briefs should be implemented where possible so that learners have an understanding of the relationship between the client, designer and producer/manufacturer. Work-related learning may also offer an introduction to the key concept of (product) research and development. This could open up new post-qualification employment opportunities.

Learners will approach design through 2D drawings, visuals, concept boards, technical drawings and through 3D work such as materials samples, maquettes, prototypes, scale models and full-size final models. 3D computer applications should be used to create visuals and to support drawings, model making and design development.

Learners should show an understanding of the way materials work and be able to select the most suitable materials and manufacturing methods to communicate their ideas.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand the principles of product design
2. Be able to plan and design a product to meet requirements
3. Be able to use technology to produce models, prototypes and presentation materials
4. Understand the connections between design management and manufacturing.
Unit content

1 **Understand the principles of product design**

Principles: design considerations eg concept, ergonomics, form, function, aesthetics, trends, end user, lifespan, materials, manufacturing methods, costings, level of finish, testing, sustainability

Types of product: eg functional, decorative, utilitarian, consumer durables, packaging, graphic design, advertising, machinery, disposable, single use

Marketing: eg market sectors, strategies, costs, unique selling point, promotion, display, point of sale

Communication techniques: eg visual language, thumbnails, orthographic projections, working drawings, concept boards, standard drawing conventions (BS308), photography, renders, CAD software, illustrations, models

Legal requirements: eg consumer protection legislation, design protection, Health and Safety at Work Act, national and international standards for product performance, Kite mark, safety standards, ISO standards

2 **Be able to plan and design a product to meet requirements**

Work to a brief: eg client brief, live brief, self-negotiated project, constraints, requirements

Production plan: plan of work; estimates; deadlines; costs; scale eg one-off, small-scale, large-scale, volume; research; sampling

Materials: properties eg types, features, qualities, flexible, rigid, components

3 **Be able to use technology to produce models, prototypes and presentation materials**

Processes: making eg cutting, removing, redistributing, joining, assembling, finishing,

Technology: eg laser cutting, injection moulding, rapid prototyping, vacuum forming, CAD, milling

Health and safety: safe production methods; product testing; legislation eg product liability

Quality: eg finish, reliability, safety; precision eg component fit, movement, fit for purpose

4 **Understand the connections between design management and manufacturing**

Organisation: project management eg plan of work, schedule, budget control, resource planning, timescale, meetings, communication

Design management: stages of production eg research, design development, testing, material sampling, re-design, production, quality assurance, promotion, review; consultation eg client, designer, manufacturer, engineer, retailer, end user
## Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Create original designs that show an understanding of design principles</td>
</tr>
<tr>
<td>Understand the principles of product design</td>
<td>1.2 Research and evaluate factors that influence design</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Produce a researched and thorough plan of work</td>
</tr>
<tr>
<td>Be able to plan and design a product to meet requirements</td>
<td>2.2 Show how choice of materials and production considerations can influence the appearance of a product</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Select materials and technology to construct models, products and prototypes</td>
</tr>
<tr>
<td>Be able to use technology to produce models, prototypes and presentation materials</td>
<td>3.2 Use finishing techniques to produce comprehensive results in models and prototypes</td>
</tr>
<tr>
<td></td>
<td>3.3 Ensure that the designed products comply with safe working practices</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Evaluate project planning and time management skills in relation to the design of products</td>
</tr>
<tr>
<td>Understand the connections between design management and manufacturing</td>
<td>4.2 Evaluate the job roles, communication and project management within the product design environment.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 49: Human-scale Working
- Level 4:
  - Unit 10: Design Method
  - Unit 11: Design Principles
- Level 5:
  - Unit 4: Professional Practice in Art and Design
  - Unit 34: Management of the Design and Production Process
  - Unit 66: Interactive Media Presentation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

This unit will require a well-equipped studio/workshop to facilitate the learner’s independent exploration of media, materials and practical techniques.

This unit requires access to a range of specialist workshop facilities for the development of models and prototypes. This should include: photographic processing facilities, a suitably equipped workshop, a finishing area, a multi-purpose 3D area, laser cutting and access to rapid prototyping facilities, either in house or by local suppliers.
Employer engagement and vocational contexts

Centres should develop work-related learning links with industry, practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 89: Commercial Model Making

Unit code: R/601/6619
Level: 5
Credit value: 15

• Aim
This unit aims to develop skills and understanding of learners who intend to follow careers as model makers in the architectural, interior design, industrial design, media or entertainment industries.

• Unit abstract
This unit is relevant to specialist pathways in which 3D visualisation is important. It aims to develop practical and perceptual skills and gives opportunities to communicate ideas as 3D models. Learners should have an active approach to investigating technology, materials and processes, and the way that they can be applied to realise creative design ideas. Learners should research materials and technological processes and be able to plan and produce commercial models. There should be a level of competence so that learners are able to translate ideas easily between two and three dimensions, and between computer skills and craft skills when handling materials.

To contextualise learning for this unit, learners should explore the commercial needs for model making, through factory visits, visiting speakers, research, live assignments and links with local business who may have access to specialist technology not available at the centre. Learners should explore routes into industry as part of their investigation into professional practice.

All evidence should be presented to a professional standard and should include a folio of 2D and 3D work which is arranged to emphasise the diversity of model-making skills. It is intended that the learner will specialise in this unit and work in one of the following sub-specialisms: product model making, architectural model making, media/effects model making, interior design, environmental, exhibition and retail design, animation.

• Learning outcomes
On successful completion of this unit a learner will:
1 Understand the technological principles of model making in a commercial context
2 Be able to plan and design a model for commercial production
3 Be able to make models to a brief
4 Be able to employ professional practice in commercial model making.
Unit content

1 Understand the technological principles of model making in a commercial context

Technology: eg mechanics, control, power sources, CAD, CAM, CNC, innovation, new materials
Principles: eg function, communication, form, purpose, events, advertising, prototype, drawing conventions
Context: eg physical limitations, size, scale, purpose, film, theatre, video, television, interior design, product design, animation, client brief

2 Be able to plan and design a model for commercial production

Planning: project management eg scheduling, time management, costings, research, development, testing, refining, communication, resources, facilities
Design constraints: eg types, features, qualities, cost, availability, technology, processes, client, end user, function, purpose
Technology: eg CAD renders, visuals, designs, samples
Structures: systems eg geodesic, space structures, stressed skin, tensegrity; features eg struts, ties, beams, loads, reaction, triangulation, tension, compression, torsion; types eg flexible, rigid

3 Be able to make models to a brief

Visual qualities: eg scale, size, static, moving, accuracy, realism, communicating ideas, quality, finish, texture, colour
Precision: eg component fit, movement, reliability
Processes: working eg cutting, laser cutting, injection moulding, rapid prototyping, vacuum forming, CAD, CNC, milling, casting, moulding, mould-making, joining, assembling, finishing
Health and safety: Health and Safety at Work Act; product liability; professional indemnity
Materials: eg wood, metal, plastics, fabrics, modelling materials, ceramics, hybrids, ‘smart’ materials, recycled materials, renewable materials, fibreglass, clay, plaster

4 Be able to employ professional practice in commercial model making

Design management: stages of production eg research, design development, testing, material sampling, re-design, production, quality assurance, promotion, review; costs; budget; consultation eg client, designer, manufacturer, engineer, retailer, end user
Presentation: eg folios, development drawings, prototypes, samples, renders, visuals, concept sheets, critiques, client meetings
Legislation: Health and Safety at Work Act; product liability; professional indemnity
Learning outcomes and assessment criteria

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</tr>
</tbody>
</table>
| LO1 Understand the technological principles of model making in a commercial context | 1.1 Research and evaluate the use of commercial models  
1.2 Research and evaluate technological principles |
| LO2 Be able to plan and design a model for commercial production | 2.1 Produce a work plan detailing materials and technology in terms of cost, effectiveness and availability  
2.2 Use innovation to develop and visualise designs |
| LO3 Be able to make models to a brief | 3.1 Produce accurate scale models to achieve intended effects  
3.2 Use model-making processes to construct skilfully accurate and visually interesting models  
3.3 Use finishing techniques to produce professional results in models  
3.4 Ensure that processes used comply with health and safety legislation |
| LO4 Be able to employ professional practice in commercial model making | 4.1 Evaluate the job roles, communication and project management within the commercial model-making environment  
4.2 Evaluate project planning and time management skills in relation to the design of products |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 46: 3D Design, Media, Techniques and Technology
  - Unit 49: Small-scale Working
- **Level 4:**
  - Unit 11: Design Principles
- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.
Essential requirements

This unit requires learners to have access to a broad range of specialist 2D and 3D facilities and equipment, and good storage options for design work and 3D work at different stages of design and production. This should include access to design tools, technology, current software, photographic studio and processing facilities, sculpture and metal working and 3D finishing areas. Learners will need access to specialist machinery to produce prototypes and where this is not available at the centre links with local business should be made in order to give learners a broad range of contemporary skills in this unit.

Required specialist resources may include: computer suites with up-to-date 3D drawing systems, image manipulation packages, A3 colour printers, vacuum forming, plaster lathes, plaster mould making facilities, rubber mould making equipments, fibreglass, resin workshop, laser cutter, CNC milling, welding, rapid prototyping equipment.

Employer engagement and vocational contexts

Links with local business or industry will help strengthen the vocational nature of this unit and there is flexibility to respond to local employment needs through specialist pathways. Live assignments and client briefs as well as guest lecturers, off-site visits and access to emerging technology will greatly enhance the delivery of this unit.
Unit 90: Furniture Design

Unit code: H/601/6625
Level: 5
Credit value: 15

Aim
This unit aims to develop learners’ skills and understanding in the design and production of furniture.

Unit abstract
In this unit learners will gain a knowledge and understanding of the visual and functional qualities of furniture and how it is designed. They will develop an understanding of a range of materials and select appropriate manufacturing processes in exploring construction and fabrication used in furniture design. They will develop high-level competence in controlling the creative process from inception to realisation.

Learners will be expected to develop an understanding of the role and responsibilities of the designer and designer-maker in a commercial context, including one-off, batch and mass production, and to develop the ability to communicate 3D ideas through 2D drawing techniques and 3D making, modelling and prototyping skills.

Learning outcomes
On successful completion of this unit a learner will:

1. Understand the visual, tactile and functional characteristics of furniture and related products
2. Understand the making processes required to meet design requirements
3. Be able to demonstrate skills in design development, using appropriate techniques to communicate ideas and respond to identified needs
4. Be able to apply professional practice in furniture design.
Unit content

1 **Understand the visual, tactile and functional characteristics of furniture and related products**
   
   Research and record: specific ideas and select materials appropriate to intended purpose
   
   Understand: the visual and functional factors which influence outcomes

2 **Understand the making processes required to meet design requirements**
   
   Materials research: eg own exploratory work, secondary research, questionnaire, environmental, health and safety
   
   Techniques: eg forming, machining, constructing, casting, moulding and finishing, environmental, health and safety

3 **Be able to demonstrate skills in design development, using appropriate techniques to communicate ideas and respond to identified needs**
   
   Design research: functional analysis, established practice, lateral thinking, published data
   
   Explore design solution: eg drawing, sampling, model making, test rigs, computer
   
   Formulate design: eg working drawings, visuals, scale models, prototypes, computer
   
   Present design solutions: eg 2D visual, 3D visual, screen, oral, written
   
   Team liaison: eg management, customer, engineers, design office, retail

4 **Be able to apply professional practice in furniture design**
   
   Professional context: eg contractual, legislative, intellectual property rights, professional bodies tradition, commercial promotion
   
   Work practice: health and safety of yourself and others, observation of your own and others’ contractual obligations, ethical and environmental considerations
## Learning outcomes and assessment criteria

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</tbody>
</table>
| LO1 Understand the visual, tactile and functional characteristics of furniture and related products | 1.1 Research and record specific design ideas and select materials for the identified application  
1.2 Understand the functional and visual factors driving outcomes |
| LO2 Understand the making processes required to meet design requirements | 2.1 Explore and explain the use of materials in your own and others’ work include health and safety considerations  
2.2 Understand and explain the use of manufacturing or craft techniques include health and safety advice |
| LO3 Be able to demonstrate skills in design development, using appropriate techniques to communicate ideas and respond to identified needs | 3.1 Carry out design research to suggest solution  
3.2 Explore suitability of design solutions  
3.3 Liaise with team members over design solution  
3.4 Formulate design solution  
3.5 Present design solution |
| LO4 Be able to apply professional practice in furniture design | 4.1 Understand and discuss the professional context of design work  
4.2 Comply with current health and safety requirements  
4.3 Work with awareness of ethical and environmental considerations. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 49: Human-scale Working
- Level 4:
  - Unit 88: Product Design
- Level 5:
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

This unit will require a well-equipped studio/workshop to facilitate the learner’s independent exploration of media, materials and practical techniques.

This unit requires access to a range of specialist workshop facilities for the development of models and finished pieces.

Employer engagement and vocational contexts

Centres should develop work-related learning links with industry, practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 91: Design for Performing Arts

Unit code: M/601/6627
Level: 5
Credit value: 15

● Aim

This unit aims to develop learners’ skills and understanding in functioning as set designers, costume or visual effects designers in the entertainment and performance industry.

● Unit abstract

This unit is designed to enable learners to follow their chosen specialism whilst gaining experience of the broad spectrum of designing for the performance industry. It provides a focal point for applying the skills and understanding acquired by learners who intend following design careers in this field. These roles bring them into close proximity with performance and learners will need to understand the particular operational characteristics of live theatre, film, television and video production. As this unit is a focal point for a career pathway, much of the work for the unit is likely to be accumulated through work experience.

The unit emphasises versatility but expects learners to have a particular specialism which may focus on sets, costume or visual effects. They will develop a high-level of competence in controlling the creative process from inception to design realisation and communication. An active experimental approach will encourage learners to broaden their creative experiences and they should be encouraged to evaluate and reflect on the outcomes and use findings to refine and inform further work.

Work produced in this unit should enable learners to develop a central core of employable skills which relate to existing specialisms within the industry, for example costume design/making and maintenance, set design and construction, lighting design, prop making/maintenance. It is important that a level of practical competence is shown in studio and workshop practice combined with evidence of an awareness of relevant safe working regulations.

Learners are expected to develop an understanding of the role and responsibilities of the designer and to acquire the ability to communicate ideas to a professional standard through drawing, 3D modelling and prototyping and be able to use the correct terminology and vocabulary in written and oral presentations.

It is important that learners gain a thorough understanding of contemporary professional practice and guest speakers, workshops, visits to design studios and appropriate performances will contextualise practical studies.
• Learning outcomes

On successful completion of this unit a learner will:

1. Be able to use source materials to inform designs
2. Be able to develop and communicate workable designs suitable for production
3. Be able to manipulate materials and processes to meet specified design requirements
4. Understand how to organise and manage design for the performance environment.
Unit content

1. **Be able to use source materials to inform designs**
   
   **Sources**: text eg scripts, prose, poetry; visual media eg painting, sculpture, film, dance, theatre, video
   
   **Distinctive characteristics**: physical features; roles; historical period; groupings eg political, religious, cultural; materials; finishes
   
   **Research**: dress; manner; artefacts; designs; environments; appearance; surface qualities; form; function
   
   **Visualisation**: design development eg sketching, illustrations, photographs, storyboards, collages, CGI, prototypes, rendering

2. **Be able to develop and communicate workable designs suitable for production**
   
   **Design development**: material characteristics eg visual, aesthetic, decorative; function eg supporting, protective, as camouflage; efficiency of use; cost
   
   **Restrictions**: performance space; ergonomics eg fit of costume, width of access, movement of props, working space; storage; available level of technology; minimise weight; maximise strength; durability eg sets, costumes, props
   
   **Communication**: drawing conventions; formal use of visual language; mediums eg painting, drawing, collage, photography; creation of moods; atmospheres

3. **Be able to manipulate materials and processes to meet specified design requirements**
   
   **Material properties**: eg structural strength, weight, durability, finishes, sensory; conditions eg atmospheric, spatial
   
   **Models**: making processes eg maquettes, wire frame, renders, rapid prototyping, experimental constructions, installations, testing materials, structures, sensory influences
   
   **Full-size constructions**: making processes eg hand, machine, preparation, cutting, forming; finishing processes eg joining; assembling; designs eg sets, props, special effects; installations eg temporary, moveable, permanent; health and safety
   
   **Design principals**: form eg 3D, symmetrical, asymmetrical, regular, irregular, geometric, spatial arrangements; function; contexts eg historical, contemporary, cultural, political, religious; values eg aesthetic, symbolic; safety eg performers, technicians, audience, backstage, on stage, front of house
   
   **Use of technology**: controlling lighting; scene changing; theatrical effects eg bangs, flashes, make-up
4 **Understand how to organise and manage design for the performance environment**

*Project management:* scheduling; research; making development; refining stages; time management; sub-contracted work

*Performance environment:* eg live theatre, television studio, location (film, video)

*Costs:* work to budget eg models, sets, props, costumes which are cost effective

*Job roles:* eg designer (set, props, costume, wardrobe, lighting), director, producer, stage manager, floor manager, performers
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Be able to use source materials to inform designs</td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>1.1 Identify and record distinctive characteristics suitable for visual emphasis within identified source materials</td>
<td></td>
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<tr>
<td>1.2 Use visual research to inform innovative design development</td>
<td></td>
</tr>
<tr>
<td>1.3 Use effective visualisation techniques to develop and communicate design ideas</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Be able to develop and communicate workable designs suitable for production</td>
<td>2.1 Specify appropriate materials for designs in terms of cost, effectiveness and availability</td>
</tr>
<tr>
<td>2.2 Accommodate the restrictions imposed by available facilities, materials and resources on the design and making process</td>
<td></td>
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<tr>
<td>2.3 Use selected drawing conventions to communicate creative design intentions</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Be able to manipulate materials and processes to meet specified design requirements</td>
<td>3.1 Experiment with materials, construction and finishing methods to produce innovative models and full-scale constructions</td>
</tr>
<tr>
<td>3.2 Apply design principles to ensure the production of safe and effective models and full-scale constructions</td>
<td></td>
</tr>
<tr>
<td>3.3 Use technology to control and coordinate the functions within the performance</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Understand how to organise and manage design for the performance environment</td>
<td>4.1 Keep records of effective project planning and time management</td>
</tr>
<tr>
<td>4.2 Accurately estimate costs of designs and exercise budget control</td>
<td></td>
</tr>
<tr>
<td>4.3 Evaluate the management structure and job roles within the performance industry from a designers’ perspective.</td>
<td></td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 3: Contextual and Cultural Referencing in Art and Design
  - Unit 11: Design Principles
- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 89: Commercial Model Making
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Textiles and Material Design.
Essential requirements

Access to studio facilities and a work area suitable for constructing three-dimensional models, props and parts of sets is essential. The workshop should be equipped with basic power and hand tools. It is essential that adequate resources are available for handling a variety of materials and, where possible, access to equipment for handling materials such as plastics would be of benefit. A sculpture/clay area is desirable for the sculptural aspect of effects, prostheses (make-up) and prop making. Workshops and equipment must adhere to the relevant health and safety legislation and guidelines.

Access to theatrical space for performance must include lighting equipment and storage and work space. Access to a video suite could be useful to some learners. Work at this level should include as much work experience as possible. Where work experience is difficult to arrange, simulated experiences should be as realistic as possible. Arranging visits to professional studios, workshops and theatres/locations is an important addition to work experience.

Suggested sources for research may include the library, the internet, CD ROMs, databases, specialist publications, galleries, exhibitions, questionnaires and interviews with practitioners. Learners should record sources carefully and accurately citing authors, titles of books, articles, journals and publications, date, place and country of publication.

Employer engagement and vocational contexts

Centres should develop links with practising theatre designers and other craft practitioners, artists and designers to deliver lectures and assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Vocational learning support resources:
• Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
• Local, regional business links – www.businesslink.gov.uk

Creative and Cultural Skills (www.ccskills.org.uk), the Sector Skills Council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The Chartered Society of Designers (www.csd.org.uk) is a professional body for all designers. It provides portfolio ‘gyms’ for students and graduates, a work placement register for student members, careers and industry information plus regularly updated news and events pages.
Unit 92: Specialist 3D Materials

Unit code: T/601/6631
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in the application of specialist 3D materials for applications within art and design.

• Unit abstract
This unit focuses on developing and applying knowledge of the creative and utilitarian possibilities of 3D-related materials within the context of the learner’s chosen area of specialism.

The unit encourages the learner to adopt an analytical and evaluative approach to identifying the production and commercial and social implications of selecting materials for design applications.

This is best achieved by a period of live or self-directed work which addresses the different perspectives of the designer, end user and producer.

• Learning outcomes

On successful completion of this unit a learner will:

1. Understand selection of materials for 3D production
2. Understand consumer responses to materials used in artefacts, products, environments
3. Understand creative and functional use of selected materials through production of own designs.
Unit content

1 **Understand selection of materials for 3D production**
   
   Material: resistant; non-resistant eg wood, metal, plastic, glass, ceramic
   
   Cost: availability; production costs
   
   Performance: eg functional effectiveness, ease of use, durability, maintenance
   
   Scale of production: eg one-off, batch, mass production
   
   Production requirements: eg material properties, production processes, health and safety

2 **Understand consumer responses to materials used in artefacts, products, environments**
   
   Build quality: suitability for the purpose
   
   Design factors: eg traditional, innovative, form, function
   
   Product cost: eg cost effectiveness, maintenance costs, longevity
   
   Operational factors: eg durability, reliability, serviceability

3 **Understand creative and functional use of selected materials through production of own designs**
   
   Materials research: eg own exploratory work, secondary research, questionnaire
   
   Design qualities: eg visual, tactile, efficacy; social association eg innovatory, historical, cultural
   
   Functional aims: eg durability, reliability, serviceability, efficacy
   
   Environmental: eg material sustainability, product recycling potential
   
   Materials usage: eg design brief, specification, fitness for purpose, use, market, client responses
   
   Effectiveness of production: availability; cost of materials; accessibility; cost and duration of production processes
Learning outcomes and assessment criteria

<table>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td><strong>1.1 Evaluate the suitability of materials in terms of cost and performance</strong></td>
</tr>
<tr>
<td><strong>Understand selection of materials for 3D production</strong></td>
<td><strong>1.2 Analyse the implications of material selection in terms of the production requirements and scale of production</strong></td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td><strong>2.1 Investigate contemporary consumer responses to materials used in artefacts, products, environments</strong></td>
</tr>
<tr>
<td><strong>Understand consumer responses to materials used in artefacts, products, environments</strong></td>
<td><strong>2.2 Evaluate reliability of investigations on contemporary consumer responses to materials used in artefacts, products, environments</strong></td>
</tr>
<tr>
<td></td>
<td><strong>2.3 Analyse implications of research into materials selections for 3D production</strong></td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td><strong>3.1 Analyse creative and functional use of materials through production of own designs</strong></td>
</tr>
<tr>
<td><strong>Understand creative and functional use of selected materials through production of own designs</strong></td>
<td><strong>3.2 Propose new applications of specialist 3D materials in own work.</strong></td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 103: Properties of 3D Materials
- Level 5:
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Textiles and Material Design.

Essential requirements

This unit requires learners to have access to a broad range of specialist 2D and 3D facilities and equipment and good storage options for design work and 3D work at different stages of design and production. This should include access to design tools, technology, current software, photographic studio and processing facilities, sculpture and metal working and 3D finishing areas. Learners will need access to specialist machinery to produce prototypes and where this is not available at the centre links with local business should be made in order to give learners a broad range of contemporary skills in this unit.

Employer engagement and vocational contexts

Links with local business or industry will help strengthen the vocational nature of this unit and there is flexibility to respond to local employment needs through specialist pathways. Live assignments and client briefs as well as guest lecturers, off-site visits and access to emerging technology will greatly enhance the delivery of this unit. Learners should be encouraged to independently research the vocational context for their chosen pathway and show understanding of where their career path may take them.
Unit 93: Specialist 3D Technology and Processes

Unit code: H/601/6639
Level: 5
Credit value: 15

• Aim

This unit aims to develop learners’ understanding of specialist 3D technology and processes. Learners will develop skills in applying this understanding to their chosen area of specialism, taking into consideration the commercial context.

• Unit abstract

In this unit learners will be encouraged to research and evaluate the technology and processes relevant to their chosen area of 3D. They should explore the commercial context of the chosen pathway and ensure the historical and contemporary research is used to inform design work and ideas generation.

Learners will develop design work which shows a personal response and demonstrates the expertise they have developed over the course of their programme. Learners should show competence with safe handling of materials, tools and machinery in the specialist pathway. Design work should show the considerations faced during design, eg utilitarian needs, creativity, understanding of materials, production methods, commercial issues, legislation. Finished outcomes should demonstrate skill and understanding of specialist 3D technology and processes.

Understanding of the professional practice aspect of their pathway should be delivered through engagement with visiting speakers, demonstrations, off-site tours to local business and specialist facilities. Client briefs, competitions, exhibitions and live or simulated live briefs will give learners a better understanding of working with clients. Visits to exhibitions, museums, factories, trade fairs and selling fairs, including international visits, should be encouraged so that learners gain an understanding of the market place for their design and manufacturing skills.

• Learning outcomes

On successful completion of this unit a learner will:

1. Understand use of specialist 3D technology and processes in chosen pathway
2. Be able to apply understanding of specialist processes to produce design work
3. Be able to produce outcomes using specialist 3D technology and processes
4. Be able to evaluate own work.
Unit content

1  **Understand use of specialist 3D technology and processes in chosen pathway**

Specialist factors: eg, materials, machinery, techniques, processes, health and safety, functionality, consumer needs, trends, constraints

3D technology: technology eg computer aided design, CNC milling, rapid prototype production, digital printing, laser cutting, lathe turning, vacuum forming, injection moulding, automated production lines; hand forming techniques eg moulding, cutting, joining, carving, welding, brazing, fusing, mould-making

Pathway: eg ceramics, metal work, woodwork, plastic, mixed media, glass, fibre art, automata, interior design, animation, product design, craft, fine art

Scale of production: eg individual one-off, batch, large-scale production

Design qualities: aesthetic eg visual, tactile; process led eg manufactured, handmade; design context eg functional, symbolic, ceremonial, figurative, representational, classical, imaginary

2  **Be able to apply understanding of specialist processes to produce design work**

Constraints: cost eg product cost, maintenance costs, running costs, budget, client brief

Function: eg product performance, fitness for purpose, ease of use, durability, life span, quality, safety, serviceability, use

Design work: eg research, market research, concept boards, visuals, development, sampling, review, product testing, presentation images of final outcomes

Specialist factors: eg production methods, materials, consumer needs, client brief, health and safety

3  **Be able to produce outcomes using specialist 3D technology and processes**

3D technology: technology eg computer aided design, CNC milling, rapid prototype production, digital printing, laser cutting, lathe turning, vacuum forming, injection moulding, automated production lines; hand forming techniques eg moulding, cutting, joining, carving, welding, brazing, fusing

Pathway: eg ceramics, metal work, woodwork, plastic, mixed media, glass, fibre art, automata

Scale of production: eg individual one-off, batch, large-scale production

4  **Be able to evaluate own work**

Analysis: eg process used, choices, design process, functionality, project management skills, design brief, consumer/audience feedback, work plan, budget, construction, finishing, safety, innovation, use of materials, appearance, use of technology
## Learning outcomes and assessment criteria

<table>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Understand use of specialist 3D technology and processes in chosen pathway</td>
<td>1.1 Research and evaluate the specialist 3D technology and processes of own chosen pathway</td>
</tr>
</tbody>
</table>
| **LO2** Be able to apply understanding of specialist processes to produce design work | 2.1 Produce creative and effective design work showing competent understanding of specialist processes  
2.2 Present design work showing competent understanding of consumer and manufacturing requirements |
| **LO3** Be able to produce outcomes using specialist 3D technology and processes | 3.1 Use specialist 3D technology and processes to achieve functional aims and creative intentions  
3.2 Adhere to health and safety guidelines for specialist technology |
| **LO4** Be able to evaluate own work | 4.1 Evaluate project management skills  
4.2 Evaluate use of specialist 3D technology and processes  
4.3 Evaluate the development of own work through feedback, analysis and review. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 46: 3D Design, Media, Techniques and Technology
- Level 4:
  - Unit 11: Design Principles
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 92: Specialist 3D Materials.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

This unit requires learners to have access to a broad range of specialist 2D and 3D facilities and equipment and good storage options for design work and 3D work at different stages of design and production. This should include access to design tools, technology, current software, photographic studio and processing facilities, sculpture and metal working and 3D finishing areas. Learners will need access to specialist machinery to produce prototypes and where this is not available at the centre links with local business should be made in order to give learners a broad range of contemporary skills in this unit.

Employer engagement and vocational contexts

Links with local business or industry will help strengthen the vocational nature of this unit and there is flexibility to respond to local employment needs through specialist pathways. Live assignments and client briefs as well as guest lecturers, off-site visits and access to emerging technology will greatly enhance the delivery of this unit. Learners should be encouraged to independently research the vocational context for their chosen pathway and show understanding of where their career path may take them.
Unit 94: Visual and Personal Presentation

Unit code: H/601/6589
Level: 4
Credit value: 15

• Aim
This unit will enable learners to develop understanding in communicating design intentions, to apply and refine visual presentation skills and to develop their own distinctive approach to presenting designs.

• Unit abstract
This unit will help learners to develop their communication skills when creating and presenting visual work. Presentation skills are needed at all stages of developing and completing art and design work and can be a useful skill for future employability or commercial success. Learners should identify where these skills can be used and how presentations can be most effective in art and design.

Visual presentations showing creativity and personal style can be applied throughout the stages of design development, eg mood boards, initial ideas, thumbnails, story boards, concept sheets, design sheets, sketchbook work, visuals, working drawings; and formative, eg assessment, portfolio building and selection, presentation, client pitch, exhibition, display, artists’ talk.

Personal style should be apparent in visual work through drawing style, branding, logo, image. Personal presentation skills should also be developed through practising giving presentations, giving and receiving feedback, building confidence and considering how to be perceived as a professional, eg manner, dress, ease, knowledge.

Learners should also understand how to measure their own performance and how to improve or adjust as needed for different situations. These core skills are central to the professional development of learners as they make the transition from student into their career path.

• Learning outcomes

On successful completion of this unit a learner will:
1 Understand visual and personal presentation formats in art and design
2 Be able to plan a presentation to meet specific requirements
3 Be able to use materials, media and techniques to present design work
4 Be able to evaluate own visual and personal presentation.
Unit content

1 Understand visual and personal presentation formats in art and design

Presentation format: direct eg folio with mounted work, professional designs, printed/colour copied visuals, design sheets, concept boards, mood-boards, examples, show case, talk, slide show, Powerpoint, presentation, pitch (‘Dragons Den’), critique, group presentation, exhibition, point of sale; indirect campaign eg mailshot, leaflet, advert, CD ROM, web format, audio, moving image, poster, postcard

Personal skills: eg appearance, vocabulary, voice, manner confidence, dress, personal style

2 Be able to plan a presentation to meet specific requirements

Audience: eg colleagues, client, employer, prospective employer, buyer, viewer, participant, customer, lecturer, peer group; audience needs eg access, able/disabled, understanding, specialist knowledge

Presentation environment: eg inside, outside, space available, premises, office, site, internet, multi-site locations

Resource planning: eg data projector, laptop, computer, screen, microphone, whiteboard, blackout, power source, projection equipment, effective lighting, plinths, display material, background, samples/examples, handouts

Content: eg format, information, pitch, flow, intonation, visuals, timing, script, flow sheet

3 Be able to use materials, media and techniques to present design work

2D techniques: eg drawing, painting, printing, photocopying, collage, photography, computer generated, printed

3D techniques: eg models, samples, prototypes, finished items, goods for sale, products

Intentions: eg visual impact, clarity, presentation, quality

Personal presentation: clarity of speech; speed of speech; vocabulary used; body language; appearance; understanding

4 Be able to evaluate own visual and personal presentation

Measure effectiveness: eg audience feedback, questionnaire, consumer panel, direct discussion, results, comments, sales, new customers; personal aims for the presentation
## Learning outcomes and assessment criteria

<table>
<thead>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1  Understand visual and personal presentation formats in art and design        | 1.1 Research and evaluate presentation formats used in art and design  
1.2 Analyse personal skills required for effective presentations                   |
| LO2  Be able to plan a presentation to meet specific requirements                 | 2.1 Produce effectively planned presentations  
2.2 Use materials, media and technology to produce creative visuals for presentation  
2.3 Practice presentation skills                                                                                                           |
| LO3  Be able to use materials, media and techniques to present design work        | 3.1 Present visual work which uses materials, media and techniques creatively and effectively  
3.2 Use personal presentation skills to communicate ideas                                                                               |
| LO4  Be able to evaluate own visual and personal presentation                      | 4.1 Collect and analyse audience feedback  
4.2 Measure effectiveness of a presentation  
4.3 Identify areas for future improvement.                                            |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 9: Professional Practice in Art and Design
  - Unit 10: Personal and Professional Development in Art and Design
- Level 4:
  - Unit 103: Properties of 3D Materials
- Level 5:
  - Unit 12: Personal and Professional Development
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

This unit can be delivered in seminar rooms, lecture theatres and design studios. Learners may need access to computers to construct presentation but their needs will depend on the nature of the presentation. Learners may require access to 2D and 3D materials and resources to illustrate their presentations. This unit may be delivered as a live brief to participate in an exhibition and this may describe the resources needed.

Employer engagement and vocational contexts

Links with local business who can give learners feedback on their presentations or pitches would help give currency and validity to this professional development unit. Guidance on CV preparation, presentation skills and managing situations with clients and customers can be given through Business Link, Chambers of Commerce and local recruitment agencies. This unit would work well with an external focus as learners make the transition from education in the workplace.
Unit 95: Marketing for 3D Design

Unit code: F/601/6602
Level: 4
Credit value: 15

● Aim
This unit aims to develop learners’ skills and understanding of marketing both to commercial organisations and individual designers involved with marketing products and services in a 3D design commercial environment.

● Unit abstract
This unit explores methods of marketing and promoting 3D design products and services and learners will explore how designer-makers and designers build an identity for their work in a commercial context.

Learners should use research and analysis to review promotional materials and marketing strategies. They should research marketing theory and identify suitable approaches to use for their own work. This unit would be well suited to shadow a product or service created by the learner in another unit so that they have something tangible to market. Learners should use this unit to explore who their target customers are and where their product will be placed in the market. These are key elements which can improve the success of launching a product to market.

Learners should produce marketing materials as part of a coherent strategy which demonstrates their understanding of key principles of marketing and how they might apply this to their own creative skills or products. This unit could also be delivered as a live or simulated live assignment to devise marketing materials for an existing product or for a local creative business. In real terms success of the marketing would be measured by sales, financial return and a greater customer base. Learners must identify how they will measure the success of their marketing and how to improve, eg through market research questionnaires, interview panels or customer reviews.

● Learning outcomes
On successful completion of this unit a learner will:

1. Understand the purpose and intentions of marketing in a 3D design commercial environment
2. Understand the relationship between marketing and design
3. Be able to produce marketing materials for own work
4. Understand the effectiveness of marketing own work.
Unit content

1 **Understand the purpose and intentions of marketing in a 3D design commercial environment**

   Market needs: demand; sector; price; quality; delivery; means
   Market factors: eg age, interest, need, ethnicity, gender, politics, social, religious, value for money
   Market research: methods eg limited trials, conferences, exhibitions, interest groups, trade journals, direct consumer response, indirect consumer response, marketing consultants
   Market access: direct selling; mail order; retail; internet
   Publicity: channels eg advertising, magazines, newspapers, television, radio
   Intentions: eg brand building, corporate identity, promotion, sales, information, break new markets, build client base

2 **Understand the relationship between marketing and design**

   Market-driven design factors: fashion eg appearance, form, distinctive features, colour, surface, graphics, packaging; function eg definition of need, size, weight, complexity, build quality, reliability; competition; cost

3 **Be able to produce marketing materials for own work**

   Values: eg product quality, value, public relations, after-sales service, sales techniques, response time, distribution, product/company image, graphics, house style, packaging, publicity, merchandising
   Marketing materials: eg brochure, print advert, leaflet, postcard, radio advert, web campaign, banner, give away, logo, identity, sample, packaging, exhibition stand design, point of sale display, use of social media sites, word of mouth, viral campaign, strategy, direct mail, insert, catalogue

4 **Understand the effectiveness of marketing own work**

   Visual: eg composition, clarity, presentation, coherence, theme
   Personal approaches: eg attitude, manner, speech clarity, confidence, dress
   Measuring tools: eg interview, customer research panel, questionnaire, increased sales, feedback, review, understanding target audience, meeting customer needs
## Learning outcomes and assessment criteria

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<tr>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand the purpose and intentions of marketing in a 3D design commercial environment | 1.1 Research and evaluate techniques adopted by commercial organisations to improve their effect on the market  
1.2 Evaluate the value of marketing to the commercial organisation and to the individual  
1.3 Analyse and evaluate the marketing information gathered |
| LO2 Understand the relationship between marketing and design | 2.1 Use market research to understand user needs  
2.2 Identify design features which generate positive market responses  
2.3 Modify design strategy in response to marketing information |
| LO3 Be able to produce marketing materials for own work | 3.1 Devise and implement a strategy for gathering marketing information  
3.2 Produce a marketing strategy  
3.3 Design and create marketing materials for own work |
| LO4 Understand the effectiveness of marketing own work | 4.1 Evaluate how effectively marketing worked in terms of own work. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

Level 3:
- Unit 9: Professional Practice in Art and Design
- Unit 42: Design for Advertising

Level 5:
- Unit 7: Professional Studies in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

This unit can be delivered largely in classroom, design studio or clean teaching space. A lecture theatre or seminar room should be used for specialist guest speakers to set the unit in a professional level context. Access to computer suites with design packages will enable learners to develop sophisticated marketing materials. Learners should be encouraged to use their independent learning time to research marketing materials and to conduct market research and gather consumer information and feedback. Learners must contextualise their research to their own field of specialism whether it be 3D products or design services.

Employer engagement and vocational contexts

The skills gained in this unit can be used in marketing departments of large local business, in-house teams at the centre and also local and national artists and designers should be approached to find out their methods to promote their work. Work experience is a valuable tool as are live projects with externally set client briefs.

The Chartered Institute of Marketing is the national association concerned with monitoring professional standards in marketing and their website has a useful resources section including careers advice and industry information (www.cim.co.uk).
Unit 96: Ceramic Design

Unit code: F/601/6549
Level: 4
Credit value: 15

- **Aim**

This unit aims to develop learners’ practical making skills in ceramics and to generate design work which shows understanding of historical and contemporary ceramics.

- **Unit abstract**

In this unit learners will be encouraged to develop their understanding of the functional and aesthetic properties of ceramic materials and artefacts and of the making, decorating and firing processes used. Learners will be expected to understand the role and responsibilities of the designer/maker in a commercial context, including one-off and batch production, and to develop the ability to communicate 3D ideas through 2D drawing techniques and 3D making and modelling skills.

Evidence of the development of projects should include the full range of processes carried out from inception to realisation. Sampling and materials investigation should be shown with correct technical information regarding techniques, clays, firing temperatures, and glazes or finishes used. Learners should develop competence in studio practice and observe health and safety legislation in relation to their own and others’ welfare.

It is important that learners gain a thorough understanding of historical and contemporary professional practice through visiting galleries, shops, trade fairs, exhibitions and high-profile retail fairs. Guest speakers, practical workshops and visits to professional studios, workshops and appropriate industrial sites will contextualise practical studies.

- **Learning outcomes**

**On successful completion of this unit a learner will:**

1. Understand the visual and tactile properties of ceramic materials
2. Be able to develop designs for ceramic products
3. Be able to make ceramic products
4. Be able to employ professional practice.
Unit content

1 **Understand the visual and tactile properties of ceramic materials**

Ceramic materials: clay e.g. earthenware, stoneware, crank, porcelain, casting slip; raw materials e.g. powdered clays, grog, oxides, stains, glaze ingredients

Properties: physical e.g. liquid, malleable, leather-hard, dry, bisq; aesthetic e.g. texture, colour, surface, form, function, scale, meaning, visual appearance

Functional characteristics: e.g. touch, texture, colour, shrinkage, strength, weakness, application, suitability, plasticity, porosity, viscosity

Ceramic work: historical; contemporary; cultures; regions; purposes

2 **Be able to develop designs for ceramic products**

Research: e.g. historical, contemporary, cultural; market research

Development: e.g. initial responses, drawings, images, texture, samples, research, maquettes, models, experimental constructions, prototypes, testing, review

Presentation: e.g. communication, drawings, mood boards, photographs, audio-visual presentations, folio, display, exhibition, publications

3 **Be able to make ceramic products**

Making processes: by hand e.g. modelling, hand-building, throwing, mould-making, press moulding, slip casting, turning, decorating, fettling, finishing, machine making (jigger, jolley, casting, pressing, CAD, rapid prototyping)

Surface decoration: e.g. modelled, carved, incised, relief, sprigging, combing, slips, scraffito under-glaze, oxide, on-glaze, glaze, mark-making, inlay, burnished, resists, slips, stencils, digital transfers, screen prints, water-based transfers, enamels, lustre

Finishing: glaze application e.g. brush, sponge, dip, spray, stencil, on-glaze, under-glaze, transfers; glazes e.g. earthenware, stoneware, porcelain, raku, salt, soda; firing e.g. packing a kiln, temperature cycles, health and safety, types (reduction, oxidisation)

4 **Be able to employ professional practice**

Professional practice: e.g. time management, budget control, making/manufacturing process, customer relations, contracts, communication, deadlines, exhibiting, selling, tax, VAT, studio share

Presentation, marketing and promotion: e.g. display, publicity material, context, direct selling, retail, wholesale, trade fair, exhibition

Legislation: e.g. public liability, product liability, copyright, health and safety, COSHH, country of origin documentation, metal release testing

Ethical and environmental considerations: e.g. ecological, economic, durability, public welfare, consumer interests, sustainability
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Understand the visual and tactile properties of ceramic materials</td>
<td>1.1 Analyse types of ceramic materials and their uses</td>
</tr>
<tr>
<td></td>
<td>1.2 Evaluate use of visual and tactile properties in historical and contemporary work</td>
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<tr>
<td><strong>LO2</strong> Be able to develop designs for ceramic products</td>
<td>2.1 Apply findings of research to design developments</td>
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<td>2.2 Produce informed working drawings, maquettes and prototypes</td>
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<tr>
<td><strong>LO3</strong> Be able to make ceramic products</td>
<td>3.1 Employ making processes to effectively realise designs</td>
</tr>
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<td></td>
<td>3.2 Apply surface decoration and finishing processes appropriate to intentions</td>
</tr>
<tr>
<td><strong>LO4</strong> Be able to employ professional practice</td>
<td>4.1 Comply with legal requirements for making and selling work</td>
</tr>
<tr>
<td></td>
<td>4.2 Evaluate own work in the context of ceramic professional practice.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 10: Design Method
  - Unit 11: Design Principles
  - Unit 103: Properties of 3D Materials
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

It is essential that adequate resources are available for handling ceramic materials. These should include: specialist workshop(s); storage for work in progress and raw materials; machinery and equipment for clay, slip and glaze preparation; equipment for shaping, forming and constructing ceramic objects; a separate area for plasterwork; a kiln room; computer assisted design programmes (3D modelling programmes if possible); and reference collections.

This unit will require a well-equipped studio/workshop to facilitate the learner's independent exploration of media, materials and practical techniques. Learners will need to have access to specialist library resources in order to research historical and contemporary art theory and practice, as well as other disciplines which may inform learners' individual ideas.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 97: Jewellery, Accessories and Body Adornment

Unit code: M/601/6644
Level: 5
Credit value: 15

Aim

The aim of this unit is to enable learners to explore the decorative and aesthetic potential of jewellery, accessories and body adornment to inform innovative outcomes.

Unit abstract

In this unit learners will gain knowledge and understanding of the creative potential of materials and construction methods and will be encouraged to explore widely and select appropriate manufacturing processes and finishing techniques. They will develop high-level competence in controlling the creative process from inception to realisation.

Learners should use a wide range of appropriate research methods in preparing and developing a project, including practical exploration of materials, techniques and technology, consultation and marketing techniques. They should develop competence in studio practice and observe health and safety legislation in relation to their own and others’ welfare.

Learners should be encouraged to keep extensive records of all work undertaken, including practical work, research, work experience and external visits. The records can be in written form, with illustrations, or in media such as tape recordings, video, digital imaging. In all forms of communication and debate, learners should use appropriate vocabulary and correct terminology.

They will be expected to develop an understanding of the role and responsibilities of the designer/maker in a commercial context, including one-off and batch production, and to develop the ability to communicate 3D ideas. It is expected that learners will attain appropriate professional skills and attitudes to work within a commercial context. Where work experience is difficult to arrange, simulated experiences should be as realistic as possible. It is important that learners gain a thorough understanding of historical and contemporary professional practice through visiting galleries, shops, trade fairs, exhibitions, and high profile retail fairs. Guest speakers, practical workshops and visits to professional studios, workshops and appropriate industrial sites will contextualise practical studies.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the visual, tactile and decorative characteristics of jewellery materials
2. Be able to create a portfolio of development work
3. Be able to respond to design requirements
4. Understand professional practice in jewellery making.
Unit content

1 **Understand the visual, tactile and decorative characteristics of jewellery materials**

Aesthetic and decorative characteristics: as objects in relation to the body; appearance; visual elements; materials; details; finishes; treatments; cultural significance

Creative potential: choice of materials eg precious, non-precious, minerals, organic, man-made; processes which determine appearance eg traditional, non-traditional; inherent properties of materials

2 **Be able to create a portfolio of development work**

Research: contextual eg historical, contemporary, cultural; market research; ergonomics; other issues eg ethical, environmental

Design development: initial responses; 2D development eg sketches, collage, mixed media, digital images, working drawings; 3D development eg maquettes, models, samples

Experimental processes: making eg constructions, prototypes; testing eg materials, structures; finishing

3 **Be able to respond to design requirements**

Structural considerations: eg strengths, weaknesses, limitations, malleability, durability, protective, decorative, tactile

Design considerations: form; function; ergonomics; construction methods

Making processes: hand; machine; finishing; handling materials eg precious, non-precious, minerals, organic, man-made

Presentation: communication eg drawings, photographs, audio-visual presentations, folio, display, exhibition, publications; 3D work eg samples, prototypes, models

4 **Understand professional practice in jewellery making**

Business skills: time management; budget control; manufacturing process; client/customer relations; contracts; communication eg team, clients

Presentation, marketing and promotion: alternative methods; market information/analysis; clients’ needs; consumer needs

Legislation: eg public liability, indemnity insurance, British/EU standards, contractual obligations, copyright; COSHH; health and safety

Ethical and environmental considerations: eg ecological, economic, elimination of waste, durability, public welfare, consumer interests
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
</table>
| **LO1** Understand the visual, tactile and decorative characteristics of jewellery materials | 1.1 Explore the aesthetic and decorative characteristics of materials  
1.2 Investigate the creative potential of selected materials  
1.3 Explain and justify creative intentions |
| **LO2** Be able to create a portfolio of development work | 2.1 Investigate relevant sources to develop imaginative and creative outcomes  
2.2 Exploit the properties and characteristics of materials and techniques for innovative design development  
2.3 Experiment with making and finishing processes |
| **LO3** Be able to respond to design requirements | 3.1 Produce working drawings, visuals, scale models and prototypes  
3.2 Explore possible design solutions and communicate ideas through drawing, sampling, model making  
3.3 Prepare effective presentations of proposed design solutions, justifying creative intentions |
| **LO4** Understand professional practice in jewellery making | 4.1 Operate effectively within a professional jewellery context  
4.2 Present, promote and market jewellery products  
4.3 Work safely and with due regard to relevant legislation |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 10: Design Method
  - Unit 11: Design Principles
  - Unit 103: Properties of 3D Materials
- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements

It is essential that adequate resources are available for handling a variety of materials. These should include: specialist jewellery workshop(s); secure storage for precious materials and hazardous chemicals; a separate area for general workshop activities to accommodate mixed media activities; computer-assisted design programmes; and reference collections. Workshops and equipment must comply with relevant COSHH and health and safety guidelines. Technician support should be available to support workshop practice.
Employer engagement and vocational contexts

Centres should develop links with practising jewellers and other craft practitioners, artists and designers to deliver assignments to learners or to provide work experience and workshops/master classes.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, regional business links – www.businesslink.gov.uk
Unit 98: Light Metals in Art and Design

Unit code: R/601/6622
Level: 5
Credit value: 15

● Aim
This unit aims to develop learners’ practical skills and understanding when working with light metals and in translating designs into 3D outcomes.

● Unit abstract
In this unit learners will develop their knowledge and understanding of the functional and aesthetic properties of light metals, through investigations, experimentation, design and construction. Learners will develop an understanding of making, decorating and finishing processes, and achieve a high level of competence with materials through design realisation. This can be applied to a variety of outcomes, eg jewellery, furniture, lighting, interior architecture, sculpture, fine art and design-led products.

Learners should use research to prepare and develop a project, including practical exploration of materials, techniques, technology, consultation and marketing techniques. This should all be documented to show how ideas have evolved. Learners should develop competence in studio practice and observe health and safety legislation in relation to their own and others’ welfare. Learners should explore various light metals and be able to work confidently with materials, tools and processes to produce samples and finished outcomes.

Learners will be expected to develop their understanding of the role and responsibilities of the designer-maker in a commercial context, including one-off and batch production and to develop the ability to communicate three-dimensional ideas. Visits to professional studios, workshops, and appropriate industrial sites, trade fairs, selling fairs, exhibitions, galleries and shops will enable learners to understand the commercial context for their own work as a designer-maker or designer.

● Learning outcomes
On successful completion of this unit a learner will:
1. Understand the characteristics of light metals
2. Be able to develop designs and communicate ideas
3. Be able to use construction and finishing techniques to produce 3D outcomes
4. Be able to employ professional practice when working with light metals.
Unit content

1 **Understand the characteristics of light metals**

Visual characteristics: appearance eg decoration, texture, colour, patina, colour, volume, shape, form, size, scale, structure, surface, finishes

Tactile characteristics: eg texture, density, weight, rough, smooth, textured, scale

Functional characteristics: eg strengths, weaknesses, limitations, malleability, ductility, surface treatment, durability, joining methods, functionality, application

2 **Be able to develop designs and communicate ideas**

Research: client brief eg constraints, customers, materials, costings, budget, time scale, marketing; context eg historical, contemporary, cultural, market research

Ideas generation: eg initial responses, developmental, experimental work, working drawings, samples, models (wire-frame, digital, simulation, mock-up)

Making: developmental work eg experimental constructions, samples, scanning, prototypes, rapid prototyping, testing materials, structures, finishes; finished outcome

3 **Be able to use construction and finishing techniques to produce 3D outcomes**

Hand and machine-making processes: eg forming, pressing, raising, forging, spinning, lathe work, folding, bending, shaping, annealing, brazing, welding, casting, milling, soldering, cutting, piercing, drilling, grinding, polishing, decorating, finishing

Surface decoration: eg etched, wire brushed, engraved, painted, enamelled, polished, chased, repoussé, patinated

Health and safety: safe working in workshop; machinery induction; test outcomes for safety

4 **Be able to employ professional practice when working with light metals**

Professional practice: project management eg time management, budget control, control of making/manufacturing process, client/customer relations, contracts, communication

Presentation, marketing and promotion: eg market information, analysis, clients’ needs, consumer needs, communication of ideas, different techniques, folio, display, exhibition, publications, presentation

Legislation: public liability; professional indemnity insurance; product liability; British/EU standards; copyright; health and safety; tax

Ethical and environmental considerations: eg ecological, economic, waste control, durability, relationship to environment (visual and ecological), public welfare, consumer interests, sustainability
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand the characteristics of light metals | 1.1 Analyse the characteristics of light metals  
1.2 Evaluate selected materials for intended purposes |
| LO2 Be able to develop designs and communicate ideas | 2.1 Carry out research to inform design development  
2.2 Explore possible design solutions through drawing, sampling and model making  
2.3 Produce working drawings, visuals, scale models and prototypes  
2.4 Prepare effective presentations of proposed design solutions |
| LO3 Be able to use construction and finishing techniques to produce 3D outcomes | 3.1 Use tools and light metals to produce creative and effective outcomes  
3.2 Apply surface finishes to light metals  
3.3 Work safely with light metals, tools and machinery |
| LO4 Be able to employ professional practice when working with light metals | 4.1 Use project management skills effectively  
4.2 Present, promote and market products  
4.3 Work safely and with due regard to relevant legislation, ethical and environmental considerations. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 48: Small-scale Working
  - Unit 50: Human-scale Design
  - Unit 67: Exploring Resistant Materials
- **Level 4:**
  - Unit 103: Properties of 3D Materials
- **Level 5:**
  - Unit 93: Specialist 3D Technology and Processes

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements

It is essential that adequate facilities are available for handling light metals. These must include: specialist workshop(s); storage for work in progress and raw materials; machinery and equipment for handling and finishing light metals; equipment for cutting, shaping, joining, forming and constructing (including a gas and air supply); a separate area for applying treatment and finishing, eg kiln for enamelling and facilities for acid and chemical treatments, polishers, grinder.

Employer engagement and vocational contexts

Links with local employers and creative or manufacturing business should be created to meet local demand for employee skills and to develop contacts with guest speakers or access to specialist facilities not available at the centre, eg forging, welding, engineering technology.

Live or simulated live assignments will help strengthen the vocational relevance of this unit and this can be through visiting speakers, guest workshops, collaborative working to host exhibitions or share resources.
Unit 99: Wood in Art and Design

Unit code: J/601/6651
Level: 5
Credit value: 15

Aim
In this unit learners will develop their understanding by generating and refining design ideas and develop their practical making skills in producing outcomes using wood and wood-based materials.

Unit abstract
This unit explores the functional and aesthetic properties of wood and wood-based materials. Learners should use research to prepare and develop project ideas, including practical exploration of materials, techniques and technology, consultation and marketing techniques. There should be investigation into current trends in contemporary craft and an understanding of historical contexts of working with wood. Competence in studio practice will be developed through demonstration of techniques and access to specialist workshops.

Learners will develop their understanding of forming, shaping, construction and finishing methods used in making wood and wood-based artefacts in a professional context.

Through research, idea generation, development, sampling and construction, learners should develop high-level competence in controlling the creative process from inception to design realisation.

Learners should explore the commercial context and professional practice of designer-makers working with wood. There should be an understanding of how outcomes will be marketed and any legislation applicable to safe working and product liability. Understanding of professional practice will be enhanced through engagement with visiting speakers, regular visits to galleries, exhibitions, retail and trade fairs.

Learning outcomes
On successful completion of this unit a learner will:
1. Understand the visual and tactile characteristics of wood
2. Be able to develop designs and communicate ideas
3. Be able to make products using wood and wood-based materials
4. Be able to employ professional practice when working with wood.
Unit content

1 Understand the visual and tactile characteristics of wood

Aesthetic characteristics: texture; colour; grain; surface; size; structure; finish; form; appearance

Functional characteristics: eg strength, limitations, durability, structural possibilities, ergonomic considerations, working methods, functionality, availability, sustainability

Properties and characteristics: eg structural strength, tensile strength, compression, flexibility, durability, hard and soft woods, composite materials, maintenance, protective finishes

2 Be able to develop designs and communicate ideas

Design briefs: eg aims, needs, client requirements, consumer interests, solutions, consultation, teamwork, constraints, time-scale

Research: eg historical context, contemporary crafts, cultural, techniques, materials, working methods; context eg market factors, client, end user, purpose

2D and 3D ideas generation: eg development, working drawings, experimentation, techniques, maquettes, models, samples, mock-ups, prototypes, testing, analysis

Presentation and communication of ideas: eg drawing, thumbnails, roughs, orthographic projection, CAD images, CAD files, concept sheets, renders, models, displays, audio-visual presentations, multimedia, seminar

3 Be able to make products using wood and wood-based materials

Hand and machine-making processes: eg cutting, piercing, shaping, forming, constructing, finishing, laminating, laser-cutting, drilling, joining, profiling, planing, sanding, staining, varnishing

Production methods: eg one-off, small-batch, volume manufacture

4 Be able to employ professional practice when working with wood

Professional practice: eg time management, budget control, making/manufacturing process, customer relations, contracts, communication, deadlines, exhibiting, selling, tax, VAT, studio share

Presentation, marketing and promotion: eg display, publicity material, context, direct selling, retail, wholesale, trade fair, exhibition

Legislation: public liability; product liability; copyright; health and safety; COSHH; industry regulations eg country of origin documentation

Ethical and environmental considerations: eg ecological, economic, durability, public welfare, consumer interests, sustainability
# Learning outcomes and assessment criteria

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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1 Understand the visual and tactile characteristics of wood</td>
<td>1.1 Research and evaluate the aesthetic and functional characteristics of wood in the creative design process</td>
</tr>
</tbody>
</table>
| LO2 Be able to develop designs and communicate ideas | 2.1 Develop creative designs that respond to a brief  
2.2 Produce working drawings, maquettes and prototypes that communicate ideas |
| LO3 Be able to make products using wood and wood based materials | 3.1 Use hand and machine-making methods to make outcomes in wood and wood-based products |
| LO4 Be able to employ professional practice when working with wood | 4.1 Comply with current legal requirements for making and selling work  
4.2 Carry out own work in the context of current professional practice. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 66: Developing and Realising Design Craft Ideas
  - Unit 46: 3D Design, Media, Techniques and Technology
- Level 4:
  - Unit 103: Properties of 3D Materials
- Level 5:
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

It is essential that adequate resources are available for handling wood and wood-based products, including well-maintained tools, equipment and staple materials. These should include: specialist workshop(s); storage for work in progress; machinery for preparation and working with materials; drawing studio facilities, computer suites with access to CAD packages for creating designs, renders and export files for laser cutting technology; and reference collections eg specialist trade magazines, photography, computer technology, production facilities, reprographic processes, business studies, reference books.
Employer engagement and vocational contexts

Working to client briefs on live or simulated live assignments will deepen the vocational learning of this unit. Where possible, learners should be encouraged to undertake work experience. Engagement with the commercial side should be through visits to workshops, factories, studios, galleries, museums and trade fairs as well as input from guest speakers. Source of information on contemporary makers and current practice are:

- The Crafts Council and Design Nation websites (www.craftscouncil.org.uk, www.designnation.co.uk)
- The Society of Designer Craftsmen (www.societyofdesignercraftsmen.org.uk) has a list of members and a gallery on the website.
Unit 100: Glass in Art and Design

Unit code: K/601/6657
Level: 5
Credit value: 15

• Aim

This unit aims to develop learners’ skills and understanding of the manufacturing processes and applications of glass and the functional, decorative and aesthetic potential of glass in art and design.

• Unit abstract

In this unit learners will extend knowledge and understanding of the creative potential and technical qualities and properties of glass and associated materials. They will be encouraged to explore the broader range of applications from industrial to purely decorative including furniture, glassware, stained glass (traditional and contemporary), lighting, glass fibre, sculptural glass and glass jewellery and to select appropriate manufacturing processes and finishing techniques for their own work. They will develop high-level competence in controlling the creative process from inception to realisation.

Learners should use a wide range of research methods in preparing and developing a project, including practical exploration of materials, techniques and technology, consultation and marketing techniques. They should develop competence in studio practice and observe health and safety legislation in relation to their own and others’ welfare implementing relevant COSHH guidance and use of appropriate personal protective equipment.

Learners should be encouraged to make extensive records of all work undertaken, including practical work, research, work experience and outside visits. The records can be in written form, with illustrations, or in media such as tape recordings, video, digital imaging and so on. In all forms of communication and debate, learners should use appropriate vocabulary and correct terminology and they will need to develop the ability to communicate 3D ideas.

A distinguishing feature of design crafts is that the complete process is generally controlled by the designer/maker. To this end, learners will be expected to develop an understanding of their role and responsibilities in a commercial context, including one-off and batch production. It is expected that learners will attain appropriate professional skills and attitudes to work. Where work experience is difficult to arrange, simulated experiences should be as realistic as possible. It is important that learners gain a thorough understanding of historical and contemporary practice through visiting galleries, shops, trade fairs, exhibitions. Guest speakers, practical workshops and visits to professional studios/workshops, appropriate industrial sites and suppliers will contextualise practical studies.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the visual, tactile and functional characteristics of glass and associated materials
2. Be able to produce a portfolio of development work to meet creative intentions
3. Be able to respond to design requirements
4. Understand professional practice in working with glass and associated materials.
Unit content

1 **Understand the visual, tactile and functional characteristics of glass and associated materials**

Aesthetic characteristics: appearance eg clarity, colour, density, sparkle, pattern, texture; shape; form; surface; finish; types of glass eg sheet, cullet, crystal, optical glass, laminated, toughened, extruded; associated materials eg lead calm, copper foil, glass paints, lustres, wire, wax, clay, plaster, mould-making materials (flexible, rigid), card, glues, found objects, recycled materials

Functional characteristics: strengths; weaknesses; ease of working; limitations eg fragility, rigidity, flexibility, weight, ductility, malleability, compatibility, impact; form related to function; construction methods; structural potential; potential for surface treatment; durability; relationship to light eg translucency, opacity, transparency, refraction, reflection

Creative potential: glass making processes eg cutting, crushing, layering, leading, copper foiling, patination, painting, model making, mould making, fusing, slumping, pate de verre, lost wax, casting, kiln firing, coldworking, ‘hot’ glass processes (depending on resources available); relationship to other materials and processes

2 **Be able to produce a portfolio of development work to meet creative intentions**

Research: contextual eg historical, contemporary, cultural; market research; identification of required information; selection; interpretation

Design development: initial responses; 2D development eg sketches, collage, mixed media, digital images, working drawings; 3D development eg samples, test pieces, maquettes, models, moulds, prototypes; reviewing work in progress eg modifying, justifying, refining; recording eg notes, technical data, reports, drawings, samples, photographs

Experimental processes: making eg constructions, prototypes, samples; testing eg materials, structures, finishes; production of final outcomes
3 Be able to respond to design requirements

Properties and characteristics of glass: inherent eg float, cast, blown, laminated, toughened, extruded; raw ingredients eg cullet, sheet, bullseye, crystal, optical, frit; structural eg strength, durability; quality eg clarity, tactile, decorative, relationship to light; firing processes; maintenance issues.

Making processes: hand eg fusing, slumping, casting, shaping, blowing, pouring, floating, leading, copper foiling; machine eg cutting, joining, piercing, grinding, polishing; finishing eg sand-blasting, etching, shattering, decorating, colouring, assembling, constructing, gluing, shaping, joining, applying patination.

Surface decoration: eg etching, engraving, painting, polishing.

Design considerations: form; function; ergonomics; construction methods.

Presentation: communication eg drawings, photographs, audio-visual presentations, folio, display, exhibition, publications; 3D work eg samples, test pieces, prototypes, models, maquettes.

4 Understand professional practice in working with glass and associated materials

Business skills: time management; budget control; manufacturing process; client/customer relations; contracts; communication eg team, clients; planning work eg cutting lists, firing schedules; sourcing materials.

Presentation, marketing and promotion: alternative methods; market information; market analysis; clients’ needs; consumer needs.

Legislation: eg public liability, indemnity insurance, British/EU standards, contractual obligations, copyright; COSHH; health and safety; personal protective equipment (PPE).

Ethical and environmental considerations: sustainability eg ecological, economic, elimination of waste, durability, public welfare, consumer interests.
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
</table>
| **LO1** Understand the visual, tactile and functional characteristics of glass and associated materials | **The learner can:**  
1.1 Explore and record the aesthetic and functional characteristics of materials  
1.2 Evaluate and exploit the creative potential of selected materials |
| **LO2** Be able to produce a portfolio of development work to meet creative intentions | 2.1 Investigate relevant sources to develop imaginative and creative outcomes  
2.2 Explore possible design solutions through drawing, sampling and model making  
2.3 Exploit the properties and characteristics of materials and techniques for innovative design development  
2.4 Experiment with making and finishing processes |
| **LO3** Be able to respond to design requirements | 3.1 Use the properties and characteristics of glass to create effective solutions to design briefs  
3.2 Use hand and machine-making processes to produce innovative responses to design requirements  
3.3 Prepare effective presentations of proposed design solutions justifying creative intentions |
| **LO4** Understand professional practice in working with glass and associated materials | 4.1 Operate effectively within a professional context  
4.2 Present, promote and market products  
4.3 Work safely and with due regard to relevant legislation. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 10: Design Method
  - Unit 11: Design Principles
  - Unit 103: Properties of 3D Materials
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

It is essential that adequate resources are available for handling glass in its various forms. These should include: specialist workshop(s) which comply with appropriate health and safety guidelines; storage of raw materials; machinery and equipment for preparation and finishing in its hot and cold states; equipment for shaping, moulding, forming, blowing, slumping and laminating glass objects; a separate area for mould and model making with clay, plasterwork and woodworking facilities; a kiln room; computer-assisted design programmes (3D modelling programmes if possible); and reference collections.
Employer engagement and vocational contexts

Centres should develop links with practising glass makers and other craft practitioners, artists and designers to deliver assignments to learners or to provide work experience and workshops/master classes at professional studios, workshops and appropriate industrial sites. Links with employers are essential to the delivery of the programme for work experience and employment. Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' to support the vocational content of the unit and programme.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk
- Business and finance advice:
  - Local, regional business links – www.businesslink.gov.uk

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The Chartered Society of Designers (www.csd.org.uk) is a professional body for all designers. It provides portfolio 'gyms' for students and graduates, a work placement register for student members, careers and industry information plus regularly updated news and events pages.
Unit 101: Exhibition and Retail Design

Unit code: J/601/6665
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding necessary to operate successfully within a commercial exhibition and retail design context.

• Unit abstract
In this unit learners will develop the ability to organise and manipulate spatial awareness to produce effective solutions for display in exhibition and retail contexts. They will develop a high level of competence in controlling the creative process from inception to design realisation and communication.

Learners will be expected to develop an understanding of the role and responsibilities of the designer in a commercial context and to acquire the ability to communicate 3D ideas through 2D drawing techniques and 3D making, modelling and prototyping skills. Learners will gain a thorough understanding of contemporary professional practice and work at this level should include as much work experience as possible.

Learners will be encouraged to work systematically and efficiently in planning their own work schedules. They need to engage in integrated research to include analysis of the brief, preparation of initial ideas, market research, investigation and practical exploration into materials, processes and techniques. Learners will need to explore the visual and tactile properties and characteristics of materials. They will also need to investigate contexts and demonstrate the ability to select and interpret research information through design development. This will necessitate practical first-hand experience in manipulating materials to meet requirements of briefs.

It is important that a level of practical competence is shown in studio and workshop practice combined with evidence of an awareness of relevant safe working practice. Learners will need to gain a thorough understanding of design practice, relevant legislation, including health and safety, public liability and copyright law. Learners should keep records of all professional practice (meetings, attendance, punctuality, contracts etc) and provide evidence of the correct use of terminology and vocabulary in written and oral presentation.

It is important that learners achieve a thorough understanding of contemporary professional practice and guest speakers, workshops, visits to design studios and appropriate exhibitions will contextualise practical studies.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand the specific requirements of exhibition and retail design
2. Be able to develop and communicate design ideas in response to identified needs
3. Be able to manipulate materials and processes to meet specified design requirements
4. Understand how to work in a professional context.
Unit content

1 **Understand the specific requirements of exhibition and retail design**

- **Aesthetic characteristics**: eg appearance, visual elements, details, finishes, treatments; materials; techniques; processes; cultural significance
- **Functional characteristics**: eg strengths, weaknesses, limitations, application of materials, form, ergonomics, construction, durability, finishes
- **Creative potential**: choice of materials eg traditional, non-traditional; construction processes
- **Management and logistics**: eg costings, transport, economies of scale, staffing, security, insurance, health and safety, product surround, marketing

2 **Be able to develop and communicate design ideas in response to identified needs**

- **Research**: selection; interpretation; relevant contexts eg historical, contemporary, cultural; market research; other issues eg ergonomic, ethical, environmental
- **Ideas generation**: developmental processes eg using research, initial responses, working drawings, visualisations, fly-throughs, textures, rendering, lighting, models, construction methods, finishes
- **Making**: eg maquettes, models, wire frame, renders, rapid prototyping, experimental constructions, installations, testing materials, structures, sensory influences
- **Presentation**: communication of ideas eg drawings, photographs, presentations, CGI, moving image, animations, online, folio, prototypes

3 **Be able to manipulate materials and processes to meet specified design requirements**

- **Properties and characteristics**: eg structural strength, durability, finishes, sensory; conditions eg atmospheric, spatial
- **Construction**: making processes eg hand, machine, preparation, cutting, forming; finishing processes eg joining; assembling
- **Installations**: eg temporary, moveable, permanent
- **Material investigations**: eg wood, metal, plastics, fabrics, reclaimed, recycled, organic, synthetic
4 Understand how to work in a professional context

Business skills: time management; budget control; control of manufacturing process; client relations; customer relations; contracts; communication eg team, clients

Marketing and promotion: eg market information, analysis, client needs, consumer needs

Legislation: public liability; indemnity insurance; British/EU/international standards; contractual obligations; copyright; health and safety

Ethical and environmental considerations: eg cultural, ecological, economic, elimination of waste, durability, sustainability, maintenance, relationship to environment (visual and ecological), public welfare, consumer interests
# Learning outcomes and assessment criteria

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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
<tr>
<td>LO1 Understand the specific requirements of exhibition and retail design</td>
<td>1.1 Evaluate the visual and tactile qualities of materials appropriate to design intentions</td>
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<td>1.2 Establish the aesthetic and functional criteria which influence outcomes</td>
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<td>1.3 Evaluate the creative potential of selected materials and processes</td>
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<td>1.4 Investigate the management and logistics of exhibition and retail design</td>
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<tr>
<td>LO2 Be able to develop and communicate design ideas in response to identified needs</td>
<td>2.1 Carry out specific research to inform design development</td>
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<td>2.2 Experiment with 2D and 3D techniques and processes to explore possible design solutions</td>
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<td>2.3 Present working drawings, visuals, scale models and prototypes</td>
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<tr>
<td>LO3 Be able to manipulate materials and processes to meet specified design requirements</td>
<td>3.1 Create solutions to design briefs and specific spatial conditions exploiting the properties and characteristics of materials, techniques</td>
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<td>3.2 Experiment with construction and finishing methods to produce innovative structures</td>
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<tr>
<td>LO4 Understand how to work in a professional context</td>
<td>4.1 Analyse the skills required to function as a professional designer</td>
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<td>4.2 Present, promote and market design proposals</td>
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<td>4.3 Comply with current relevant legislation.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 10: Design Method
  - Unit 11: Design Principles
  - Unit 103: Properties of 3D Materials

- **Level 5:**
  - Unit 6: Critical Study in Art and Design
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Textiles and Material Design.

Essential requirements
It is essential that adequate resources are available for handling a variety of materials. These should include specialist workshops eg for sound, lighting, 3D, wood and metal work, and with appropriate machinery and equipment for converting materials, fabrication and assembly of models, samples and prototypes. Where possible, access to equipment for handling other materials such as plastics, plaster and clay would be of benefit. Workshops and equipment must adhere to the relevant health and safety legislation and guidelines.

Work at this level should include as much work experience as possible. Where work experience is difficult to arrange, simulated experiences should be as realistic as possible. Arranging visits to professional studios, workshops and appropriate industrial sites and locations is an important addition to work experience.
Employer engagement and vocational contexts

Centres should develop links with practising architects, designers and suppliers to deliver lectures and assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The Chartered Society of Designers (www.csd.org.uk) is a professional body for all designers. It provides portfolio ‘gyms’ for students and graduates, a work placement register for student members, careers and industry information plus regularly updated news and events pages.
Unit 102: Interior Design

Unit code: H/601/6673
Level: 5
Credit value: 15

- **Aim**

This unit aims to develop learners’ skills and understanding needed to create and modify interior environments for specific purposes and to a professional standard.

- **Unit abstract**

In this unit learners will develop spatial awareness and competence in working with 3D formal elements together with the ability to communicate 3D ideas through a range of visual presentation techniques.

Learners will develop an understanding of the roles and responsibilities of the professional interior designer, including working within teams of other professionals. Learners should be encouraged to develop research methods appropriate to interior design practice and an understanding of design development processes, particularly those involving teamwork. They should keep comprehensive records of all experience of professional practice whether in the form of work experience or visits. Presentation methods should include drawing to communicate ideas, orthographic drawing, CAD where appropriate, model making, photography and video, if available.

Learners should develop competence in working with materials samples and the use of colour. They should also gain a sound knowledge of construction techniques, decoration, furnishing, fixtures and fittings and preparing specifications for sub-contractors. It is important that learners gain a thorough understanding of architectural practice, relevant legislation, including health and safety, public liability and copyright law. They should have the opportunity to gain some experience of contract and project management and, where appropriate, constraints such as local authority bye-laws and planning regulations should be included in design briefs. Studio work should be organised to reflect patterns and standards of professional practice. Outside work should include site visits, experience of measuring, surveying and estimating. It is important that learners gain a thorough understanding of contemporary professional practice and guest speakers, workshops, visits to design studios and appropriate industrial sites will contextualise practical studies.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to manipulate interior environments to meet design requirements
2. Be able to respond to the aesthetic and functional requirements of an interior design brief
3. Be able to employ technical processes to respond to an interior design brief
4. Understand how to operate as a professional interior designer.
Unit content

1 **Be able to manipulate interior environments to meet design requirements**

   **Design process:** concept generation; analysis; development; experimentation; selection; modification; completion

   **Research:** information sources eg cultural, contemporary, historical; market research eg consumers, client needs

   **Environmental and ethical considerations:** eg visual effects, public uses, elimination of waste, waste disposal, services, efficiency, implementation costs, maintenance requirements, health and safety, public liability

2 **Be able to respond to the aesthetic and functional requirements of an interior design brief**

   **Response to brief:** analysis; initial research; problem solving

   **Aesthetics:** formal elements eg volume, scale, proportion, colour, surface decoration, spatial relationships

   **Design function:** eg social, civic, recreational, entertainment, commercial, professional; modification of interior environments eg refurbishment

   **Consultation:** eg clients, potential users, wider public; other professionals eg structural engineers; architects’ specifications

3 **Be able to employ technical processes to respond to an interior design brief**

   **Measuring:** site surveys; specifications; details

   **2D processes:** drawings eg sketches, orthographic, perspective, CAD; mixed media; concept boards; sample boards

   **3D processes:** model making eg maquettes, sketch models, presentation scale models; 3D digital imaging

   **Preparation of specifications:** eg materials, fixtures, fittings, furnishing, construction, decorating, maintenance schedule; samples (material/products)

   **Presentation:** drawings eg measured, CAD; models; other formats eg audio-visual, mixed media

4 **Understand how to operate as a professional interior designer**

   **The designer’s role:** business skills; time management; record keeping; planning; communication (team/clients/general public)

   **Legislation:** eg contracts, sub-contracts, copyright, public liability, planning, building regulations, health and safety

   **Budget control:** costing eg estimating, penalties, sub-contracting, time frame; schedules
Learning outcomes and assessment criteria

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<td><strong>Learning outcomes</strong></td>
<td><strong>The learner can:</strong></td>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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<tr>
<td><strong>LO1</strong></td>
<td>1.1 Demonstrate the design process from initial concept to final realisation</td>
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<tr>
<td>Be able to manipulate interior environments to meet design requirements</td>
<td>1.2 Select information sources for research</td>
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<td>1.3 Apply relevant ethical, environmental and health and safety considerations in responding to the brief</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Conduct research based on analysis and interpretation of the brief and use findings to inform design development</td>
</tr>
<tr>
<td>Be able to respond to the aesthetic and functional requirements of an interior design brief</td>
<td>2.2 Develop design solutions in response to the requirements of the brief using 3D formal elements</td>
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<td>2.3 Create designs for interior environments to meet required functions and architects’ specifications</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Prepare accurate scale 2D and 3D work informed by site surveys</td>
</tr>
<tr>
<td>Be able to employ technical processes to respond to an interior design brief</td>
<td>3.2 Prepare specifications for materials, fixtures, fittings, furnishing and contracted services</td>
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<td>3.3 Present proposed solutions to the design brief using selected media and techniques</td>
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<tr>
<td><strong>LO4</strong></td>
<td>4.1 Communicate effectively with interest groups, clients and colleagues</td>
</tr>
<tr>
<td>Understand how to operate as a professional interior designer</td>
<td>4.2 Evaluate own practice and propose improvements</td>
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<td>4.3 Identify relevant legislation</td>
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<td>4.4 Exercise budget control.</td>
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</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 10: Design Method
  - Unit 11: Design Principles
  - Unit 103: Properties of 3D Materials
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

These must include adequate studio facilities with access to technical drawing equipment, CAD, photography and model making. There will need to be adequate reference materials available to support research studies and from which learners are able to develop technical specifications.

It is important that learners gain a thorough understanding of contemporary professional practice, and work at this level should include as much work experience as possible. The aim is to enable learners to be able to attain appropriate professional skills and attitudes to work within a commercial context. Where work experience is difficult to arrange, simulated experiences should be as realistic as possible. Arranging visits to professional studios and appropriate architectural sites is an important addition to work experience.
Employer engagement and vocational contexts

Centres should develop links with practising architects, designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:
- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:
- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 103: Properties of 3D Materials

Unit code: R/601/6765
Level: 4
Credit value: 15

● Aim

This unit aims to develop learners’ skills and understanding common to the broad area of 3D design and the potential design implications of selected materials.

● Unit abstract

In this unit learners will develop knowledge and understanding of the properties, characteristics and creative potential of a broad range of 3D materials. Learners will understand and apply the implications and limitations of selected materials for the design of artefacts and products and identify the strengths and weaknesses in both practical and aesthetic terms.

An active experimental approach will encourage learners to broaden their understanding of the creative and utilitarian potential of the range of materials and finishes available to the designer. They will need to evaluate and reflect on the outcomes and use findings to refine and inform further work. The creation of work with a functional emphasis could include products which use sophisticated materials for highly specific purposes.

Learners will develop research skills to broaden understanding of the design potential of materials, the underlying implications of the nature and source of materials, their availability and cost. Learners will need to research and critically analyse the way others have used materials in 3D work. They should develop competence in studio practice and observe relevant health and safety legislation in relation to their own and others’ welfare.

Learners will need to keep extensive records of all work undertaken, which can be in written form with illustrations or in media such as tape recordings, video, digital imaging. Learners should be able to articulate their own thinking using appropriate language, through discussion and evaluation, demonstrating a broader understanding of materials and their potential in both creative work and in the production of functional and reliable products. The design work can be presented in any suitable format.

It is important that learners gain a thorough understanding of historical and contemporary professional practice through visiting galleries, exhibitions, museums. In addition, guest speakers, practical workshops, visits to professional studios and workshops will contextualise practical studies.
● Learning outcomes

On successful completion of this unit a learner will:

1. Understand and apply the characteristics of 3D materials
2. Be able to practically investigate 3D materials
3. Be able to demonstrate the use of 3D materials in specific contexts
4. Understand how to use 3D materials to meet intentions.
Unit content

1. **Understand and apply the characteristics of 3D materials**

   Research: contextual eg historical, contemporary, cultural; other issues eg ethical, environmental

   Physical qualities: eg electrical, thermal, durability, strength, stability, structural, weight, elasticity, texture

   Visual qualities: appearance eg transparency, opacity, reflective, colours (contrasting, complementary), surfaces, patterns, textures (rough, smooth), aesthetic, decorative

   Creative qualities: unusual combinations (materials, finishes); choice of materials; processes which determine appearance eg finishes, surface treatments, details; visual elements; cultural significance

2. **Be able to practically investigate 3D materials**

   Naturally occurring materials: eg clay, softwood, hardwood, stone, gemstone, ores, natural fibres

   Manmade materials: eg ferrous metals, non-ferrous metals, thermo-plastics, thermo-setting plastics, structural boards

   Experimental processes: making eg models, constructions, prototypes, artefacts; testing eg materials, structures; finishing; sampling

   Health and safety: elimination of risk (self, others); working environment (workshop, studio); relevant COSHH guidance (materials, workshop practice)

3. **Be able to demonstrate the use of 3D materials in specific contexts**

   Functional: eg models, products, structures, spatial arrangements

   Creative: eg representational, symbolic, environmental, commemorative, decorative

   Effectiveness of materials: combining functional needs with creative uses; exploiting physical properties; exploiting visual qualities

   Creative processes: materials eg combinations, colours, styles, traditional, non-traditional; techniques (traditional, non-traditional)

4. **Understand how to use 3D materials to meet intentions**

   Use: specific purposes; appropriateness to function; fitness for purpose; aesthetic qualities; response eg user, viewer, client, market

   Applications of materials: surfaces; structures; in relation to function; qualities (form, visual)

   Critical analysis: assess results; refine solutions; evaluate outcomes against intentions eg strengths, weaknesses, aesthetics, function, form; suitability for making; potential; fitness for purpose

   Record keeping: technical notes eg processes, techniques, details for production; samples
## Learning outcomes and assessment criteria

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</table>
| LO1 Understand and apply the characteristics of 3D materials | 1.1 Research and record specific qualities of materials in own and others’ work  
1.2 Record and evaluate examples of the creative use of material characteristics in 3D work |
| LO2 Be able to practically investigate 3D materials | 2.1 Exploit the properties and characteristics of 3D materials in own work with due regard to health and safety  
2.2 Evaluate the characteristics of 3D materials |
| LO3 Be able to demonstrate the use of 3D materials in specific contexts | 3.1 Produce 3D work which exploits the functional characteristics of a range of materials to meet intentions  
3.2 Produce 3D work which experiments with the creative potential of a range of materials  
3.3 Explore different approaches to the effective use of materials in 3D work |
| LO4 Understand how to use 3D materials to meet intentions | 4.1 Establish criteria for assessing the effectiveness of materials used in design work  
4.2 Evaluate the strengths, weaknesses and opportunities for refinement of the materials used in design work  
4.3 Compile comprehensive records for future reference. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 90: 3D Design Media Techniques and Technology
  - Unit 99: Exploring Resistant Materials
  - Unit 101: Exploring Non-Resistant Materials
- **Level 4:**
  - Unit 10: Design Method
- **Level 5:**
  - Unit 92: Specialist 3D Materials
  - Unit 93: Specialist 3D Technology and Processes.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements

This unit requires access to workshop facilities suitably equipped to permit work in wood, metal and plastics and a multi-purpose sculpture area for clay, foam, plaster, latex work. It is essential that adequate resources are available for handling a variety of materials. Workshops and equipment must adhere to the relevant health and safety legislation and guidelines.

Suggested sources for research include the Crafts Council, libraries, the internet, CD ROMs, databases, specialist publications, galleries, exhibitions, questionnaires and interviews with practitioners.

Employer engagement and vocational contexts

Centres should develop links with practising craft practitioners, artists and designers to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.
Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

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The Chartered Society of Designers (www.csd.org.uk) is a professional body for all designers. It provides portfolio ‘gyms’ for students and graduates, a work placement register for student members, careers and industry information plus regularly updated news and events pages.
Unit 104: Lens-based Recording Techniques in Art and Design

Unit code: J/601/6648
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in a range of lens-based techniques that can be applied to fine art practice.

• Unit abstract
Fine artists use lens-based recording techniques in a variety of ways. They can be used to explore subject matter, to document situations or scenarios, and to highlight aspects of the visible world. They can also be used to document the working practice and developmental cycle of the practitioner, through recording the different stages of their work as it progresses. Artists may sometimes use lens-based imagery as starting points to be carried through into final artwork, or as inspiration for work that develops beyond the lens-based image. Film and documentary are synonymous with much contemporary fine art practice.

In this unit learners should be introduced to lens-based recording techniques, and gain understanding in the available applications of these. Learners should work with a variety of lens-based equipment including both still and moving image. Learners should explore the creative potential of lens-based recording as a viable and effective method of building a visual library and of creating starting points for work, as well as being an end in itself. Applications might include documenting working practices, recording information and researching ideas. Learners should apply skills gained in selecting and using lens-based equipment and techniques to develop outcomes that are driven by their creative intention.

• Learning outcomes
On successful completion of this unit a learner will:
1 Understood the purpose of lens-based recording techniques
2 Be able to use lens-based equipment
3 Be able to apply visual language in lens-based work
4 Be able to produce lens-based work.
Unit content

1 Understand the purpose of lens-based recording techniques

Recording: light; colour; texture; contrast; scale; shape; objects
Aims: convey meaning; moods; express ideas; highlight creative intentions; build visual library; create records eg objects, environments, events, change over time, performance, installation, ephemera, land-art
Purpose: researching eg visual sources, material, subjects, environments; documenting eg work in progress, final outcomes, portfolio, stages, developmental cycle; building library eg visuals imagery, starting points; providing evidence eg for self, assessors, client, agent

2 Be able to use lens-based equipment

Cameras and accessories: 35 mm SLR; digital SLR, compact; automatic; phone camera; digital video; webcam
Equipment: tripods; camera stands; lighting; capture devices; video playback; editing equipment; software; hardware
Materials: film; speeds; photographic paper; tapes; electronic data storage eg USB, DVD, CD ROM; networked image storage; external hard drive

3 Be able to apply visual language in lens-based work

Considerations: composition; aesthetics; proximity; viewpoint; factual; clarity
Use of formal elements: form; line; perspective; textures; movement; volume; scale; colour; shape; contrast; pattern; rhythm; repeat; angle
Light sources: natural eg available; artificial eg controlled, portable, interior; studio set-up
Techniques and effects: exposure eg controlled, multiple, bracketed; lighting eg studio, natural; viewpoint eg anticipated, unexpected; mode eg factual recording, intention, capturing moment

4 Be able to produce lens-based work

Silver-based developing and printing: processing eg black and white film, colour film, prints; laboratory work eg transparencies; paper quality; image quality eg contrast, colour values
Digital image manipulation: cropping; enlarging; reducing; adjusting eg levels, hue, saturation, channels, balance; distorting eg manipulating, fading
Outcomes: prints eg contacts, end prints, enlargements, experimental, documentary
Video: capture; edit; output; compression
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td>The learner can:</td>
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<tr>
<td>LO1  Understand the purpose of lens-based recording techniques</td>
<td>1.1 Evaluate the potential for creating images</td>
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<tr>
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<td>1.2 Clarify purposes for creating images</td>
</tr>
<tr>
<td>LO2  Be able to use lens-based equipment</td>
<td>2.1 Identify materials for lens-based image making</td>
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<td>2.2 Use lens-based equipment for required purposes</td>
</tr>
<tr>
<td>LO3  Be able to apply visual language in lens-based work</td>
<td>3.1 Explore formal elements through the use of photographic techniques</td>
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<td>3.2 Apply creative considerations when selecting photographic techniques</td>
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<tr>
<td>LO4  Be able to produce lens-based work</td>
<td>4.1 Investigate the potential of different image production techniques</td>
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<td>4.2 Produce lens-based outcomes defined by creative intention.</td>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 15: Photography Media, Techniques and Technology
  - Unit 28: Lens-Based Image Making
- Level 4:
  - Unit 110: Photographic Techniques
  - Unit 123: Time-based Artwork
- Level 5:
  - Unit 125: Fine Art Digital Applications.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Photo Imaging.

Essential requirements

The delivery of this unit requires learners to access a range of different lens-based equipment, to explore the potential offered by different technologies. Centres must provide photographic resources for both black and white wet-based processing and printing, and digital image manipulation and output.

Learners should be taught the potential applications of lens-based activities as a recording device to document their own working practice, to prepare work for exhibition and to promote their portfolio, and as a method of recording source material, subject matter and the world around them. Learners should be taught how to use photographic materials and equipment with appropriate reference to operating procedures in order to produce quality outcomes.

Digital video should also be explored, through its potential to document events and people, and as a communication tool through vlogs and presentations.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, photographer, video artist or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.
## Unit 105: Studio Practice in Photography

<table>
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<tr>
<th><strong>Unit code:</strong></th>
<th>T/601/6757</th>
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<tr>
<td><strong>Level:</strong></td>
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### Aim

This unit aims to develop learners’ skills and understanding in using photographic studio resources.

### Unit abstract

The photographic studio allows photographers to record subjects through controlling and exploiting lighting, sets and choices of equipment. In this unit learners will explore the different aspects of working in the studio and will gain the skills needed to working in the field of studio photography.

Learners will work through tasks involving controlling the studio environment, selecting and using equipment that is fit for purpose, and safe working practices. Professional practice forms an underpinning component of this unit, providing learners with information and guidance to support their photographic practice. The exploration of creative approaches to lighting subjects can also be explored within this unit.

### Learning outcomes

**On successful completion of this unit a learner will:**

1. Understand how to employ professional practice in studio photography
2. Be able to use studio space and equipment
3. Be able to light subjects in a studio setting
4. Be able to use sets and backgrounds.
Unit content

1 Understand how to employ professional practice in studio photography

Health and safety regulations: COSHH regulations; health and safety; environmental practices; PAT testing; public liability; insurance

Safety of self and others: working area; electrical equipment; lighting; camera stands; safe working conditions eg minimising risk, minimising trips, control measures, avoiding hazard

Safety procedure: eg risk assessments, safety stops, lifting and handling, fire hazards, evacuation procedures, cabling, PPE

Working practice: communication eg working in team, working to brief; organisational eg time, booking space, props, booking subjects, identifying equipment, shooting list, budgets; creative eg interpreting brief, considering alternative approaches

2 Be able to use studio space and equipment

Control: space; background material; studio stands

Equipment: eg lighting, cameras, accessories, special effects equipment, Chromakey facilities, make-up artists, preview facilities for digital shoots

3 Be able to light subjects in a studio setting

Subjects: person eg portrait, full length, adult, child; object eg model, food, still life, product

Equipment: tungsten eg spots and floods; electronic flash eg studio/portable, floor systems, gantry mounted systems, light pipes, macro lighting, fibre optics

Accessories: barn doors; diffusers; meters; remote sensors

Lighting: eg soft, hard, key lighting, backlighting, detail

Creative: eg shadow, contrast, colour, reflection, symmetry, harmony, balance, composition, tension, area of maximum interest, rule of thirds

4 Be able to use sets and backgrounds

Plan and build: sets eg still life; subjects eg models, products; props eg selecting, placing; backdrops eg paper, fabric, infinity coving

Evaluate: tools and equipment; lighting techniques; effects; technical and aesthetic quality of images; fitness for purpose
### Learning outcomes and assessment criteria

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<tr>
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Analyse health and safety regulations that apply to studio photography</td>
</tr>
<tr>
<td>Understand how to employ professional practice in studio photography</td>
<td>1.2 Employ health and safety regulations in the photographic studio</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Select photographic studio equipment relevant to purpose</td>
</tr>
<tr>
<td>Be able to use studio space and equipment</td>
<td>2.2 Use photographic studio equipment</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Arrange subjects to meet requirements</td>
</tr>
<tr>
<td>Be able to light subjects in a studio setting</td>
<td>3.2 Light subjects to meet requirements</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Create sets that are fit for purpose</td>
</tr>
<tr>
<td>Be able to use sets and backgrounds</td>
<td>4.2 Source and use relevant backdrops and props.</td>
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Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 20: Photographic Studio Techniques
  - Unit 16: Darkroom Practice
- Level 4:
  - Unit 110: Photographic Techniques
- Level 5:
  - Unit 4: Professional Practice in Art and Design.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Photo Imaging.

Essential requirements

A suitable range of lighting equipment, including tungsten floodlights and spotlights, electronic flash, mono and quad type systems, together with associated accessories, is required.

Learners will need access to facilities for backgrounds, propping and set building. Infinity coving may not be available, but learners should be made familiar with its principles. Appropriate cameras, stands and tripods should be available.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 106: Darkroom Practice in Photography

Unit code: D/601/6669
Level: 4
Credit value: 15

Aim

This unit aims to develop skills and understanding associated with the processing and printing of films and images, using both black and white and colour materials.

Unit abstract

The darkroom allows photographers to create and manipulate images through controlling and exploiting the various processes and materials. This unit offers learners the opportunity to gain skills, knowledge and understanding to achieve a professional standard in both the application of techniques and the quality of the final prints. It is expected that learners will gain experience of a range of film stock and print materials. All outcomes should be evidenced using the different processes covered in the unit to produce images. It is not expected that this work should be evidenced through simple exercises, although appropriate evidence of the various controls applied to processing systems should be obtained either in the form of test strips or process control records. Learners should be working towards the quality required for final presentation of work using a range of materials which are appropriate to the form of presentation.

The unit should be delivered through a combination of lectures and/or demonstrations which support practical work. It is best offered as a practical unit as part of a vocationally focused assignment that embraces a number of units.

It is recognised that learners progress to Higher National programmes through different routes and at different levels of practical and technical ability. Work undertaken in this unit is intended to ensure that all learners achieve a minimum benchmark of ability associated with the processing and production of images.

Learning outcomes

On successful completion of this unit a learner will:

1. Understand the safe use of film and darkroom photographic processes and materials
2. Be able to produce prints using a print enlarger
3. Be able to modify images using filters, masks and variable processing times
4. Be able to carry out finishing processes to modify images.
Unit content

1 **Understand the safe use of film and darkroom photographic processes and materials**
   
   **Processes**: developing film; processing film eg wet processing by hand, dry processing by machine
   
   **Materials**: photographic film eg black and white negative, colour negative/transparency; print papers eg black and white papers, colour papers; chemicals eg wet and dry processing
   
   **Health and safety**: COSHH specific to current darkroom legislation; protective clothing

2 **Be able to produce photographic prints using a print enlarger**
   
   **Techniques**: contact sheets; test strips; exposure; scaling; cropping; printing eg black and white, colour, manual/semi automatic

3 **Be able to modify images using filters, masks and variable processing times**
   
   **Image manipulation techniques**: filters eg contrast control, colour casts; image density control eg masking, burning in, solarisation, dodging, double exposure, shading
   
   **Processing**: eg machine processing, hand processing
   
   **Film speed manipulation**: pushing; pulling

4 **Be able to carry out finishing processes to modify images**
   
   **Finishing processes**: for prints eg toning, bleaching, reducing, retouching; presentation processes eg laminating, mounting, framing
## Learning outcomes and assessment criteria

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</table>
| LO1 \n Understand the safe use of film and darkroom photographic processes and materials | 1.1 Analyse and adopt correct processing procedure for hand and machine processing of films and papers  
1.2 Assess and carry out correct process control procedures for different hand and machine processing techniques |
| LO2 \n Be able to produce prints using a print enlarger                            | 2.1 Produce high quality prints from positive and negative film  
2.2 Demonstrate effective use of exposure control systems  |
| LO3 \n Be able to modify images using filters, masks and variable processing times | 3.1 Control printed image characteristics by use of filters, masks and processing  
3.2 Increase or decrease relative film speed through push and pull development  |
| LO4 \n Be able to carry out finishing processes to modify images                  | 4.1 Use appropriate techniques to modify prints  
4.2 Retouch prints using correct materials and processes. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 105: Studio Practice in Photography
- Level 5:
  - Unit 115: Specialist Practice in Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Photo Imaging.

Essential requirements

There is a requirement for learners to be able to access darkroom developing and processing facilities. While limited applications for the hand processing of materials exist (for example black and white fine art images for exhibition), the hand processing experience informs the understanding and knowledge which underpin the processes involved in machine processing. It is expected that learners will gain experience of a range of film stock and print materials.

Learners would not be expected to carry out hand processing of colour materials. Access to machine processing as a hands-on experience may be limited, but there should be opportunities for this to take place.
Employer engagement and vocational contexts

Centres should develop links with practising photographers, artists and galleries to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 107: Visual Language in Photography

Unit code: D/601/6672
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in the use of visual language in a photographic context.

• Unit abstract
This unit explores the combination of applied research into photographic visual imagery, creative experimentation and photographic images. Learners should actively engage in contemporary and historical research and also in interpreting this understanding into their own image construction.

The unit should be supported by visits to specialist photography exhibitions wherever possible and learners should make use of electronic media to extend their visual library over a period of time. The value of learners understanding the visual context and explicit/implicit messages of the work of others and themselves cannot be stressed too strongly throughout the unit. Learners should become increasingly critical of the meaning and content of their own work. As the work undertaken by learners becomes more focused on their particular area of interest, it is important that the understanding of visual communication should continue to have a broad application. Learners should be encouraged to develop a more specific and individual pathway.

• Learning outcomes
On successful completion of this unit a learner will:
1 Understand the role of photography as a visual communication medium
2 Be able to investigate ideas, processes and constraints in photographic imagery
3 Be able to produce work which demonstrates understanding of image and text.
Unit content

1 **Understand the role of photography as a visual communication medium**
   
   **Communications**: social recording eg archives material, subjective, emotive, representative, web, animation, magazines, illustrations, television, advertising, packaging, books
   
   **Visual codes**: eg meanings, symbols, semiotics, juxtaposition of elements, understanding; messages eg overt, covert, symbolic, subliminal

2 **Be able to investigate ideas, processes and constraints in photographic imagery**
   
   **Investigate**: colour theory eg emotion, design rules, codes, monochrome, tonal values
   
   **Visual language**: eg line, shape, tone, perspective, composition, golden section, visual materials, layout, focal point, typographical styles; combinations eg words, images, colour
   
   **Influences**: eg artists, designers, photographers, historical references, cultural interpretation, ideological beliefs, social factors, political manipulation, economic factors, ecological persuasion, galleries, exhibitions, events
   
   **Practice**: bias eg image placement, cropping, selection; editing eg image manipulation, montage, pixel manipulation, overlays, colours, tinting, hand painting, burning in, dodging

3 **Be able to produce work which demonstrates understanding of image and text**
   
   **Image**: relationship eg aesthetic, harmonious, discordant, symbolic, symmetrical, fashionable, traditional, challenging; contexts eg editorial, visual, advertising, social, meaning, information, news, reportage, sales medium
   
   **Textual language**: eg font, size, placing, page layout, transparency opacity, cropped, mismatched, mixed styles
   
   **Industry issues**: eg timing, specific messages, materials, formats, costs, client needs, customer response
   
   **Evaluate**: eg intentions, success, outcomes, meanings, messages, methods, results
# Learning outcomes and assessment criteria

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<thead>
<tr>
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<tbody>
<tr>
<td>On successful completion of this unit a learner will:</td>
<td>The learner can:</td>
</tr>
<tr>
<td>LO1 Understand the role of photography as a visual</td>
<td>1.1 Investigate the role of photography as a visual communication medium</td>
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<tr>
<td>communication medium</td>
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</tr>
<tr>
<td>LO2 Be able to investigate ideas, processes and constraints in photographic imagery</td>
<td>2.1 Investigate the application of visual language in photographic imagery</td>
</tr>
<tr>
<td>LO3 Be able to produce work which demonstrates understanding of image and text</td>
<td>3.1 Produce work that demonstrates knowledge of the relationship between image and communication</td>
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<td>3.2 Evaluate the relationship between image and communication in own work</td>
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<td>3.3 Produce photographic imagery that develops a personal visual language.</td>
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</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 27: Experimental Imagery in Photography
- Level 4:
  - Unit 3: Contextual and Cultural Referencing in Art and Design
- Level 5:
  - Unit 108: Advertising Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Sufficient research and photographic facilities should be made available.

Employer engagement and vocational contexts

As this unit is based around experimentation of ideas, techniques and methods, employer and vocational contexts will be limited. The following contacts will be useful:

- The British Institute of Professional Photography (www.bipp.com) provides information and support to practising photographers and publishes The Photographer magazine
- Skillset (www.skillset.org) the national training organisation for Photography and the media.
Unit 108: Advertising Photography

Unit code: F/601/6678
Level: 5
Credit value: 15

• Aim

This unit aims to develop learners’ skills and understanding through the creative application of photographic techniques and media for advertising.

• Unit abstract

This unit provides the framework for learners to gain understanding about advertising photography. They will learn how advertising uses photographic images through considering the work of others in contemporary practice. They will also learn how legislation such as copyright and codes of practice need to be considered when producing images.

Learners will explore their own creative use of photography in working to an advertising brief. Areas such as addressing the constraints of the brief and recognising audience needs will be considered, alongside creative approaches that are reinforced by sound technical skills.

Learners will evaluate their outcomes in terms of meeting the brief and fitness for purpose.

Tutors will give learners the opportunity to research the work of photographers in advertising, in order to locate their own work within contemporary practice. Content will include relevant information on legislation, copyright and ethical practice, delivered through seminars and discussion groups. The subsequent practical elements of the unit may be delivered around a series of skills building workshops and an advertising brief.

Learners may consider alternative approaches to applying visual language in photography in order to develop creative responses. Presentations and discussion groups may be used to provide evidence of knowledge gained. Practical work will form a significant body of evidence for this unit, and learners will keep clear records of all the stages of their ideas development and various rolls or downloads of images shot. They will also document their evaluation as they move through the brief, reflecting on fitness for purpose and how well they have met the brief.

• Learning outcomes

On successful completion of this unit a learner will:
1. Understand the requirements of a client brief
2. Be able to produce creative imaging solutions in an advertising context
3. Understand legislative and ethical issues
4. Be able to apply photographic methodologies for an advertising brief.
Unit content

1 **Understand the requirements of a client brief**

   Briefs: constraints; potential; product placement; target audience; market research; concepts eg themes, subject matter, sources, cultural connections
   
   Requirements: presenting ideas; communicating; time management; legislation; ethics; copyright; budget
   
   Planning: working in teams; roles; responsibilities; tasks eg shooting lists, sourcing props, subjects, location, equipment lists

2 **Be able to produce creative imaging solutions in an advertising context**

   Research sources: eg media, film, video, digital art, web-based, advertising campaigns, contemporary advertising practice
   
   Imaging solutions: ideas generation eg referencing contemporary advertising photography, exploring themes, identifying potential subjects; producing eg shooting, processing, downloading, editing, printing, outputting

3 **Understand legislative and ethical issues**

   Legislation: copyright; privacy; Advertising Standards Authority; CAP code; BCAP code
   
   Ethical: environmental considerations; public welfare; economic; ecological
   
   Factors: public liability; copyright; health and safety, intellectual property, permissions

4 **Be able to apply photographic methodologies for an advertising brief**

   Methodologies: eg studio photography, location photography, imaging techniques, image/text combinations, camera techniques, lighting, image manipulation, editing techniques, printing
   
   Evaluate: technical; aesthetic; client satisfaction; audience appeal; fitness for purpose
Learning outcomes and assessment criteria

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</table>
| LO1 Understand the requirements of a client brief | 1.1 Analyse requirements of the brief  
1.2 Evaluate the production of images to meet creative intentions |
| LO2 Be able to produce creative imaging solutions in an advertising context | 2.1 Research sources of advertising photography  
2.2 Produce creative images that reflect contemporary practice in advertising photography |
| LO3 Understand legislative and ethical issues | 3.1 Research and apply legal and ethical considerations affecting advertising photography |
| LO4 Be able to apply photographic methodologies for an advertising brief | 4.1 Produce creative images applying photographic methodologies  
4.2 Evaluate fitness for purpose of images produced. |
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 18: Advertising Campaigns
  - Unit 110: Photographic Techniques
- Level 5:
  - Unit 112: Location Photography
  - Unit 113: Fashion Photography.

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Photo Imaging.

Essential requirements
Centres must provide a suitable studio for photographic work, where learners can build any necessary sets, use props and light subjects. A range of portable equipment will also be required if learners are going to shoot work on location. Tutors must demonstrate any relevant techniques in lighting subjects and camera use.

Employer engagement and vocational contexts
There is potential in this unit to engage employers or clients to provide a commercial context for the advertising brief. This can be sourced externally through industry contacts, and may be linked to local graphic design companies, or based around a national competition. Alternatively, the client may be an internal area of the centre, ie the marketing department may wish to commission a series of shots of studios and learners at work for a website and prospectus.
Unit 109: Reprographic Processes in Photography

Unit code: A/601/6680
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ understanding and skills using photographic reprographics processes.

• Unit abstract
The unit enables learners to further develop current practices for reproducing images. Research tasks will include an appraisal of different production processes, such as offset lithography and electronic imaging processes. Learners will be able to consider and reflect on the significance of image quality and its influence in the reprographic process.

Learners will evaluate the range of reprographics processes that can be applied in contemporary image production. Through this activity they will gain understanding of the potential of different processes, and consider the suitability of certain production techniques for defined purposes. They will also consider aspects such as cost and its relationship to image quality.

Learners will develop skills in selecting images for reproduction, and in preparing these images for pre-press production. Whilst digital processes are at the forefront of commercial practice, there is scope within the unit to also explore alternatives and precursors that will provide insight into the printing process. Learners can apply their understanding to developing and preparing their own images for reprographic production, and evaluate how factors such as cost and image quality have to be balanced in commercial contexts.

• Learning outcomes
On successful completion of this unit a learner will:
1 Understand reprographics processes
2 Understand requirements for image processing
3 Be able to relate image quality to production process
4 Be able to prepare and evaluate photographic images for reprographic production.
Unit content

1 **Understand reprographics processes**

   Processes: offset litho eg monochrome, four-colour; thermographic; electrostatic; screen printing; electronic imaging eg laser, inkjet; photocopying; scanning; microfilm; workflow; image retouching; colour management; proofing; web-based workflow management; overprinting, RIPing
   Paper types: eg weight, colour, surface, environmentally friendly, hand-made
   Sizes: international A sizes

2 **Understand requirements for image processing**

   Pre-press processing: image scanning; process camera; separations; screen processing; software eg photographic, image handling, desktop publishing, PDF, compression; retouching; proofing

3 **Be able to relate image quality to production process**

   Image quality: contrast range; prints; transparencies; parameters; file sizes; resolution; colour density
   Production processes: eg offset litho; thermographic; electrostatic; screen-printing; inkjet; laser; photocopying; web-based workflow
   Costs: pre-press; production; size; full colour; image quality; length of run; unit cost; quality

4 **Be able to prepare and evaluate photographic images for reprographic production**

   Prepare: research eg purpose, factors, scale, colour; deliver eg scanning, software, manipulation, output
   Images: eg subject, theme, clarity, detail
   Contexts: eg exhibition, marketing, banner, display, function, large format, graphic design, sign, catalogues
   Quality indicator: eg against cost; budget; fitness for purpose; creative intention; quality control; clarity; detail; colour balance
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>LO1 Understood reprographics processes</td>
<td>1.1 Analyse current practice in the reprographics industry &lt;br&gt; 1.2 Evaluate different reprographic print processes</td>
</tr>
<tr>
<td>LO2 Understand requirements for image processing</td>
<td>2.1 Describe pre-press image processing techniques &lt;br&gt; 2.2 Identify hardware and software required for pre-press processes</td>
</tr>
<tr>
<td>LO3 Be able to relate image quality to production process</td>
<td>3.1 Relate image quality to production processes &lt;br&gt; 3.2 Research costs of reprographic processes</td>
</tr>
<tr>
<td>LO4 Be able to prepare and evaluate photographic images for reprographic production</td>
<td>4.1 Present images of commercial quality for reprographic production &lt;br&gt; 4.2 Following evaluation, specify quality indicators for a selected reprographics process.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 107: Visual Language in Photography
  - Unit 116: Photographic Materials, Techniques and Technology
- Level 5:
  - Unit 7: Professional Studies in Art and Design
  - Unit 14: Business Practice in Art and Design
  - Unit 115: Specialist Practice in Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Photo Imaging.

Essential requirements

Learners will need access to an appropriate level of computer-based technology to allow for the scanning of images, and processing through a RIP to a colour printer. Access to offset litho and silk screen for demonstration purposes or possibly learner hands-on experience would be an advantage, although a significant level of understanding in terms of primary image quality and its effect on reprographic outcomes can be gained from scanning and printing images.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a photographer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 110: Photographic Techniques

Unit code: A/601/6713
Level: 4
Credit value: 15

• Aim
This unit enables learners to develop skills across photographic techniques on location, in the studio and from initial capture, through processing to output.

• Unit abstract
Artists, designers and craftspeople use photography as a means of recording visual information, developing ideas for their working practice, recording the development of their work and publicising their portfolio and output.

In this unit learners are encouraged to develop practical experience and skills in using photographic equipment and techniques. Learners will use a range of camera types and learn about their potential application and they will use studio set-ups and basic lighting configurations. They will explore the potential of photographic techniques, in order to inform their subsequent approaches to using photographic imagery. Learners will need to select and use techniques and equipment appropriate to their creative intentions and evaluate their success in achieving their aims.

• Learning outcomes
On successful completion of this unit a learner will:
1 Be able to explore photographic techniques on location
2 Be able to use photographic studio equipment
3 Be able to process photographic media
4 Be able to produce photographic output.
Unit content

1 Be able to explore photographic techniques on location

Camera and accessories: camera format eg DX, FX, 35mm, SLR, medium; type eg semi-automatic, automatic, manual; basic lens types eg standard, wide angle, long focus; tripod; phone camera

Techniques: load camera; determine exposure; focus; light metering; in camera meters; memory capacity; aperture priority; shutter priority; programmed; composition; viewpoint; depth of field

Location: interior eg studio, workplace; exterior eg rural, urban, industrial; public; private

Application: commercial eg advertising

2 Be able to use photographic studio equipment

Purpose: identify aims; scope; subject matter; intention

Use: space; lights; props eg natural, artificial; models; stands; sets; backgrounds; backdrops

Lighting equipment: natural lighting; flash only; flash fill-in; ambient light; tungsten lights

3 Be able to process photographic media

Process: capture; store; file naming protocols; libraries; formats eg PICT, JPEG, RAW; access; re-name; manipulate eg crop, adjust, invert, posterise, treat, enhance, delete

Media: digital; alternatives eg black and white, colour, negative, transparency, machine processing, laboratory services

Equipment: computers; hardware; software; digital techniques; alternatives eg darkroom, safety, cleaning, handling, chemical storage, disposal

4 Be able to produce photographic output

Pre-production: planning; intuitive ideas; response; technological; communication; content; format; intentions; reaction to opportunities, outcomes

Technical: camera eg correct exposure, focus, composition; studio eg use of flash, props, backdrop; digital eg shooting mode, format, file size, image manipulation; alternatives eg darkroom, enlarger, chemicals, paper

Effectiveness: fitness for purpose eg record, reference, creative intention, subject matter, clarity, detail, mood, imagery; potential eg future work, source material, developing ideas, importing imagery

Output: prints eg final prints, series, multiple, wet-based, digital, large-scale, outsourced printed, preliminary prints, contacts, thumbnails, digital files; screen-based eg resolution, file size, gamut, format, for web, for hand-held device, for projection; quality control eg to meet intention, colour balance, sharpness, tonal control
Learning outcomes and assessment criteria

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<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Be able to explore photographic techniques on location | 1.1 Use photographic equipment effectively  
1.2 Select techniques to create images in interior and exterior settings |
| LO2 Be able to use photographic studio equipment | 2.1 Work effectively within the constraints of a studio  
2.2 Use lighting equipment to produce effective images of subjects |
| LO3 Be able to process photographic media | 3.1 Use processing techniques to produce photographic images  
3.2 Explore the potential of digital manipulation techniques |
| LO4 Be able to produce photographic output | 4.1 Produce photographic prints  
4.2 Produce screen-based photographic work  
4.3 Evaluate effectiveness of use of photographic techniques in meeting creative intention. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3**:
  - Unit 23: Photography Media, Techniques and Technology
  - Unit 24: Photographic Studio Techniques
  - Unit 33: Lens-based Image Making
  - Unit 35: Darkroom Practice
- **Level 4**:
  - Unit 104: Lens-based Recording Techniques in Art and Design
  - Unit 123: Time-based Artwork
- **Level 5**:
  - Unit 4: Professional Practice in Art and Design
  - Unit 111: Digital Image Creation and Development
  - Unit 125: Fine Art Digital Applications
  - Unit 132: Development of a Fine Art Identity

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Photo Imaging
  - Essential requirements

This unit introduces learners to the technical requirements and potential of photographic techniques. Centres will need to provide digital equipment to allow learners to explore the use of digital SLRs and automatic/point and shoot cameras and to consider how these can be used to achieve specific intentions. Centres may choose to provide wet-based facilities, or access to a venue providing wet-based processing and printing.

Tutors must ensure that learners reflect on their choices of equipment, techniques and their suitability to their aims. Centres will need to provide different camera formats and a studio set-up where learners can explore lighting and staging sets.

Learners must record all technical information in a logbook or journal for future reference. References to contemporary practice should be explored through visits to studios and presentations by practitioners.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a photographer, artist or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 111: Digital Image Creation and Development

Unit code: Y/601/6721
Level: 5
Credit value: 15

- **Aim**

This unit aims to develop skills and understanding in sourcing, creating, developing and managing digital images for specific purposes.

- **Unit abstract**

In this unit learners will work with digital image systems and equipment to produce digital images to a specified brief. This could be applied to many different sectors, for example image editors working on images intended for newspapers, magazines, websites, mobile devices, packaging, illustration, large-scale images for film, advertising hoardings or exhibition. Source images may include photography, line art, textures or specially created drawings, prints or paintings. They will learn key aspects of digital practice such as file naming conventions, storage, compression and output. They will also work with a range of input devices and software tools.

Learners will be encouraged to explore approaches to developing digital imagery that incorporate creativity and sound technical skills. Learners will evaluate their response to the set brief and consider areas such as copyright and legislation in commercial and non-commercial contexts in contemporary practice.

Delivery will be primarily practical with the provision of demonstrations of software and hardware. In addition, theory sessions will facilitate learning in some topic areas, for example file size, formats, resolution and compression.

Learners will be encouraged to adopt an experimental approach to generating imagery. This will enable learners to broaden their creative experiences and their understanding of the creative and potentiality of digital imaging systems.

Tutors will provide a set brief, or facilitate learners in developing their own set brief that meets the requirements of the unit. Learners will prepare designs for images, capture images, save appropriately, and present evidence that demonstrates their understanding. There will be opportunities for learners to focus on the critical evaluation of their own work. This may involve peer group and/or tutor presentation and discussion.

A large proportion of this unit will be practice based, and learners should demonstrate competent use of digital imaging systems in the production of practical work. The documentary evidence for each learning outcome will include images, their evaluation and supporting material that demonstrates knowledge and understanding.
Learning outcomes

On successful completion of this unit a learner will:

1. Be able to create digital images for specific purposes
2. Be able to process digital images
3. Be able to manipulate digital images to meet requirements
4. Understand the use of digital images.
Unit content

1 Be able to create digital images for specific purposes

Sources: primary; secondary; recording; sampling

Input devices: eg cameras, scanners, external hard-drives, USB devices, mobile phones, video cameras

Acquisition: analogue eg continuous tone, transparent, opaque, monochrome, colour, line, halftone; digital sources eg photograph, JPEG, clip art, royalty-free stock photography, internet (Flickr, Creative Commons, Google Images) newswire (AP, Reuters) mobile phone, handheld device (current events, social networks, Twitpic, Facebook)

Input fundamentals: resolution eg screen, print, dpi, lpi, bits per pixels (bpp), CMOS systems, file size, file formats; cross-platform eg PSD, TIFF, JPEG, GIF, PDF

2 Be able to process digital images

Devices: eg portable, online, archive, screen, proofing, printing

File formats: file naming conventions; file management; applications; image size; compression eg lossy and lossless, ISDN

Processing fundamentals: capture; file format; back-up; import; export; image size; resolution; canvas size; resolution; output; image modes eg RGB, CMYK, indexed colour, grayscale, duotone

Transmission: download; stream eg File Transfer Protocol (FTP)

3 Be able to manipulate digital images to meet requirements

Tools, techniques and palettes: software tools eg text, exposure, cropping, adjusting, painting, duplicating, levels, curves, colour balance, hue, saturation, layers, history, paths, masks, channels, filters

4 Understand the use of digital images

Own work: evaluate; constraints of brief; originality; aesthetics; context; meaning; emphasis

Other's work: commercial contexts; design; sources; aesthetics; context; meaning; emphasis
# Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Identify sources for digital images</td>
</tr>
<tr>
<td>Be able to create digital images for specific purposes</td>
<td>1.2 Create digital images from sources for specific purposes</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Identify file formats and fundamentals required to process image data</td>
</tr>
<tr>
<td>Be able to process digital images</td>
<td>2.2 Apply digital data management techniques to store imagery</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Use software tools to manipulate images</td>
</tr>
<tr>
<td>Be able to manipulate digital images to meet requirements</td>
<td>3.2 Prepare image files for output</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Evaluate own use of digital images in meeting requirements</td>
</tr>
<tr>
<td>Understand the use of digital images</td>
<td>4.2 Evaluate others’ use of digital images in meeting specified purposes.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 84: 2D, 3D and Time-based Digital Applications
  - Unit 86: Digital Media in Art and Design
- Level 5:
  - Unit 69: 3D Computer Modelling and Animation.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- Skillset Sector Skills Council
  - Animation
  - Photo Imaging.

Essential requirements

Centres will need to provide access to professional level cameras, scanners and image editing software to enable learners to gain practical knowledge and skills.

Employer engagement and vocational contexts

There is the potential for centres to offer a live project or employer-led brief, where the requirements of the unit are addressed through a set brief that identifies real and tangible needs. Learners should be encouraged to work through the different stages of the set brief through presenting images and evaluating fitness for purpose of their ideas generation and digital developmental work, as well as their final outcomes.
Unit 112: Location Photography

Unit code: L/601/6683
Level: 5
Credit value: 15

Aim

This unit aims to develop learners’ understanding and develop skills in location photography techniques.

Unit abstract

The use of location photography is widespread throughout the visual communication industries. Photography on location is used in areas such as fashion, video stills, tourism, brochures, catalogues, design, automobile industry, corporate reports, architecture and advertising in general. Photographers working on location need to understand the creative potential of backgrounds and subjects, as well as knowing how to exploit available lighting conditions and use additional lighting as required.

In this unit learners will research examples of contemporary location photography and learn about working practices. They will understand how to assess lighting conditions when working on location and how to select appropriate equipment and cameras. Technical considerations will be balanced alongside reflection on creative possibilities. Learners will need to recognise the variability of working conditions experienced when working on location and to have an appreciation of the effects of colour temperature in mixed lighting conditions. Learners will develop an understanding of the quality of different types of lighting, including an awareness of how the quality of natural light changes with time of day/year.

Learners will produce a plan for a set location photography shoot that encompasses both technical and creative factors. This plan will also evidence their reasons for choice of additional lighting, its strength and their selection of accessories. They will work through the process of shooting on location to produce outcomes, which they will evaluate for fitness of purpose in terms of client needs, creative intentions and techniques employed.

Learning outcomes

On successful completion of this unit a learner will:

1. Be able to research locations for a photographic shoot
2. Understand how to assess lighting requirements for a location shoot
3. Be able to use photographic equipment and resources for a location shoot and print production
4. Be able to evaluate location photography.
Unit content

1 **Be able to research locations for a photographic shoot**

   **Locations:** eg urban, city, indoor, outdoor, town, village, scenic, industrial, domestic, commercial, architectural, figure, portrait, landscape
   
   **Backgrounds:** eg shallow, deep, colour, content, relationship to subject, mood, interest, composition, perspective, pattern
   
   **Work of others:** eg publications, portraits, catalogues, fashion, advertising, public information, print, web-based, event
   
   **Planning a shoot on location:** eg permission of proprietor, land owner, manager, personnel; equipment preparation eg checklist

2 **Understand how to assess lighting requirements for a location shoot**

   **Assess:** eg adequate, potential, additional; mood eg subject matter, theme, effect, references; clarity eg detail, colour range, contrast
   
   **Lighting:** available; controlled; interior eg fluorescent, background; exterior eg full sun, full shade, cloudy, time of day, season; measuring eg metering
   
   **Additional lighting:** eg fill in, flash, portable, reflectors, mirrors, colour balance, built in flash

3 **Be able to use photographic equipment and resources for a location shoot and print production**

   **Equipment:** cameras; format; lenses eg wide angle, telescopic, fish eye; portable lighting; power source
   
   **Exposure:** assessment; balance; subject; focus; foreground; background; depth of field; contrast; detail
   
   **Prints:** eg processing, colour negative, black and white, laboratory services, printing, digital, capture, selecting, proofing, image manipulation, output

4 **Be able to evaluate location photography**

   **Evaluate:** technical; equipment; cameras; lighting; creative eg composition, contrast, colour; treatment eg detail, clarity, definition, mood; selection eg changing light conditions, window of opportunity, subject positioning
   
   **Brief:** fitness for purpose eg location, client needs, target audience, constraints, budget, communication, strengths and weaknesses
## Learning outcomes and assessment criteria

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<tbody>
<tr>
<td><strong>LO1</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td>Be able to research locations for a photographic shoot</td>
<td>1.1 Research contemporary working practice in location photography</td>
</tr>
<tr>
<td></td>
<td>1.2 Select composition backgrounds for a location photography</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Analyse lighting condition for a location shoot</td>
</tr>
<tr>
<td>Understand how to assess lighting requirements for a location shoot</td>
<td>2.2 Evaluate and apply lighting set-up for a location shoot</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Select equipment for location photo shoot</td>
</tr>
<tr>
<td>Be able to use photographic equipment and resources for a location shoot and print</td>
<td>3.2 Use photographic techniques to produce prints for the location photo brief</td>
</tr>
<tr>
<td>production</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Assess use of equipment and techniques</td>
</tr>
<tr>
<td>Be able to evaluate location photography</td>
<td>4.2 Evaluate fitness for purpose of prints in meeting the set brief.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 18: Advertising Campaigns
  - Unit 107: Visual Language in Photography
  - Unit 110: Photographic Techniques
- Level 5:
  - Unit 108: Advertising Photography
  - Unit 113: Fashion Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Centres will need to provide adequate portable resources for location-based photography. Learners must be taught how to assess lighting conditions in a location setting, before attempting their own location shoot. Techniques in measuring light and understanding the likely effects on subjects should be demonstrated.

Learners will be required to research examples of contemporary practice in location photography to provide insight into strategies for meeting location briefs. Tutors will need to develop a delivery system that provides on-site support to learners if required, although much of the location-based work will be undertaken independently.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a photographer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme. A live brief may be sourced within the centre through providing location-based photography for an internal department, for purposes such as advertising in a prospectus. Alternatively, external clients may be sources to provide a vocational scenario for the set brief.
Unit 113:  Fashion Photography

Unit code:  K/601/6688
Level:  5
Credit value:  15

•  Aim

This unit aims to develop learners’ understanding and practical skills in fashion photography.

•  Unit abstract

This unit gives learners the opportunity to plan, develop and execute a creative strategy to set fashion photography briefs. Learners will consider the factors that influence fashion photography, and the relationships between designers, audience, content and application of photographic visual language.

The ability to understand the requirements of the brief and interpret it in a creative way forms a vital element in fashion photography. Learners will work through the process of research, planning, shooting and producing prints. Knowledge gained in researching contextual factors will be applied by learners to inform the strategy they develop to meet the brief. Aspects such as cultural connections, style, mood and effect will form part of learners’ reflection and evaluation.

Technical factors such as lighting and camera use will be incorporated in the decision-making process, alongside sourcing props, and ideas about models, sets and locations. Learners will reflect on their ability to meet the constraints of the brief, and evaluate the effectiveness of their photographs in meeting their creative intentions.

•  Learning outcomes

On successful completion of this unit a learner will:

1  Understand contextual influences in fashion photography
2  Be able to present a creative strategy for a fashion shoot to a set brief
3  Be able to produce fashion photography to a set brief
4  Be able to evaluate own fashion photography work.
Unit content

1 **Understand contextual influences in fashion photography**

- **Contexts:** editorial; documentary; advertising; commercial
- **Cultural:** historical; contemporary; constructed; deconstructed
- **Target audiences:** eg trends, subcultures, age groups, gender, affluence, socio-economic groups, eras, aspirations, ethnicity, customs
- **Marketing:** eg style, image, layout, target audience, demographic groups, readerships
- **Media outlets:** eg newspapers, magazines, books, catalogues, exhibitions, internet, CD-ROMs, DVDs
- **Client base:** eg clothing manufacturers, retailers, designers, advertising campaigns, marketing agencies

2 **Be able to present a creative strategy for a fashion shoot to a set brief**

- **Factors:** research; brief; target audience; constraints; budget; media eg archive materials, digital applications
- **Strategy:** ideas generation; visual language; themes; mood; interpretation; meetings eg team members, assign roles, finalise shooting list
- **Presentation:** methods eg mocked-up images, pitch to client, past examples, portfolio
- **Set:** eg location, studio, props, models, make-up
- **Clothes:** range; type; accessories; references eg historical, contemporary, modernist, postmodernist
- **Lighting:** eg natural, artificial, controlled, location
- **Photographs:** intention; scale; format eg film, digital, colour, black and white, image manipulation

3 **Be able to produce fashion photography to a set brief**

- **Equipment:** cameras; lenses; accessories eg motor drive, filters
- **Lighting systems:** eg tungsten, floods, spots, key, accessories, tripods, stands, backgrounds; flash eg studio, portable
- **Light:** fabric type eg absorption, reflection, transmission
- **Situations:** eg location, fashion show, studio
- **Layouts:** eg standard, experimental, given, created
- **Media:** eg film, type, speed, digital, image manipulation
- **Output:** eg printing, laboratory services, digital applications
4  Be able to evaluate own fashion photography work

Fitness for purpose: image content; creative interest; audience reaction; garment detail; client feedback; visual language; media; working practice; interpretation; theme; subject

Photographic resources: equipment; lighting; film; digital applications

Setting: eg studio, location, fashion show, props, sets
## Learning outcomes and assessment criteria

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<td>The learner can:</td>
</tr>
</tbody>
</table>
| **LO1** Understand contextual influences in fashion photography | 1.1 Analyse the interrelationship between fashion and photography  
1.2 Evaluate the contextual factors that influence fashion photography |
| **LO2** Be able to present a creative strategy for a fashion shoot to a set brief | 2.1 Identify and apply the constraints of the set brief  
2.2 Present a strategy for a creative interpretation of the brief |
| **LO3** Be able to produce fashion photography to a set brief | 3.1 Employ equipment for the fashion shoot  
3.2 Produce fashion photographs to the set brief |
| **LO4** Be able to evaluate own fashion photography work | 4.1 Evaluate fitness for purpose of photographs produced  
4.2 Propose further development of own fashion photography work. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 17: Products, Marketing and Advertising Media
  - Unit 18: Advertising Campaigns
  - Unit 105: Studio Practice in Photography
  - Unit 107: Visual Language in Photography
  - Unit 110: Photographic Techniques

- **Level 5:**
  - Unit 108: Advertising Photography
  - Unit 112: Location Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Photo Imaging.

Essential requirements

Tutors will need to provide support and guidance for learners about the nature of photography as it is used in the fashion industry, and the factors that influence its production. Examples of fashion photography must be considered across a range of different outlets such as the web, catalogues, magazines and fashion house publications. Tutors must provide support for learners to individually develop creative strategies in interpreting the set brief. Creativity, historical or contemporary referencing and technical factors must all be addressed by learners in the planning stage, production and evaluation of their work. Learners must be assessed on their working practices, decision making and practical output through the different stages of the unit, supported by underpinning knowledge gained in Learning Outcome 1.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.
Unit 114: Press Photography and Photo Journalism

Unit code: F/601/6776
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ understanding and practical skills through engaging with editorial photography.

• Unit abstract
This unit enables learners to achieve an understanding of the processes and techniques associated with press photography. The unit explores the characteristics of press photography, covering themes and applications such as social documentary and reportage. Learners will follow a structured programme to expand their awareness of the contextual and cultural issues relating to the different strands of editorial photography. Issues of legislation, privacy and constraints will be examined, and learners will be encouraged to discuss the ethics of these. Learners will apply understanding gained to tackle a set or self-generated editorial brief.

The unit provides learners with scope to explore different editorial practices. Through research they will identify the key factors and constraints that affect editorial photography work, and gain understanding that will inform their intentions. The role of the image in contemporary communication is wide, varied and well-established; we as viewers could be said to be saturated with this abundance of imagery. Learners will consider how to devise a strategy through which they can develop photographs that can compete in this ever increasing, demand-led sector. They will also need to investigate the immediacy and shelf-life of images in this context and the need to file them quickly. Technical issues in camera and lenses used will be balanced alongside the need to recognise what makes images effective and attention grabbing. Learners will have the potential to propose lines of enquiry and experimental approaches in meeting the outcomes in this unit.

• Learning outcomes
On successful completion of this unit a learner will:
1. Understand contextual factors used in editorial photography
2. Understand the requirements of editorial photography briefs
3. Be able to comply with legislation affecting editorial photographic practice
4. Be able to produce editorial photography.
Unit content

1 **Understand contextual factors used in editorial photography**

   **Contextual:** historical; contemporary; social; political; economic
   **Cultural:** issues; currency; environmental; business; commerce; conflict; protest
   **Editorial contexts:** photojournalism; press photography; social documentary; reportage; speculative work; commissioned work
   **Target audience:** age; gender; ethnicity; demographics
   **Editorial applications:** photojournalism; press photography; social documentary; reportage

2 **Understand the requirements of editorial photography briefs**

   **User:** editorial eg appropriate images, speed of filing images to editor; link; design; effectiveness; technical eg focus, depth of field, exposure, composition
   **Brief:** communication eg self-generated, client, editorial, publishing; purpose eg user needs; audience; format; availability;
   **Strategy:** requirements; roles eg individual, team; communication; planning; resources; concluding; evaluating
   **Constraints:** time; budget; deadline; format; textual relationship
   **Context:** eg everyday, basic, complex, extraordinary, drama, pathos, event, spectacle; range eg local, national, global

3 **Be able to comply with legislation affecting editorial photographic practice**

   **Regulations:** Press Complaints Commission; Advertising Standard Authority; Human Rights Act (privacy provisions, photojournalism); relevant UN conventions
   **Legislations:** copyright; contracts; criminal disclosure; data protection; defamation; freedom of information; discrimination; intellectual property; model release; privacy law; freedom of the press; professional indemnity; public liability; rights and permissions; moral issues; ethics
   **Images:** individuals; groups; logos; brand names; public bodies; context eg advertising, photojournalism, social documentary, media, web-based, reportage
   **Emphasis:** factual; political; cultural; techniques; target audiences; contexts
4 **Be able to produce editorial photography**

Photographic techniques: formats eg digital, DSLR, point-and-shoot, camera phones, 35mm, medium format, lenses; creative eg framing, cropping, contrast, positioning, composition

Output images: eg digital technology, DTP, combined with text, page layout

Communicating: image transfer to editor; publication eg mobile phones, laptops, wireless 3G modems, WiFi-based SD cards

Effective: evaluate eg fitness for purpose, client feedback, addressing constraints, relationship to text
Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand contextual factors used in editorial photography | 1.1 Analyse contemporary practice in editorial photography  
1.2 Evaluate contextual factors that influence editorial photography |
| LO2 Understand the requirements of editorial photography briefs | 2.1 Evaluate and record the requirements of editorial photography briefs  
2.2 Determine a strategy to carry out an editorial photography brief |
| LO3 Be able to comply with legislation affecting editorial photographic practice | 3.1 Investigate legislation affecting editorial photographic practice  
3.2 Adhere to legislation when producing own editorial photography |
| LO4 Be able to produce editorial photography | 4.1 Use photographic techniques to produce effective editorial photography  
4.2 Evaluate and record fitness for purpose of images produced |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 18: Advertising Campaigns
  - Unit 107: Visual Language in Photography
  - Unit 110: Photographic Techniques
- Level 5:
  - Unit 108: Advertising Photography
  - Unit 112: Location Photography
  - Unit 113: Fashion Photography
  - Unit 115: Specialist Practice in Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Design
- Skillset Sector Skills Council
  - Design for the Moving Image
  - Photo Imaging.

Essential requirements

Learners must have access to specialist facilities relevant to the pathway.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers to deliver assignments to learners or to provide work experience. A lecture or visit by a photographer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
## Unit 115: Specialist Practice in Photography

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>J/601/6777</th>
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<tbody>
<tr>
<td>Level:</td>
<td>5</td>
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<tr>
<td>Credit value:</td>
<td>15</td>
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</table>

### Aim
This unit aims to develop learners’ skills and understanding in the preparation and contextualisation of their specialist photographic practice, through independent self-directed study and critical reflection.

### Unit abstract
This unit gives learners the opportunity to develop a cohesive body of photographic work with particular reference to their own individual specialist photographic practice. Dealing with project development from concept to output, the learner will be required to contextualise their practice in relation to both contemporary and historic practitioners.

Through independent self-directed study, the learner will be supported to engage with network building opportunities in order to plan continued professional development within the relevant sector of the photographic industry.

Learners will be encouraged to contextualise a critical position for their work through written statements about their individual practice. The development of a creative journal to support the photographic output will also allow learners to communicate their creative intentions.

### Learning outcomes
**On successful completion of this unit a learner will:**

1. Be able to articulate critical contextual statements defining individual specialist practice
2. Be able to present a body of work that demonstrates a sustained period of independent self-direction
3. Understand how to develop network opportunities for the progression of personal practice through specialist work produced
4. Understand how to develop professional practice from a personal critical position.
Unit content

1  **Be able to articulate critical contextual statements defining individual specialist practice**

    Contextual statements: related to specialism; primary research; self-directed development
    Critical dialogue: group critique; individual critique; one-to-one tutorial; seminar presentation
    Creative journal: ideas development; personal targets; historic and contemporary practitioner research; technique testing

2  **Be able to present a body of work that demonstrates a sustained period of independent self-direction**

    Conceptual frameworks: creative ideas; concepts
    Realising project intentions: coherent progression; portfolio of evidence; reflection; milestone analysis; output analysis; interim reviews

3  **Understand how to develop network opportunities for the progression of personal practice through specialist work produced**

    External situations: cultural; social; environmental; public; private; commercial; academic
    Networks: staging exhibitions; commissions; funding applications; studio associates; academic progression; collaborative engagement

4  **Understand how to develop professional practice from a personal critical position**

    Continued professional development: short term; long term; opportunities for progression; academic; commercial
    Individual practice: dependent upon specialist pathways; specialist techniques
    Personal self-development: time management; self-organisation; resources; workspaces; studio management; creative processes
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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<tbody>
<tr>
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Plan, action and implement a critical dialogue with peers and tutors detailing professional standards</td>
</tr>
<tr>
<td>Be able to articulate critical contextual statements defining individual specialist practice</td>
<td>1.2 Create a contextual creative journal to support practical work, including a summary personal statement</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Establish independently the concept(s) and approach(es) essential to project realisation</td>
</tr>
<tr>
<td>Be able to present a body of work that demonstrates a sustained period of independent self-direction</td>
<td>2.2 Present a completed body of specialist work that demonstrates a sustained period of self-development and critical justification</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>2.3 Manage the process of realising practical project intentions</td>
</tr>
<tr>
<td>Understand how to develop network opportunities for the progression of personal practice through specialist work produced</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>3.1 Evaluate potential opportunities for the positive exploration of specialist practice</td>
</tr>
<tr>
<td>Understand how to develop professional practice from a personal critical position</td>
<td>3.2 Analyse effectiveness of networks for the development of specialist practice projects</td>
</tr>
<tr>
<td></td>
<td>4.1 Evaluate a completed practical project, compared against initial contextual statements</td>
</tr>
<tr>
<td></td>
<td>4.2 Analyse the relationship between personal professional practice and continued professional development</td>
</tr>
<tr>
<td></td>
<td>4.3 Evaluate new ideas in terms of future opportunities for self development.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 105: Studio Practice in Photography

- Level 5:
  - Unit 4: Professional Practice in Art and Design
  - Unit 108: Advertising Photography
  - Unit 112: Location Photography
  - Unit 113: Fashion Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Photo Imaging.

Essential requirements

Sufficient research and photographic facilities should be made available.

Space, facilities and equipment should be provided for learners to make professional presentations of their work at the final critique.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- **Learning and Skills Network** – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 116: Photographic Materials, Techniques and Technology

Unit code: A/601/6856
Level: 4
Credit value: 15

• Aim
This unit aims to develop learner's understanding and skills using photographic materials, techniques and technologies within the constraints of a set brief.

• Unit abstract
In this unit learners may be able to extend their knowledge of photographic materials, techniques and technologies through considering the respective characteristics and applications of silver-based and digital media. Learners may identify the potential applications for photographic media and reflect on the merits of different formats as used in industry and creative practice. Knowledge gained may be applied to the selection and use of photographic media to a set brief. Learners should reflect on their selection and gauge its effectiveness in allowing them to meet the brief and fulfil their creative intention.

The unit aims to ensure that learners become confident in their use of materials and methodology, enabling them to make informed decisions about materials, techniques and technologies to fulfil their personal creative direction.

• Learning outcomes
On successful completion of this unit a learner will:
1. Understand photographic materials, techniques and technologies
2. Be able to select photographic media for a set brief
3. Be able to use photographic materials, techniques and technologies
4. Be able to evaluate use of photographic materials, techniques and technologies.
Unit content

1 Understand photographic materials, techniques and technologies

Silver-based materials: film eg black and white, colour, transparency; formats eg 35mm, medium format; properties eg film speeds, grain, structure, sensitivity, colour casts, reversal, negative/positive, characteristics, film stock

Digital media: capturing; storage; file naming; resolution; output; memory capacity; pixel size

Techniques: silver based; development; printing; laboratory services; darkroom techniques eg photo montage; digital eg manipulation; adjustment; enhancement; tool palettes

Technologies: laboratory printing; print processors; computer-based applications; software; hardware; file types eg TIFF, JPEG, PICT, BMP, RAW

2 Be able to select photographic media for a set brief

Purpose: identify aims; scope; subject matter; creative intention; audience needs

Applications: communication eg documentary, reportage, landscape, environment, installation, time-based, photo journalistic, web-based, photomontage, advertising

Requirements: technical eg equipment, camera type, lenses, film type, processing requirements, printing, output

Select: plan; justify decisions; identify constraints; creative strategy; consideration eg qualities of materials, processes, techniques, technologies, printing, output

3 Be able to use photographic materials, techniques and technologies

Use: media eg silver based, exposure, process, printing, machine processing, laboratory services, digital formats, capture, store, file naming protocols, libraries, PICT, JPEG, RAW, access, re-name

Techniques: practical eg darkroom, digital, manipulate, crop, adjust, invert, posterise, treat, enhance, delete; consider alternatives eg mixed photographic media, time based, projection

Technologies: equipment eg cameras, processing tanks, deep tanks, enlargers, filters, computers, hardware, software, digital, darkroom, safety

Present: formats eg online, digital presentation, blog, exhibition

4 Be able to evaluate use of photographic materials, techniques and technologies

Performance: media eg image resolution, colour sensitivity, characteristics, format, output, presentation

Effectiveness: fitness for purpose eg record, reference, creative intention, subject matter, clarity, mood, imagery; potential eg future personal work, source material, developing ideas, importing imagery, alternative ideas

Working methods: evaluate eg strategies employed, planning; selection; photographic materials; techniques; technologies testing; proofing
# Learning outcomes and assessment criteria

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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
</tbody>
</table>
| **LO1** Understand photographic materials, techniques and technologies | 1.1 Analyse the properties and characteristics of silver-based photographic materials, techniques and technologies  
1.2 Analyse the properties and limitations of digital photographic media, techniques and technology |
| **LO2** Be able to select photographic media for a set brief | 2.1 Identify the constraints of a photographic brief  
2.2 Propose an effective strategy to realise creative intention  
2.3 Select photographic media for set brief demonstrating understanding of properties and characteristics |
| **LO3** Be able to use photographic materials, techniques and technologies | 3.1 Use photographic materials, techniques and technologies to produce an effective response to the set brief  
3.2 Present photographic outcomes in a format appropriate to creative intention |
| **LO4** Be able to evaluate use of photographic materials, techniques and technologies | 4.1 Be able to evaluate use of photographic materials, techniques and technologies. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 1: Visual Recording in Art and Design
  - Unit 12: Computers in Art and Design
  - Unit 34: Image Manipulation Using Computer Applications
- **Level 4:**
  - Unit 110: Photographic Techniques
  - Unit 123: Time-Based Artwork
- **Level 5:**
  - Unit 111: Digital Image Creation and Development
  - Unit 115: Specialist Practice in Photography.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **Skillset Sector Skills Council**
  - Photo Imaging.

Essential requirements

Learners will require access to as many different examples of photographic media available in the centre. The theoretical aspects of silver-based and digital materials, equipment and technologies should be delivered through lectures, seminar groups and practical demonstrations. Tutors should provide visual references of as broad a range of silver-based and digital practice as possible.

Learners will need to access a sufficient range of equipment such as cameras, lenses and tripods as well as either or both darkroom facilities and digital labs, to gain as much practical experience with photographic media as possible.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a photographer, artist or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and progression.
Unit 117: Exhibition of Art Work

Unit code: F/601/6759
Level: 4
Credit value: 15

Aim

This unit aims to develop skills and understanding of the methodologies open to visual artists for exhibiting their own work.

Unit abstract

In this unit learners will use a range of techniques to present and exhibit their own work. They will be expected to research circumstances affecting the presentation and exhibiting of fine art. Learners will evaluate the strengths and weaknesses of their own presentation and exhibition.

Learning outcomes

On successful completion of this unit a learner will:
1. Be able to research circumstances affecting presentation and exhibition of artwork
2. Understand the potential of presentation and exhibition techniques
3. Be able to use selected presentation and exhibition techniques
4. Be able to evaluate the effectiveness of presentation and exhibition techniques.
Unit content

1 Be able to research circumstances affecting presentation and exhibition of artwork

Outcomes: sketchbooks; maquettes; plans; photographs; performance; 2D; 3D; time-based

Financial circumstances: organisations; individuals; businesses; sponsors; materials; funding sources eg public, private, enterprise, development

Environment: room; venue; space; interior; exterior

Context: public; private; formal; informal; tutorial; critique

2 Understand the potential of presentation and exhibition techniques

Presentation: mounts; slides; plinths; frames; on-screen; portfolio; use of space

Exhibition: installation; performance; arrangement; lighting; formal/informal; hanging; framing; floor; wall; interactive; digital

Work: coursework; end of project; end-of-year exhibition

Present to an audience: oral; written; documentation; digital

3 Be able to use selected presentation and exhibition techniques

Presentation: methods eg mounts, slides, plinths, frames, on-screen, portfolio, use of space

Exhibition: appropriate to the work eg installation, performance, arrangement, plinths, lighting, formal, informal, hanging, framing, floor, wall, interactive, CD ROM, websites

Work: selected eg coursework, end of project, end-of-year exhibition

Present to an audience: selected work eg oral, written, documentation, digital

4 Be able to evaluate the effectiveness of presentation and exhibition techniques

Evaluate: technical quality; aesthetic quality; ambition; achievement; audience accessibility; critical appraisal; individual reaction
Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Assess the requirements for exhibiting work from different disciplines</td>
</tr>
<tr>
<td>Be able to research circumstances affecting presentation and exhibition of artwork</td>
<td>1.2 Identify and assess the financial circumstances affecting an exhibition</td>
</tr>
<tr>
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<td>1.3 Evaluate the potential of exhibition environments</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Explore and evaluate presentation methods</td>
</tr>
<tr>
<td>Understand the potential of presentation and exhibition techniques</td>
<td>2.2 Evaluate exhibition modes</td>
</tr>
<tr>
<td></td>
<td>2.3 Explain the relationships between the type of work exhibited and its mode of presentation</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Use selected presentation and exhibition techniques to display work</td>
</tr>
<tr>
<td>Be able to use selected presentation and exhibition techniques</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Evaluate presentation techniques used</td>
</tr>
<tr>
<td>Be able to evaluate the effectiveness of presentation and exhibition techniques</td>
<td>4.2 Evaluate exhibition mode.</td>
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</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 126: Installation and Performance in Fine Art
- Level 5:
  - Unit 118: Management of Art Exhibitions.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

To allow for the diversity of approach inherent in this unit, learners should have access to a range of facilities. These should include 3D workshops and equipment that may be taken offsite. Offsite work must be monitored for legal and safety reasons.

Technician support is a requirement, particularly when electricity, lighting and sound are to be installed. Adequate photographic processing and video production equipment should be available for final documentation.

Employer engagement and vocational contexts

Centres should develop links with practising artists, performers and designers, to deliver assignments. Public spaces may be sought through links with the community.
Unit 118: Management of Art Exhibitions

Unit code: A/601/6632
Level: 5
Credit value: 15

• Aim

This unit aims to develop learners’ skills and understanding in the process of exhibiting art work and its communication within the wider public domain.

• Unit abstract

In this unit learners will, through contact with individuals and organisations, participate in the exhibition process, both as manager and contributor. They will use a range of presentation and exhibiting techniques in the preparation and installation of work for exhibition. Learners will be expected to evaluate information about exhibited work and to discuss this information with a variety of audiences.

• Learning outcomes

On successful completion of this unit a learner will:
1. Be able to establish exhibition space through contact with individuals and organisations
2. Be able to prepare and install work for exhibition
3. Understand the effectiveness of exhibitions
4. Be able to make an effective contribution to managing the exhibition process.
Unit content

1. **Be able to establish exhibition space through contact with individuals and organisations**
   - Venues: eg public, private, commercial, non-commercial, subsidised, non-subsidised
   - Space: location; context; size; lighting; access
   - Funding: eg sponsored, self-funded, subsidised
   - Individuals and organisations: eg practitioners, societies, clubs, curators, administrators, directors, proprietors, companies, public associations, professional bodies

2. **Be able to prepare and install work for exhibition**
   - Prepare work: eg framing, mounting, presentation, transporting
   - Venue preparation: access; security; supervision; lighting; cleaning
   - Installation methods: eg arrangement, hanging techniques, plinths, screen, computer, visual projections

3. **Understand the effectiveness of exhibitions**
   - Exhibition information: form; intent; content; philosophy; interpretation
   - Audiences: eg general public, critics, the media, artists
   - Personal evaluation: response to audience; critics; peer group; potential for development; ambition; achievement

4. **Be able to make an effective contribution to managing the exhibition process**
   - Curatorial skills: eg inception, conception, development, production, information, realisation, evaluation
   - Resources: personal; physical; financial; time; people
   - Publicity tools: eg catalogues, press releases, radio, television, websites, mobile phone, reviews, lectures, seminars
### Learning outcomes and assessment criteria

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</tr>
</tbody>
</table>
| **LO1** Be able to establish exhibition space through contact with individuals and organisations | 1.1 Investigate the availability of exhibition space by contacting organisations and the responsible personnel  
1.2 Contribute effectively to the running and management of exhibition |
| **LO2** Be able to prepare and install work for exhibition | 2.1 Physically prepare work for presentation and transportation  
2.2 Organise the preparation of the venue for the work  
2.3 Install the work in the venue employing the necessary display methodologies |
| **LO3** Understand the effectiveness of exhibitions | 3.1 Evaluate the overall nature of the exhibition and the explanatory associated information  
3.2 Analyse the complexion of the visitors  
3.3 Analyse responses to the exhibition from the visitors |
| **LO4** Be able to make an effective contribution to managing the exhibition process | 4.1 Demonstrate curatorial skills across the various aspects of the exhibition process  
4.2 Identify and harness the necessary resources for the exhibition  
4.3 Effectively utilise a range of publicity tools. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 3:
  - Unit 16: Promoting Art and Design Work
- Level 4:
  - Unit 117: Exhibition of Art Work
- Level 5:
  - Unit 127: Site-specific Fine Art.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

To allow for the diversity of approach inherent in this unit, learners should have access to a range of facilities. These should include 3D workshops and equipment that may be taken offsite. Offsite work must be monitored for legal and safety reasons.

Technician support is a requirement, particularly when electricity, lighting and sound are to be installed. Adequate photographic processing and video production equipment should be available for final documentation.

Employer engagement and vocational contexts

Centres should develop links with practising artists, performers and designers, to deliver assignments. Public spaces may be sought through links with the community.
Unit 119: Fine Art Painting

Unit code: R/601/6667
Level: 4
Credit value: 15

- **Aim**
  This unit aims to develop learners’ skills and understanding in painting through communication of their personal creative intentions.

- **Unit abstract**
  Through the process of making paintings, learners can develop an understanding of the potential of traditional or contemporary painting materials and techniques. In this unit they will also use systematic investigation to extend visual thinking and creativity.

  Learners should investigate a broad range of traditional and non-traditional materials to support the creative development of their work. Personal voice and response should be encouraged through an analytical approach to theoretical and practical work.

  Engagement with materials and an awareness of how they can be utilised to create visual meaning should be part of the development process during this unit. Learners should investigate ethical and environmental considerations where relevant to their work. As part of learners’ emerging professional practice they should demonstrate how they have exploited and interrogated visual values and the role of the audience.

- **Learning outcomes**
  **On successful completion of this unit a learner will:**
  1. Be able to produce paintings that communicate a personal creative intention
  2. Be able to use materials and techniques to develop ideas towards a personal creative intention
  3. Understand formal visual values in painting
  4. Be able to employ professional fine art practice in painting.
Unit content

1  **Be able to produce paintings that communicate a personal creative intention**

   Sources: eg organic, inorganic, others’ work, mass media
   Concepts: eg formal, philosophical, psychological, religious, ecological, political, emotional
   Approaches: eg themes, critical issues, contemporary life, media, society, abstraction, naturalism, realism, expressionism, conceptual

2  **Be able to use materials and techniques to develop ideas towards a personal creative intention**

   Traditional materials: eg ink, gouache, watercolour, oil colour, varnishes, acrylic colour, wax, paper (handmade, machine-made), card, wood, canvas
   Non-traditional materials: eg varnishes, latex, medium density fibreboard (MDF), found materials, ephemera, steel, aluminium, Perspex, vinyl, polythene, plastics, light, glass, recycled, mixed media, textiles (natural, synthetic)
   Traditional techniques: eg brush, finger painting, wet into wet, scumbling, glazing, brushwork, alla-prima, underpainting, graffito, texturing, blending, broken colour, dry brush, imprinting, transferring, encaustic
   Non-traditional techniques: eg airbrush, diffuser, computer-generated, projection

3  **Understand formal visual values in painting**

   Formal values: eg line, tone, texture, colour, shape, pattern, composition, drawing systems, scale, proportion, mass, weight, volume, balance, structure, rhythm, pitch, symmetry, harmony

4  **Be able to employ professional fine art practice in painting**

   Working practice: presentation skills eg formal, informal, oral, visual, finished, preparation, work in progress, installation, exhibition, mounted, framed; management skills eg time; communication; financial budgets; resources eg studio workshop, materials
   Legislation: public liability; copyright; health and safety
   Currency: eg ethical, environmental, public welfare, economic, visual, ecological
### Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
</table>
| **LO1** Be able to produce paintings that communicate a personal creative intention | 1.1 Develop concepts to reflect intentions  
1.2 Produce paintings that communicate a personal creative intention |
| **LO2** Be able to use materials and techniques to develop ideas towards a personal creative intention | 2.1 Produce work which demonstrates a creative and sensitive use of materials and techniques  
2.2 Show in the work appropriate use of materials in relation to personal intentions |
| **LO3** Understand formal visual values in painting | 3.1 Determine the extent to which formal values are relevant to creative intentions  
3.2 Evaluate the role of formal values in the realisation of creative intentions |
| **LO4** Be able to employ professional fine art practice in painting | 4.1 Adhere to legislation in working practices  
4.2 Consistently apply professional working practice  
4.3 Reflect and record success of own work. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 129: Drawing in Fine Art
  - Unit 131: Development of Fine Art Language
- Level 5:
  - Unit 128: Commissioned Fine Art Work.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

This unit will require a well-equipped studio/workshop to facilitate learners’ independent exploration of media, materials and practical techniques.

Learners will need to have access to specialist library resources to research historical and contemporary art theory and practice, as well as other disciplines, which may inform learners’ individual ideas.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
## Unit 120: Fine Art Printmaking

<table>
<thead>
<tr>
<th>Unit code:</th>
<th>R/601/6670</th>
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</thead>
<tbody>
<tr>
<td>Level:</td>
<td>4</td>
</tr>
<tr>
<td>Credit value:</td>
<td>15</td>
</tr>
</tbody>
</table>

### Aim

This unit aims to develop learners’ skills and understanding in realising personal creative intentions through printmaking.

### Unit abstract

Through the process of printmaking, learners can develop an understanding of the potential of traditional or contemporary printmaking media, processes and techniques. In this unit they will also use systematic investigation to extend visual thinking and creativity.

Learners should investigate a range of traditional and non-traditional media to support the creative development of their work. Personal voice and response should be encouraged through an analytical approach to theoretical, contextual and practical work.

Engagement with materials and an awareness of how they can be utilised to create visual meaning should be part of the development process during this unit. It is important that learners gain a thorough understanding of historical and contemporary professional practice through visiting galleries, shops, trade fairs, exhibitions and high-profile retail fairs. In addition guest speakers, practical workshops, arranging visits to professional studios, workshops and appropriate industrial sites will contextualise practical studies.

### Learning outcomes

On successful completion of this unit a learner will:

1. Be able to produce printmaking that communicates a personal creative intention
2. Be able to use materials and techniques to develop ideas towards a personal creative intention
3. Understand formal visual values in printmaking
4. Be able to employ professional practice in printmaking.
Unit content

1 **Be able to produce printmaking that communicates a personal creative intention**

   **Sources:** eg organic, inorganic, others’ work, historical, contemporary, mass media, digital
   **Concepts:** eg formal, philosophical, psychological, religious, ecological, political, emotional
   **Approaches:** eg themes, critical issues, contemporary life, media, society, abstraction, naturalism, realism, expressionism, conceptual, technological, environmental

2 **Be able to use materials and techniques to develop ideas towards a personal creative intention**

   **Traditional materials:** eg ink, oil, varnishes, acrylic, wax, paper (handmade, machine-made), card, shellac
   **Non-traditional materials:** eg toner, found materials, photo-sensitive emulsion, digital technologies, Perspex, vinyl, polythene, plastics, recycled materials, mixed media
   **Traditional techniques:** eg lino, woodcuts, engraving, planographic, etching, drypoint, lithography, serigraph, stencil, screening, paperstencil, photostencil, monoprinting
   **Non-traditional techniques:** eg collograph, transfer, digitised, interactive, found materials, organic, inorganic, inkjet, laser, print in installation, photocopying

3 **Understand formal visual values in printmaking**

   **Formal values:** eg composition, line, tone, texture, colour, shape, pattern, drawing systems, scale, proportion, mass, weight, volume, balance, structure, rhythm, pitch, symmetry, harmony

4 **Be able to employ professional practice in printmaking**

   **Professional practice:** presentation skills eg formal, informal, oral, visual, finished, preparation, work in progress, installation, exhibition, mounted, framed; management skills eg time, communication with external agencies, print editions, fees, financial budgets; resources eg studio workshop, materials
   **Legislation:** public liability; copyright; health and safety
   **Currency:** eg ethical, environmental, public welfare, economic, visual, ecological; cultural
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1  Develop concepts to reflect intentions</td>
</tr>
<tr>
<td>Be able to produce printmaking that communicates a personal creative intention</td>
<td>1.2  Create prints that communicate a personal creative intention</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1  Produce work which demonstrates a creative and sensitive use of materials and techniques</td>
</tr>
<tr>
<td>Be able to use materials and techniques to develop ideas towards a personal creative intention</td>
<td>2.2  Show in the work appropriate use of materials in relation to personal intentions</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1  Determine the extent to which formal values are relevant to creative intentions</td>
</tr>
<tr>
<td>Understand formal visual values in printmaking</td>
<td>3.2  Evaluate the role of formal values in the realisation of creative intentions</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1  Adhere to legislation in working practices</td>
</tr>
<tr>
<td>Be able to employ professional practice in printmaking</td>
<td>4.2  Demonstrate professional working practice</td>
</tr>
<tr>
<td></td>
<td>4.3  Reflect and record success of own work.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 129: Drawing in Fine Art
  - Unit 131: Development of Fine Art Language
- Level 5:
  - Unit 127: Site-Specific Fine Art
  - Unit 128: Commissioned Fine Art Work.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements

This unit will require a well-equipped printmaking workshop to allow learners to develop and extend their ideas in relation to this specialist discipline. Facilities would normally include monoprint, relief, intaglio, serigraphy, screenprinting and lithography.

The use of lens-based and computer facilities within a printmaking context clearly justifies the provision of opportunities at this level of study. Learners will also need access to specialist fine art library resources to develop an understanding of the theoretical approaches governing the production and realisation of ideas, both historical and contemporary.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 121: Fine Art Sculpture

Unit code: L/601/6635
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in realising personal creative intentions through sculpture.

• Unit abstract
Working with sculpture offers learners the opportunity to develop their thinking and making skills in three-dimensions, spatial contexts and in the environment. In this unit they will also use systematic investigation to extend visual thinking and creativity.

Learners should investigate a range of traditional and non-traditional materials to support the creative development of their work. Personal voice and response should be encouraged through an analytical approach to theoretical and practical work.

Engagement with materials and an awareness of how they can be utilised to create visual meaning should be part of the development process during this unit. Learners should investigate ethical and environmental considerations where relevant to their work. Professional practice will underpin learners’ understanding and development of practical work. As part of learners’ emerging professional practice, they should demonstrate how they have exploited and interrogated visual values and the role of the audience.

• Learning outcomes
On successful completion of this unit a learner will:
1 Be able to produce sculpture that communicates personal creative intentions
2 Be able to use materials, techniques and processes to realise personal creative intentions
3 Understand formal visual values in sculpture
4 Be able to employ professional practice in sculpture.
Unit content

1 **Be able to produce sculpture that communicates personal creative intentions**

   *Sources*: eg organic, inorganic, others' work, mass media
   
   *Concepts*: eg formal, philosophical, psychological, religious, ecological, political, emotional, mythological
   
   *Approaches*: eg themes, critical issues, contemporary life, media, society, abstraction, naturalism, realism, expressionism, conceptual, contextual references
   
   *Context*: eg public art commissions, self-generated brief

2 **Be able to use materials, techniques and processes to realise personal creative intentions**

   *Materials*: eg clay, wood, plaster, metals, stone, paper, card, wire, MDF, steel, aluminium, perspex, polythene, styrofoam, glass, fabrics, canvas, leather, rubber, rope, concrete, recycled, found
   
   *Physical properties*: eg mass, strength, miscibility, malleability, friability, flexibility, plasticity, durability
   
   *Visual properties*: eg tone, colour, texture, patina, reflectivity
   
   *Manipulative and technical processes*: accumulative eg modelling, assembling, constructing; subtractive eg carving, cutting; combination processes eg traditional/non-traditional, conventional/non-conventional

3 **Understand formal visual values in sculpture**

   *Formal values*: eg shape, proportion, mass, weight, volume, balance, structure, line, tone, texture, colour, pattern, composition, scale, rhythm, pitch, symmetry, harmony, movement, discord

4 **Be able to employ professional practice in sculpture**

   *Working practice*: presentation skills eg formal, informal, oral, visual, finished, preparation, work in progress, installation, exhibition, mounted, framed; management skills eg time, communication; financial budgets; resources eg studio workshop, materials
   
   *Legislation*: public liability; copyright; health and safety
   
   *Currency*: eg ethical, environmental, public welfare, economic; visual, ecological
   
   *Contextual understanding*: locate own work within contemporary practice; reference contextual sources
## Learning outcomes and assessment criteria

<table>
<thead>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td>The learner can:</td>
</tr>
</tbody>
</table>
| LO1 Be able to produce sculpture that communicates personal creative intentions | 1.1 Develop concepts to reflect intentions  
  1.2 Produce sculpture that communicates personal creative intentions |
| LO2 Be able to use materials, techniques and processes to realise personal creative intentions | 2.1 Produce work which demonstrates a creative and sensitive use of materials and techniques  
  2.2 Show in the work appropriate use of materials in relation to personal intentions |
| LO3 Understand formal visual values in sculpture | 3.1 Determine the extent to which formal values are relevant to creative intentions  
  3.2 Evaluate the role of formal values in the realisation of creative intentions |
| LO4 Be able to employ professional practice in sculpture | 4.1 Adhere to legislation in working practices  
  4.2 Demonstrate professional working practice. |
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 126: Installation and Performance in Fine Art
  - Unit 131: Development of Fine Art Language
- **Level 5:**
  - Unit 127: Site-Specific Fine Art
  - Unit 132: Development of a Fine Art Identity.

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements
This unit will demand a flexible approach when allocating suitable resources. The development and realisation of sculptural work will often depend upon the specific physical, material and technical resources used by learners to express and convey their ideas. A broad range of 2D and 3D workshop/studio facilities (including lens-based) will provide the necessary technical support for the generation of the learners’ evidence.

Resources for research will include the learning resources centre, field trips, exhibitions, galleries and specialist publications. Where a live project is being delivered centres will need to provide facilities for presentation by both clients and learners.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
# Unit 122: Fine Art Ceramics

**Unit code:** D/601/6641  
**Level:** 4  
**Credit value:** 15

## Aim

This unit aims to develop learners’ skills in exploring ceramics as a fine art material, and to develop understanding of conceptual and creative approaches to the medium.

## Unit abstract

This unit allows learners to realise personal creative intentions through ceramics. Through the process of making ceramics, learners can develop an understanding of the potential of traditional and/or contemporary ceramic materials and techniques. In this unit they will also use systematic investigation to develop understanding and extend visual thinking and creativity.

Learners should develop competence in studio practice and observe health and safety legislation in relation to their own and others’ welfare. Learners should be exposed to the breadth of ceramics, both historical and contemporary, with a particular focus on sources, concepts and approaches. They should demonstrate their knowledge and understanding through sharing, discussion, presentation and criticism with tutors, professional practitioners and their peer group. Discussion and criticism should be constructive and build on the learner’s particular skills and potential, as well as concepts and ideas.

Exploration with materials and finding ways to communicate meaning through mark-making, texture, form, shape, surface treatment should be central to the development of ideas and outcomes. Sound technical skills and safe working practice should underpin creative development, however innovative and creative uses of ceramic materials should also be encouraged. Current practice and new approaches to traditional materials should be investigated to contextualise work, eg installation, film and ceramics, craft skills applied to fine art concepts, emerging practice, ceramics and print.

## Learning outcomes

**On successful completion of this unit a learner will:**

1. Be able to produce a portfolio of ceramic work that realises personal intentions  
2. Be able to use ceramic materials and processes  
3. Understand how to research and experiment with formal values  
4. Be able to employ professional practice in fine art ceramics.
Unit content

1 **Be able to produce a portfolio of ceramic work that realises personal intentions**

   Sources: eg organic, synthetic, mechanical, technological, environmental, personal sensations, imagined imagery, historical, contemporary practice

   Ideas and concepts: eg formal, philosophical, the human condition, environmental, social, religious, mythological, psychological (sexuality, emotions, memory, dreams), interaction, non-verbal communication

   Ceramic work: eg vessels, forms, installation, wall piece, re-purposed ceramics, found ceramics, unfired clay, printed ceramic surfaces, tiles, innovative use of ceramic materials, ceramic ephemera (imagery, history, tools, machinery, waste)

2 **Be able to use ceramic materials and processes**

   Materials: clay eg stoneware, earthenware, porcelain, bone china, ‘T’ material, crank

   Physical properties: eg weight, strength, malleability, plasticity, durability, colour, texture, drying process

   Visual properties: eg colour, texture, surface treatment, scale, form, pattern

   Making processes: eg modelling, slab-building, coiling, throwing, moulding, slip casting, turning, decorating, finishing

   Surface treatment: surface decoration eg modelled, carved, incised, mark-making, relief, inlay, burnished, resists, slips, stencils, spray, glaze, digital transfers, screen prints, water-based transfers, enamels, lustre, scraffito, projection, imagery

   Finishing processes: glazes; firing methods eg glaze recipes, application, reduction firing, electric firing, raku, salt, soda

3 **Understand how to research and experiment with formal values**

   Formal values: eg scale, proportion, shape, form, balance, structure, movement, rhythm, colour, surface, pattern, function, communication, expression, meaning

4 **Be able to employ professional practice in fine art ceramics**

   Presentation: communicate ideas eg tutorials, critiques, discussion, visual documentation, recording, sketchbooks, logbooks, preparation of work, exhibition, display, justify

   Management skills: eg time management, resources, communication, workspace/studio management, budget, control of making process

   Legislation: public liability; copyright; health and safety; tax; COSHH

   Ethical and environmental considerations: eg public welfare, economic, sustainability, subject matter
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Establish relevant concepts as a basis for ceramic work</td>
</tr>
<tr>
<td><strong>Be able to produce a portfolio of ceramic work that realises personal intentions</strong></td>
<td>1.2 Investigate relevant sources to develop imaginative and creative ceramic outcomes</td>
</tr>
<tr>
<td></td>
<td>1.3 Evaluate own ceramic work to confirm realisation of creative intentions</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Use processes skilfully and inventively in producing ceramic work</td>
</tr>
<tr>
<td><strong>Be able to use ceramic materials and processes</strong></td>
<td>2.2 Evaluate the use of materials and processes in the production of ceramic work</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Analyse the role of formal values in fine art ceramics</td>
</tr>
<tr>
<td><strong>Understand how to research and experiment with formal values</strong></td>
<td>3.2 Evaluate the role of formal values in the realisation of creative intentions</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Work with awareness of health and safety and other legislation in producing ceramic work</td>
</tr>
<tr>
<td><strong>Be able to employ professional practice in fine art ceramics</strong></td>
<td>4.2 Explain and justify creative intentions in exhibiting ceramic work.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units
This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 121: Fine Art Sculpture
  - Unit 131: Development of a Fine Art Language

- **Level 5:**
  - Unit 127: Site-Specific Fine Art
  - Unit 128: Commissioned Fine Art Work

Links to National Occupational Standards
This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

Essential requirements
This unit will demand that adequate resources are available for handling ceramic materials. These should include specialist workshop(s), storage for raw materials and work in progress, machinery and equipment for clay, slip and glaze preparation, equipment for shaping, forming, constructing and decorating ceramic objects, a separate area for plasterwork and a kiln room.

This unit will require a well-equipped studio/workshop to facilitate learners’ independent exploration of media, materials and practical techniques.

Learners will need access to specialist library resources to research historical and contemporary art theory and practice, as well as other disciplines which may inform learners’ individual ideas.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional Business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 123: Time-based Artwork

Unit code: F/601/6762
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in realising personal creative intentions through time-based artwork.

• Unit abstract
Time-based artwork covers a wide range of applications, such as installation and performance, interactivity and is an important element in contemporary fine art practice. In working on this unit learners should be encouraged to apply systematic investigation into professional practice within time-based artwork. They may use understanding gained to inform their choices of production process, in turn consolidating and further developing their understanding of the properties of video, film, computers and multimedia. Through considering and applying conventional and/or non-conventional sources, concepts and approaches to time-based work they will extend the scope of their visual thinking and creativity.

Learners should research examples of time-based artwork, from pioneering examples to recent practice, to provide a contextual framework for learners’ creative thinking and visualisation. Practical demonstration and technical assistance, particularly in relation to electronic and other technological processes and equipment, should provide learners with skills they can apply to their personal work. Study can be balanced to include application of techniques and processes with creative experimentation. Opportunities for discussion, both one-to-one and in groups, may be used to support a context where increasing independence of working is required.

The communication of creative intentions, from pre-production onwards, may be presented in appropriate formats as evidence. The environment in which the completed work is shown should be considered as an essential component of the whole. Learners may present critical analysis and evaluation of work to peer group and tutors in oral, textual or electronic format. Learners should be able to articulate their own thinking using appropriate language. An understanding of the nature of time-based work in a visual arts context and how creative intentions relate to this may be demonstrated in the work produced.
• Learning outcomes

On successful completion of this unit a learner will:

1. Understand professional practice in time-based work
2. Be able to evaluate technology and processes in time-based work
3. Be able to explore formal values in time-based work
4. Be able to produce time-based work confirming creative intention.
Unit content

1 **Understand professional practice in time-based work**

Presentation skills: tutorials; critiques; discussion; documentation; recording

Management skills: time; finance; funding bids; resources; collaboration; communication

Legislation: public liability; copyright; health and safety eg portable appliance testing, risk assessment

Ethical and environmental issues: ethical eg public, economic, welfare; environmental eg social, visual, ecological

2 **Be able to evaluate technology and processes in time-based work**

Evaluate: select; review eg analyse, critique, confer; act upon eg problem solve, modify, retake, re-edit

Technology: camera eg photo, video, digital; computer eg manipulation/animation/modelling software; sound eg feedback, synthesised, digital; multimedia software eg format, compression, platform, network

Processes: pre-production; production; post-production; tasks eg storyboarding, scanning, importing, shooting to edit, performance (live action, sets, props, direction) assembling assets, editing, digitising; presentation eg public, private, web, sonic environment; format eg monitors, projection, internet, CD ROM

3 **Be able to explore formal values in time-based work**

Visual: images eg camera angles, tone, colour, manipulation, screen design; presentation eg scale, spatial, installation, electronic page

Time-based: installation; performance; collaboration; recording change eg growth, decay; time-lapse; documentary; cyclical eg revisiting, renewing, returning; interactive; web-based eg online exhibition, participation; subsidiary eg recording event; animation eg stop motion, claymation; communication eg navigation, interactive, audio systems; sequencing eg frames, editing, multi-channel, multi-screen
4  **Be able to produce time-based work confirming creative intention**

Sources: brief; client; personal eg experience, imagination, sensation; environmental eg urban, rural, cultural, technological; others' work eg lens, text, performance, digital-based

Concepts: formal eg multi-screen, multi-channel, CD ROM, sound, no sound; philosophical eg contemplative, polemical, sociological, political; psychological eg dreams, identity, emotions, sexuality

Approaches: technological eg video, film, multimedia, audio; communicative eg narrative, animated, interactive, sequential; environmental eg installation, performance, internet, soundscape

Thought processes: conscious eg objective, logical, analytical; intuitive eg subjective, randomly associative, stimulus-led
## Learning outcomes and assessment criteria

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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research professional practice in time-based artwork</td>
</tr>
<tr>
<td>Understand professional practice in time-based work</td>
<td>1.2 Analyse factors influencing time-based artwork</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Select and evaluate technologies used in time-based artwork</td>
</tr>
<tr>
<td>Be able to evaluate technology and processes in time-based work</td>
<td>2.2 Analyse and refine processes to be used in own time-based work</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Investigate formal visual values in developing time-based work</td>
</tr>
<tr>
<td>Be able to explore formal values in time-based work</td>
<td>3.2 Explore use of formats in time-based artwork</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Investigate the potential of sources as starting points for time-based artwork</td>
</tr>
<tr>
<td>Be able to produce time-based work confirming creative intention</td>
<td>4.2 Establish conceptual framework for time-based artwork</td>
</tr>
<tr>
<td></td>
<td>4.3 Produce time-based artwork that confirms creative intention.</td>
</tr>
</tbody>
</table>
Guidance

Links

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 53: 2D Animation Production
  - Unit 56: Producing Video Installation Work
- **Level 4:**
  - Unit 131: Development of Fine Art Language
- **Level 5:**
  - Unit 125: Fine Art Digital Applications
  - Unit 132: Developing a Fine Art Identity.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.

Essential requirements

Learners will require flexible access to art and design studios, interactive media and photographic facilities. Digital technology will form an important resource for this unit, as will video and audio.

Depending on the creative intention, learners will need access to music and performance facilities, installation of completed work in physical space, as opposed to electronic space and locations outside of normal studio/workshop allocation. Tutor and technician support must be available to ensure learners are able to realise intentions in appropriate formats.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by an animator local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 124: Fine Art Ready-mades

Unit code: T/601/6645
Level: 5
Credit value: 15

Aim

This unit aims to develop learners’ understanding of the potential of fine art ready made work and to develop skills in using ready-mades as a vehicle for creative expression.

Unit abstract

The unit enables learners to consider fine art ready-mades as a medium for communicating creative intentions. Through working with ready-made objects, learners can explore associations relating to mass production and pose questions around the notion of the art form as an independently produced, unique artefact. By taking found or appropriated objects and elevating them to the status of artform, learners can explore tensions between the notion of skill-based construction and audience perception.

The historical and contemporary contextual references to developing ready-made work will be addressed through discussion and reflection. Learners will consider the work of artists such as Marcel Duchamp, central in identifying fine art ready-mades as a conceptual basis for creative expression. The notion of the concept as a starting point rather than the retinal image will also be considered.

Learners will develop skills in selecting objects for fine art ready-made work. They will apply understanding gained in researching to inform their ideas generation and application. Issues around parody and iconic images or objects may also be explored. Learners will reflect on the potential in using ready-mades and assisted ready-mades for developing future work that communicates their personal intention.

Learning outcomes

On successful completion of this unit a learner will:

1. Understand the use of fine art ready-mades
2. Understand the potential of fine art ready-mades to communicate intentions
3. Be able to produce fine art ready-mades
4. Be able to evaluate fine art ready-mades.
Unit content

1 **Understand the use of fine art ready-mades**

   **Context:** object; mass production; industrial; technological; personal; historical; political; environmental; cultural; global; local; sustainable; transient; poetical; recyclable; juxtaposition

   **Concepts:** assisted ready-mades; non-retinal starting point; idea; statement; intention; association; appropriation; value; originality; ordinary; conflict

   **Contextual references:** Duchamp; Breton; Surrealism; Dada; Pop Art

2 **Understand the potential of fine art ready-mades to communicate intentions**

   **Potential:** communicate eg association, intention; referencing eg production, application; questioning eg value, skill, originality; subvert eg purpose, idea, image, form; creativity eg formal language, scale, combinations, positioning, installation

   **Intentions:** eg message, idea; comment eg absurdity, humour, mass culture, mass communication, society, value, environmental, sustainability

3 **Be able to produce fine art ready-mades**

   **Produce:** ideas generation; referencing; sourcing eg objects, environments, 2D, 3D, moving image, interactive; adapting eg object, text, image, visuals; subverting eg meaning, association, context

   **Communicate:** intention; textual; visual; information eg statement, verbal, written

   **Present:** eg installation, mounting, lighting, justifying

4 **Be able to evaluate fine art ready-mades**

   **Critical review:** research eg sources, planning, ideas, tasks; production eg materials, objects, supporting information; communication eg message, intention, audience reaction

   **Further developments:** eg additional ideas; refinements; series; adaptations

   **References:** eg historical, contemporary, cultural, contextual
### Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td><strong>The learner can:</strong></td>
</tr>
</tbody>
</table>
| LO1 Understand the use of fine art ready-mades | 1.1 Research contextual influences in fine art ready-made working practice  
1.2 Analyse conceptual approaches applied in fine art ready-mades |
| LO2 Understand the potential of fine art ready-mades to communicate intentions | 2.1 Evaluate potential ideas for communicating through working with fine art ready-made work  
2.2 Analyse conceptual approach to be used to communicate intention |
| LO3 Be able to produce fine art ready-mades | 3.1 Create fine art ready-made work that communicates personal intention  
3.2 Present fine art ready-made work |
| LO4 Be able to evaluate fine art ready-mades | 4.1 Critically review working practice applied to producing fine art ready-made work  
4.2 Identify opportunities for further personal development in fine art ready-made work. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 13: Art, Craft and Design Specialist Contextual Investigation
  - Unit 78: Developing and Realising Fine Art Ideas
- **Level 4:**
  - Unit 3: Contextual and Cultural Referencing in Fine Art
- **Level 5:**
  - Unit 127: Site-specific Fine Art
  - Unit 128: Commissioned Fine Art Work
  - Unit 132: Development of a Fine Art Identity.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements

Learners will need to be supported in considering fine art ready-mades through informative lectures and discussions. The conceptual emphasis on working in this field will necessitate discussion, presentation and critique, with the focus on learners gaining knowledge and understanding of how objects can be redefined in an art context, as pieces of creative work.

Visits to galleries and specific exhibitions will be used to demonstrate the nature of the work in this area, and the methods used to display and support it. Where learners are preparing statements, they must be provided with historical and contemporary examples from the work of others.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a fine artist local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme. Local recycling centres may provide a useful source of objects that can be re-made as artwork.
Unit 125: Fine Art Digital Applications

Unit code: A/601/6761
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners’ understanding and skill in using digital applications in fine art practice.

• Unit abstract
Learners will gain practical experience of a range of 2D, 3D and moving image digital applications, contextualised within their developing fine art practice. Work in this unit may range from experimental electronic imaging, to specific digital investigation as part of the creative process. Manipulation, modeling, animation and time-based processes may be explored in the work learners produce.

Learners will consider the role and effectiveness of 2D, 3D and moving image digital artwork in meeting creative intentions. They will research examples of artists’ work, particularly within contemporary practice. Learners will consider how sources, concepts and approaches are used by artists to empower their potential to communicate. Technological advances place the digital environment at the forefront of our sphere of communication, and learners will consider how they can develop creative strategies to exploit this through their working practice.

Learners’ work will demonstrate a balance between individual interpretation and creativity with skills in applying digital technologies.

Learners will demonstrate that they can explore, investigate and realise in digital formats. Emphasis will be placed on the body of digital work completed. Learners will be critically aware of how each stage of the creative and technological process contributes towards the images produced.

• Learning outcomes

On successful completion of this unit a learner will:
1 Understand the use of digital applications
2 Be able to explore digital applications
3 Be able to produce digital work that confirms creative intentions
4 Be able to evaluate own digital work.
Unit content

1 Understand the use of digital applications

Digital applications: video; animation; stills; web-based; camera eg still, moving image; digital print eg laser, inkjet; sound eg soundscape, narration, musique concrete
2D: image capture eg scanning artwork, drawing, painting, mark making, printmaking; photography; illustration
3D: eg modeling, animation, rendering, special effects
4D: eg time based, installation, interactive, performance
Context: eg communication, creative, gallery, social networking; web-based eg blog, vlog, portfolio; interdisciplinary
References: eg contemporary practice, others’ work, exhibitions, events, publications

2 Be able to explore digital applications

Explore: potential eg image scanning, capture, screen processing; software eg photographic, image handling, desktop publishing, PDF, compression, 3D modeling, installation
Experiment: open-ended; consider opportunities; brief eg self-directed, set; creative eg imagery, textual, sound
Reflect: results; exploration; ideas; sources; imagery; audio; technical factors; creative development; intention

3 Be able to produce digital work that confirms creative intentions

Creative intentions: communication; audience; concept; approach; working practices; planning; technical factors eg software, size, colour; image quality, platform
Influences: eg own work, work of others, historical, contemporary
Select: eg media, applications, technical requirements, presentation methods; confirm eg intention, subject, starting points
Produce: source eg subject, imagery; capture eg import, export, manipulate; output
Presentation: format eg 2D, 3D, 4D, printed, screen, web, CD ROM, DVD

4 Be able to evaluate own digital work

Preparation: research; format; visual language eg scale, colour, form; technical factors eg scanning, software, manipulation, output, sound
Content: eg images, subject, theme, clarity, detail, visual, audio, venue
Evaluate: planning; intuition; response; technological; communication; content; format; intentions; reaction
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tbody>
</table>
| **LO1** Understand the use of digital applications | 1.1 Analyse the use of digital applications in current fine art practice  
1.2 Evaluate digital applications used in fine art |
| **LO2** Be able to explore digital applications | 2.1 Carry out practical exploration using digital applications  
2.2 Reflect on potential of own experimental digital fine art work |
| **LO3** Be able to produce digital work that confirms creative intentions | 3.1 Select digital applications to be used in own fine art work  
3.2 Produce digital fine art work to realise creative intentions |
| **LO4** Be able to evaluate own digital work | 4.1 Describe working practices employed in producing own digital fine art work  
4.2 Evaluate effectiveness of digital applications in realising creative intentions. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 120: Fine Art Printmaking
  - Unit 126: Installation and Performance in Fine Art.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

Flexible access to computers, media, multimedia and photographic facilities at the centre will be required, to facilitate a range of 2D, 3D and 4D options to match learners’ creative intentions. If completed work is to be presented in a physical space, as opposed to electronic or 2D paper-based formats, this may demand locations which are outside normal studio and workshop allocations.

Although learners tackling this unit should be sufficiently competent in digital technologies in order to work independently, some tutor and technician support should be available to provide demonstrations and one-to-one teaching of areas such as specialist software.

Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers to provide work experience. A lecture or visit by a photographer local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme. Useful information on contemporary practice can be found at The Artists Information Company (www.a-n.co.uk).
Unit 126: Installation and Performance in Fine Art

Unit code: Y/601/6654
Level: 4
Credit value: 15

• Aim

This unit aims to develop learners’ skills in applying their personal creative intentions through fine art installation and performance.

• Unit abstract

In this unit learners will explore ideas and issues of personal significance through the physical creation or transformation of a space, live performance or a combination of both. Learners will explore the expressive and communicative relationships that exist between themselves, the environment or event they create and their audience. Learners will take into account a range of technical and organisational problems; develop awareness of other artists’ work in this field and contribute to their own personal fine art development.

• Learning outcomes

On successful completion of this unit a learner will:
1. Be able to explore ideas through installation or performance art
2. Be able to plan the implementation of selected ideas
3. Be able to physically create or adapt an environment or space, or stage a live performance to realise intentions
4. Be able to test an outcome through the participation of a live audience.
Unit content

1 Be able to explore ideas through installation or performance art

Potential starting points: eg personal interests, experiences, memories, beliefs, observations, intentions, feelings, environmental, cultural/ethical issues

Development: eg connections with own past work, work of other artists

2 Be able to plan the implementation of selected ideas

Initial research: eg survey locations, audition, collect relevant information, libraries, the internet

Outline proposals: eg plans, scripts, scores, storyboards

Detailed planning: eg methods of construction, materials, characterisation, costume, choreography, scripts, audio/video technology, lighting, cost, health and safety

Test viability: eg models, mock-ups, computer modelling, video shorts, rehearsals

3 Be able to physically create or adapt an environment or space, or stage a live performance to realise intentions

Implement proposal: eg construct, install, light, sound, direct, build team, stage, employ special effects, make props

4 Be able to test an outcome through the participation of a live audience

Organise: eg physical access, publicity, consider audience interaction, health and safety issues

Record outcome: eg photography, film, video, tape/slide, CD ROM

Evaluate: eg successes, shortcomings, failures, the unexpected, audience response, through discussion, interview, questionnaire
## Learning outcomes and assessment criteria

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<tr>
<td>LO1 Be able to explore ideas through installation or performance art</td>
<td>1.1 Generate viable ideas</td>
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<tr>
<td></td>
<td>1.2 Develop methods to visualise, record and communicate ideas</td>
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<tr>
<td></td>
<td>1.3 Review the potential of ideas</td>
</tr>
<tr>
<td>LO2 Be able to plan the implementation of selected ideas</td>
<td>2.1 Carry out research and development to test the viability of ideas</td>
</tr>
<tr>
<td></td>
<td>2.2 Present detailed and informative plans and proposals</td>
</tr>
<tr>
<td>LO3 Be able to physically create or adapt an environment or space, or stage a live</td>
<td>3.1 Demonstrate technical and organisational skills</td>
</tr>
<tr>
<td>performance to realise intentions</td>
<td>3.2 Manage a project through to its conclusion</td>
</tr>
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<td></td>
<td>3.3 Implement inventive problem solving</td>
</tr>
<tr>
<td>LO4 Be able to test an outcome through the participation of a live audience</td>
<td>4.1 Organise safe public access and participation</td>
</tr>
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<td></td>
<td>4.2 Evaluate results against intentions and audience response</td>
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<td></td>
<td>4.3 Record and document the final outcome.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 131: Development of Fine Art Language
- **Level 5:**
  - Unit 118: Management of Fine Art Exhibitions
  - Unit 132: Development of a Fine Art Identity.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design.

Essential requirements

To allow for the diversity of approach inherent in this unit, learners should have access to a range of facilities. These should include 3D workshops and equipment that may be taken offsite. Offsite work must be monitored for legal and safety reasons.

Technician support is a requirement, particularly when electricity, lighting and sound are to be installed. In the case of rehearsal and performance, adequate space must be available and public access and egress must conform to health and safety regulations. Adequate photographic processing and video production equipment should be available for final documentation.

Employer engagement and vocational contexts

Centres should develop links with practising artists, performers and designers, to deliver assignments. Public spaces may be sought through links with the community.
Unit 127: Site-specific Fine Art

Unit code: M/601/6658
Level: 5
Credit value: 15

• Aim
The aim of this unit is for learners to develop skills and understanding in making permanent or temporary works for specific public sites, purposes or events.

• Unit abstract
Learners will investigate the creative potential and physical characteristics of identified sites, determine work and prepare proposals. Learners will be exposed to a range of influences, with a particular focus on sources, concepts and approaches for site-specific work. Learners will demonstrate their knowledge and understanding, sharing discussion, presentation, criticism with tutors, professional practitioners and their peer groups.

• Learning outcomes
On successful completion of this unit a learner will:
1 Be able to research site-specific artwork
2 Understand the potential for site-specific artwork
3 Be able to prepare proposals for work
4 Be able to implement proposals.
Unit content

1  **Be able to research site-specific artwork**

   Physical characteristics: area; accessibility; surroundings; visibility; limitations; health and safety

   Site content: creative potential of site context and content eg function, urban/rural, interior/exterior, available materials, temporary/permanent, participation of others

2  **Understand the potential for site-specific artwork**

   Site context: eg historical references, archaeological references, geographical location, cultural associations, social associations

3  **Be able to prepare proposals for work**

   Proposals: specifications eg commissioned/non-commissioned, formal/informal, real/speculative, public/private/personal

   Creative intentions: sources eg organic, synthetic, environmental, personal, historical

   Concepts: eg formal, philosophical, psychological

   Approaches: eg analytical, expressive, experimental

   Technical methods: time-based eg film, video, performance; space-based eg sculpture, painting, installation; feasibility eg size, cost, materials, constraints

4  **Be able to implement proposals**

   On-site: environmentally based work eg starting points, research, proposals, assembly

   Off-site: studio-based work eg prefabrication, evolution of ideas, progression of work, consultation

   Evaluation: in relation to proposals; creative intentions and technical methods
## Learning outcomes and assessment criteria

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<tr>
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<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research site-specific work</td>
</tr>
<tr>
<td>Be able to research site-specific artwork</td>
<td>1.2 Evaluate the work of others to inform own practice</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Analyse physical characteristics, health and safety, content and context of a specific site</td>
</tr>
<tr>
<td>Understand the potential for site specific artwork</td>
<td>2.2 Evaluate creative potential for site-specific artwork in relation to site, purpose and constraints</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Identify human and physical resources necessary to implement proposals</td>
</tr>
<tr>
<td>Be able to prepare proposals for work</td>
<td>3.2 Determine a schedule of activities to implement proposals</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Carry out on-site and off-site activity to realise creative intentions and proposals</td>
</tr>
<tr>
<td>Be able to implement proposals</td>
<td>4.2 Review success of project.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 117: Exhibition of Fine Art Work
- Level 5:
  - Unit 118: Management of Fine Art Exhibitions.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

It is essential that adequate resources are available for handling ceramic materials. These should include: specialist workshop(s); storage for work in progress and raw materials; machinery and equipment for clay, slip and glaze preparation; equipment for shaping, forming and constructing ceramic objects; a separate area for plasterwork; a kiln room; computer-assisted design programmes (3D modelling programmes if possible); and reference collections.

This unit will require a well-equipped studio/workshop to facilitate the learner’s independent exploration of media, materials and practical techniques. Learners will need to have access to specialist library resources in order to research historical and contemporary art theory and practice, as well as other disciplines which may inform learners’ individual ideas.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

• Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

• Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of 'live projects' for example to support the vocational content of the unit and programme.
Unit 128: Commissioned Fine Art Work

Unit code: F/601/6888
Level: 5
Credit value: 15

• Aim
This unit aims to develop learners' understanding of the commissioning process through development of a proposal.

• Unit abstract
In this unit learners will work to commissions, agree contracts and execute artwork. They will seek out, meet and make contracts with private or public clients. Learners will determine and agree approaches to work and expected outcomes. They will carry out the work according to the contract in order to realise agreed outcomes and will evaluate outcomes in discussion with the client.

Delivery of this unit should be practical. Tutors will need to provide specialist guidance relative to the commissioning process.

• Learning outcomes

On successful completion of this unit a learner will:
1. Be able to initiate and agree a contract with the client
2. Be able to agree approaches to work with the client
3. Be able to develop a proposal for a client
4. Be able to carry out contracted work to realise agreed outcome.
Unit content

1 Be able to initiate and agree a contract with the client
   Client: eg individual/corporate, private/public
   Financial basis: eg fees, cost, time, expenses, insurance, penalties
   Expected outcomes: eg client’s requirements, nature of work, deadlines, creative expectations, materials, technical specifications

2 Be able to agree approaches to work with the client
   Practical arrangements: eg stages, materials, access to subject/site, transport, payment
   Creative intentions: sources eg organic, synthetic, environmental, personal, historical; concepts eg formal, philosophical, psychological; approaches eg analytical, expressive, experimental
   Differences of opinion: eg style, taste, content, timescale

3 Be able to develop a proposal for a client
   Prototype: eg model, maquette, drawing, painting, photographs
   Revisions: eg to cost, materials, site

4 Be able to carry out contracted work to realise agreed outcome
   Development: eg starting points, evolution of ideas, resolution of ideas
   Completion: eg realisation of agreed expected outcomes, handover to client
   Evaluation: eg in relation to contract, agreed expected outcomes, aesthetic criteria
Learning outcomes and assessment criteria

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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td>The learner can:</td>
</tr>
</tbody>
</table>
| LO1 Be able to initiate and agree a contract with the client | 1.1 Make contact with a client  
1.2 Establish a financial agreement  
1.3 Agree expected outcomes |
| LO2 Be able to agree approaches to work with the client | 2.1 Agree approaches to work with client  
2.2 Determine practical arrangements with client  
2.3 Resolve any differences with client |
| LO3 Be able to develop a proposal for a client | 3.1 Produce a proposal  
3.2 Develop a prototype  
3.3 Discuss and agree any changes to commissioned work |
| LO4 Be able to carry out contracted work to realise agreed outcome | 4.1 Develop and resolve ideas  
4.2 Complete and meet agreed outcomes  
4.3 Evaluate final commissioned artwork. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 117: Exhibition of Fine Art Work
  - Unit 121: Fine Art Sculpture
- Level 5:
  - Unit 118: Management of Fine Art Exhibitions.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design.

Essential requirements

This unit requires learners to visit and/or contact a variety of venues, individuals and organisations for research and discussion relating to potential commissioned artwork.

The unit will require suitable workshop resources to allow learners to employ 2D/3D/4D techniques according to the nature of the commissioned work.

Employer engagement and vocational contexts

Centres should develop links with commissioning agents to deliver projects to learners or provide work experience.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.
Unit 129: Drawing in Fine Art

Unit code: J/601/6794
Level: 4
Credit value: 15

• Aim
This unit aims to develop learners’ skills and understanding in realising personal creative intentions through using traditional and alternative forms of drawing within a fine art context.

• Unit abstract
It is expected that this unit will provide a starting point for learners wishing to understand the nature of drawing practice in relation to theory in fine art. Learners will be expected to develop a versatile and creative approach in their practice of mark-making skills, matching these to specific intentions for fine art work. Current practice and new approaches to traditional drawing materials and subjects should be investigated to contextualise work such as visualisation techniques applied to fine art concepts such as recording on various grounds, 3D maquettes, use of found media, moving image and digital recording.

Through drawing learners will be encouraged to investigate experimental and traditional methods in relation to the development of their own ideas. Through their explorations, they will develop an understanding of the potential of contemporary and historical drawing media, processes and techniques. The unit might well be delivered in different stages throughout the course as learners develop their recording skills. Primary source studies from the human form and environment will form the basis for traditional and new drawing practices to develop on the one hand, accurate recording and anatomical knowledge and on the other, fluid visual thinking and tactile appreciation.

In this unit learners will also use exploratory methods to develop their understanding and extend their visual thinking and creativity. Through research and experimentation, learners will enquire into cultural and historical drawing traditions and contemporary developments in drawing. They will extend their knowledge and understanding through seminar sessions with their tutors, visiting professional practitioners and their peer group. Through constructive critical discussion, they will develop their concepts and ideas and personal visual voice. They will be expected to understand and explain the relationships between mark making (the use of line, tone, form, shape and surface treatment), the presentation format and the information they wish to record and convey.
Learning outcomes

On successful completion of this unit a learner will:

1. Understand how to explore contemporary and historical drawing media, processes and techniques
2. Be able to select appropriate drawing approaches in relation to personal intentions
3. Be able to produce a portfolio of drawing in a fine art context
4. Be able to develop drawing techniques through review of own and others’ work.
Unit content

1 Understand how to explore contemporary and historical drawing media, processes and techniques

Components: context; others’ work; contemporary and historical; perceptions, ideas, intention eg purpose, meaning; formal elements eg line, tone, form, colour, shape, surface treatment

Formal values: visual language eg scale, proportion, shape, form, balance, structure, movement, rhythm, colour, surface, pattern, function, communication, expression, meaning; breaking rules, conventions

Application: techniques; methodology; approaches eg planar, spatial, electronic

Material and method: tools; equipment eg graphite, pencil and paper, inks, paint, print media, brushes, papers; 3D facilities; malleable and non-malleable media; digital software; lens-based media; method, approach eg CAD, technical, cartoon, architectural, wire frame, satirical, engraving, scientific, topographic, surface design, medical, botanical, anatomical

2 Be able to select appropriate drawing approaches in relation to personal intentions

Intention: method; approach eg gestural, schematic, expressive, objective, analytical, tactile

Presentation: format; size; form; shape and surface eg large-scale studies, miniatures, series, life studies, mixed media, digital, 3D maquettes

3 Be able to produce a portfolio of drawing in a fine art context

Components: context; intention; formal elements eg select in terms of context and intentions, line, tone, texture, colour, contour

Application: techniques; methodology; approaches eg planar, spatial, electronic

Material: drawing media and tools eg graphite/pencil and paper, ink/brush and paper, wire/pliers and space, tables, digital mouse, touch sensitive, interactive, programmed

Sources: primary; secondary; contextual eg organic, synthetic, mechanical, technological, environmental, personal sensations, imagined imagery, historical, contemporary practice

Ideas and concepts: formal; expressive; abstract eg philosophical, the human condition, environmental, social, religious, mythological, psychological (sexuality, emotions, memory, dreams), interaction, non-verbal communication, gestural, graffiti, delineation, ownership, branding

Work: ideas; drawings; outcomes eg studies, storyboards, models, illustrations, mock-ups, projections, models, maquettes
4 Be able to develop drawing techniques through review of own and others’ work

Review: analyse and evaluate eg select, comment, justify, critiques, modify, explore, techniques, approaches, outcomes presentation format(s)

Propose: selection; context; communication eg, specific uses, meaning, techniques, future development; media eg 2D, 3D, time-based, and mixed media
# Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of this unit a learner will:</td>
<td>The learner can:</td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Analyse contemporary and historical contexts for drawing</td>
</tr>
<tr>
<td>Understand how to explore contemporary and historical drawing media, processes</td>
<td>1.2 Evaluate contemporary and historical drawing media, processes and techniques</td>
</tr>
<tr>
<td>and techniques</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Expand on and exploit different forms of mark making</td>
</tr>
<tr>
<td>Be able to select appropriate drawing approaches in relation to personal</td>
<td>2.2 Determine specific uses for drawing in the development of own ideas and information</td>
</tr>
<tr>
<td>intentions</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Create and present a portfolio of imaginative and creative drawing studies in a fine</td>
</tr>
<tr>
<td>Be able to produce a portfolio of drawing in a fine art context</td>
<td>art context</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Review mark-making techniques used in own and others’ work</td>
</tr>
<tr>
<td>Be able to develop drawing techniques through review of own and others’ work</td>
<td>4.2 Use specific ideas and information to innovate with techniques and approaches</td>
</tr>
<tr>
<td></td>
<td>4.3 Use findings to modify and adapt working practices.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 84: 2D, 3D and Time-based Digital Applications
  - Unit 130: Drawing Techniques and Processes in Art and Design
- Level 5:
  - Unit 133: Personal Development Through Drawing.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- CCSkills Sector Skills Council
  - Crafts
  - Design
- Skillset Sector Skills Council
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

In order to identify and explore a variety of mark-making techniques, including dry, wet and mixed media combinations, learners will need to understand the wide-ranging contemporary use of digital drawing and recording through lens-based media in a fine art context. Learners should be given opportunities to develop their drawing ideas through model making, samples, maquettes and 3D digital imaging. Primary sources including access to the life model should be encouraged as starting points for development of ideas and use of media.

Learners will require a well-equipped drawing/recording workshop with access to a broad range of wet and dry 2D resources such as drawing, painting, printmaking, engraving, fine art textile media and, where appropriate, 3D resources such as constructing, carving and modelling, video, film and installation media to develop and extend their ideas in relation to drawing in a fine art context. Access to a well-equipped range of facilities will encourage the use of specialist, traditional and non-traditional recording media, materials and techniques.

Learners will need access to both broad-based and specialist fine art resources to cover the practical and theoretical approaches involved in the practice of fine art drawing.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 130: Drawing Techniques and Processes in Art and Design

Unit code: L/601/6764
Level: 4
Credit value: 15

Aim
This unit aims to develop and extend learners’ technical and creative skills through drawing and their understanding of drawing media, materials and techniques.

Unit abstract
In this unit learners will be encouraged to develop visual thinking and creativity as fundamental to all design work. It will enable learners to experiment with drawing approaches and techniques in order to broaden their experience and understanding of visual language. Learners will need to use traditional art and design materials and media, as well as extending their visual language and creativity through experimenting with unusual materials and media.

Learners will need to gain information and inspiration from good quality contextual examples. In particular, primary sources from visits to galleries or from visiting speakers will promote their understanding of others’ approaches to drawing. Learners’ exploration of others’ work should include contemporary and cultural visual language, with the focus on mark-making techniques, formal elements, responses, moods and emotions evoked.

Learners can present analysis and evaluation of their own and others’ work in written assignments or to peer groups and tutors for discussion. Learners should be able to articulate their own thinking using appropriate language through discussion and evaluation, demonstrating an informed understanding of visual thinking and creativity in their drawing techniques and approaches.

Learning outcomes
On successful completion of this unit a learner will:
1 Understand how to analyse the use of drawing media, materials and techniques
2 Be able to use drawing techniques and processes creatively
3 Be able to extend visual language
4 Be able to evaluate work for further development.
Unit content

1 **Understand how to analyse the use of drawing media, materials and techniques**

Drawing media and materials: traditional and non-traditional media eg 2D, pencil, compressed/willow charcoal, marker pens, chalk, oil, pastels, graphite, dry pigment, silver point, inks, dyes, various paints, print media, found objects, created drawing tools; 3D eg wire, withies, clay, plaster, carving blocks, found objects, malleable and non-malleable card, papers, wood, metal, plastics; 4D eg digital processes, photography, film, video

Approaches: mark-making; formal elements; visual language eg methods, techniques, tools, wet and dry media, traditional and non-traditional, own and others' work

Communication: ideas; concepts eg formal, informal, functional, illustrative, social, political, environmental, spiritual, mood, personal expression

2 **Be able to use drawing techniques and processes creatively**

Application of materials and techniques: traditional; non-traditional eg 2D, 3D, 4D media
Creative approaches: experimental, exploratory, chance, scale, mixed-media, analytical, expressive, formal, informal, lateral thinking

Concepts: ideas; development eg activities, projects, briefs; contrasts eg hot/cold, dry/wet, soft/hard, alive/dead, dark/light; abstract, formal, informal

3 **Be able to extend visual language**

Visual language: own and others' work eg concepts, meaning, purpose, communication, formal, informal, semiotics, semantics, symbolism, icons

Formal values: formal elements; visual language eg scale, proportion, shape, form, balance, structure, weight, composition, mass, space, volume, movement, rhythm, colour, surface, pattern, function, communication, expression, meaning

4 **Be able to evaluate work for further development**

Development: analysis eg deconstruction, personal judgements, connections, contexts; outcomes eg strength, weakness, success, failure; criteria eg creativity, ideas, opinions, peers, tutors

Refinement: review; adaptation; eg outcomes, modification, reconstruction, development, presentations, critiques, evaluation

Opportunities: developments; future eg applications, further study, planning, strategies
Learning outcomes and assessment criteria

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<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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</tr>
</tbody>
</table>
| **LO1** Understand how to analyse the use of drawing media, materials and techniques | 1.1 Research and record specific qualities of various media in own and others’ work  
1.2 Evaluate use of own and others’ drawing media, materials and techniques |
| **LO2** Be able to use drawing techniques and processes creatively | 2.1 Produce creative work showing imaginative approaches to drawing techniques and processes  
2.2 Show originality and innovation in portfolio of drawing |
| **LO3** Be able to extend visual language | 3.1 Demonstrate a creative and effective use of visual language  
3.2 Develop new ideas and approaches as a result of analysis, evaluation and discussion |
| **LO4** Be able to evaluate work for further development | 4.1 Analyse own work in meeting personal intentions  
4.2 Evaluate response of others to own work. |
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 3:**
  - Unit 1: Visual Recording in Art and Design
  - Unit 5: Contextual Influences in Art and Design
- **Level 4:**
  - Unit 129: Drawing in Fine Art
  - Unit 131: Development of Fine Art Language
- **Level 5:**
  - Unit 12: Personal and Professional Development
  - Unit 132: Development a Fine Art Identity.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging.
Essential requirements

To identify and explore a variety of mark-making techniques, including dry, wet and mixed media combinations, learner’s will need to understand the wide-ranging contemporary use of digital drawing and recording through lens-based media in a fine art context. Learners will need to be given opportunities to develop their drawing ideas through model making, samples, maquettes and 3D digital imaging.

Learners will require a well-equipped drawing/recording workshop with access to a broad range of wet and dry 2D resources such as drawing, painting, printmaking, engraving, fine art textile media and, where appropriate, 3D resources such as constructing, carving and modelling as well as video, film and installation media to develop and extend their ideas in relation to drawing techniques. Access to a well-equipped range of facilities will encourage the use of specialist, traditional and non-traditional drawing media, materials and techniques.

Learners will need access to both broad-based and specialist fine art resources to cover the practical and theoretical approaches involved in the practice of fine art drawing techniques.

The use of computer facilities and software packages for use within a fine art context clearly justify the provision of opportunities at this level of study.

Learners will also need access to specialist fine art resources through learning centre resources, local and national exhibitions and digital information sources, to develop their research skills and to promote their understanding of the theoretical approaches, both historical and contemporary, governing the production and realisation of ideas through drawing techniques. Resources for research may include the internet, websites, CDROM, databases, specialist publications, galleries, exhibitions, questionnaires and interviews with practitioners.

Employer engagement and vocational contexts

Centres should develop links with practising architects, designers and other professionals to deliver lectures and assignments to learners or to provide work experience. Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

• Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

• Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design have launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

The Chartered Society of Designers (www.csd.org.uk) is a professional body for all designers. It provides portfolio ‘gyms’ for students and graduates, a work placement register for student members, careers and industry information plus regularly updated news and events pages.
Unit 131: Development of Fine Art Language

Unit code: D/601/5389
Level: 4
Credit value: 15

Aim
This unit aims to develop learners’ awareness of fine art as a means of communication and extend their knowledge of visual language through application in their own work.

Unit abstract
In this unit learners will develop an awareness of fine art as a means of communication. Through practical and theoretical work they will develop their knowledge of visual language, expand their visual literacy and refine their working vocabulary. They will consider how ideas, information and feelings can be articulated, transformed and conveyed through visual systems and conventions. Learners will reflect on historical precedents and draw on their own experiences.

The theoretical element of this unit will be focused on fine artists’ visual language communication ideas and methods. Learners will be introduced to the varied approaches that historical and contemporary artists use to communicate different messages.

Slide demonstrations, discussions and handouts will provide information and develop learner understanding. An active and experimental approach is required to deliver the practical learning outcomes of this unit. Learners will be encouraged to explore the physical and expressive qualities of various media and methods of application and at the same time consider the relationships that exist between medium, application and message.

Learning outcomes
On successful completion of this unit a learner will:

1. Understand the role of visual language in historical and contemporary fine art
2. Understand how visual language conventions are used in fine art
3. Be able to use expressive visual language in own work.
Unit content

1 **Understand the role of visual language in historical and contemporary fine art**

   Research: primary; contextual eg contemporary, historical artists, professional practitioners, visits, local, national, visiting lecturers, speakers, slide shows; electronics sources eg computer-based data, internet, Opacs, CDROM eg films, DVD, video; paper-based materials eg learning resources centre, lectures, group presentations, study skills

   Evaluate: contexts eg selections, contemporary, historical artists, professional practitioners; analysis eg personal judgements, sources eg communication, meaning, purpose, intention, interrelationships, comparisons, wider context

2 **Understand how visual language conventions are used in fine art**

   Visual representation: figurative; abstract eg schematic methods, description, visual transformation

   Visual conventions: communication eg signs, symbols, narrative, visual metaphor

   Specific information: ideas; qualities eg emotive, formal, conceptual, abstract, philosophical, social, personal

   Influences: contexts eg historical and contemporary art, primary sources eg museums, galleries; secondary sources eg libraries, internet, discussion, lectures, seminars

   Communication: ideas; concepts eg interpretation eg others’ art, similarities, differences, comparisons; visual arts eg theatrical productions, installations; music eg sound pictures, literature; psychology of perception; combinations of art forms

3 **Be able to use expressive visual language qualities in own work**

   Visual language: formal elements eg line, tone, colour, shape, composition, scale, surface, form, space, movement, mass, volume, texture

   Expressive potential: fine art media; techniques; processes eg traditional and non-traditional, mixed media, 2D, 3D, time-based, experimentation, exploration; tools and equipment eg drawing, painting, printmaking, mixed media, montage, collage, low relief, modelling, constructing, carving, incising, photography, film, digital imaging, computers, software

   Outcomes: visual language eg composition, format, structure, design, scale, surface, form, space, movement, mass, volume, texture; fine art work eg studies, sketches, roughs, models, maquettes, worksheets; assignments eg activities, projects, briefs; finished pieces eg paintings, prints, 3D forms, sculptures, time-based outcomes, installations
## Learning outcomes and assessment criteria

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<tr>
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<td><strong>The learner can:</strong></td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Research visual language used by historical and contemporary fine artists</td>
</tr>
<tr>
<td>Understand the role of visual language in historical and contemporary fine art</td>
<td>1.2 Evaluate others’ use of visual language</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Analyse various visual language conventions in historical and contemporary fine art</td>
</tr>
<tr>
<td>Understand how visual language conventions are used in fine art</td>
<td>2.2 Propose way of using visual language conventions in own work</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Exploit and evaluate the expressive qualities and potential of visual language in own work</td>
</tr>
<tr>
<td>Be able to use expressive visual language qualities in own work</td>
<td></td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- **Level 4:**
  - Unit 84: 2D, 3D and Time-based Digital Applications
  - Unit 130: Drawing Techniques and Processes in Art and Design

- **Level 5:**
  - Unit 133: Personal Development Through Drawing.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design

- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

Because this unit encourages learners to develop a broad, practical understanding of the expressive power of visual language, learners should have good access to a wide variety of resources. These can include various wet and dry drawing and painting media, collage, computer and photocopier image manipulation, and a range of conventional and non-conventional 3D materials, both plastic and rigid.

The use of lens-based and computer facilities in developing a fine art visual vocabulary clearly justify the provision of opportunities at this level of study.

The theoretical aspects of this unit means that access to specialist fine art resources will be needed to develop an understanding of the theoretical approaches, both historical and contemporary relating to the communication of fine art ideas.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk
- Business and finance advice:
  - Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural Skills (www.ccskills.org.uk), the sector skills council for design has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.

Skillset, the sector skills council for creative media, provide details on their photo pages (www.skillset.org/photo) about careers advice and industry information, plus a regularly updated news and events page.
Unit 132: Development of a Fine Art Identity

Unit code: Y/601/5391
Level: 5
Credit value: 15

• Aim

This unit aims to develop the learner’s potential for their development of a personal identity within the context of fine art practice.

• Unit abstract

In this unit learners will be expected to produce a body of work that reflects a rigorous examination of their chosen subject. In working through the unit the learner will demonstrate their growing individual identity within the context of fine art practice. This unit will address issues relating to learners’ creative drive and self-motivation.

This unit may well be pursued in a linear fashion over much of the programme, allowing opportunity for learners to reflect and reaffirm their growing individuality through work carried out in other units.

Whatever the approach or medium, the learner will provide evidence of sustained investigation that reflects genuine personal involvement. The learner will experiment with fine art media and processes, acquire skills and show a growing individual artistic identity that is echoed and confirmed by work produced in other chosen units. Learners will produce a substantial body of work that reflects an informed and intelligent response to their chosen subject and to demonstrate the ability to measure their work against their expressive and intellectual intentions.

• Learning outcomes

On successful completion of this unit a learner will:

1. Be able to identify a complex subject that has potential for sustained personal investigation
2. Be able to devise appropriate strategies for research exploration of the chosen subject
3. Be able to develop a personal identity through an imaginative and creative portfolio
4. Be able to demonstrate an informed critical understanding of the work produced.
Unit content

1. **Be able to identify a complex subject that has potential for sustained personal investigation**

   **Subject:** personal interest eg memories, observations, experiences, beliefs, attitudes

   **Starting points:** physical world eg human form, landscape, objects; perceptual and sensory phenomena eg illusion, allusion, balance, movement, touch, space, surface, colour distortion; conceptual issues eg gender, alienation, politics, time

   **Identify:** select eg decision-making, personal brief, planning

2. **Be able to devise appropriate strategies for research exploration of the chosen subject**

   **Strategies:** investigate eg subject matter, media, discipline, action planning, cross-reference art forms, cross boundaries

   **Research:** source material eg contextual links, visits, locations, historical precedents, chance events

   **Form and content:** ideas eg outline plans, drawings, annotated sketches, models, storyboards; media eg drawing, painting, printmaking, modelling, constructing, carving, photography, film, video

3. **Be able to develop a personal identity through an imaginative and creative portfolio**

   **Body of work:** subject matter; ideas; outcomes eg concepts, media, exploration, review, development, final pieces

   **Accident and chance:** idea; media eg creative opportunity, serendipity, found objects, experiments, mixed media

   **Skills:** technical; conceptual eg media, processes, techniques, ideas, imagination, lateral thinking

   **Identity:** practice; theory eg contextual connections, influences, analysis, review, judgements, development, expressive, formal, personal, outcomes

4. **Be able to demonstrate an informed critical understanding of the work produced**

   **Critical understanding:** review; analysis eg intention, judgements, critiques, influences, purpose, meaning, contexts, developments

   **Informed:** contextual connections eg analogies, others’ work, influences, personal, cultural identity, directions, potential, future
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</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Review and evaluate a range of potential subjects</td>
</tr>
<tr>
<td>Be able to identify a complex subject that has potential for sustained personal investigation</td>
<td>1.2 Select subjects for personal investigation</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Plan and investigate procedures to explore the chosen subject</td>
</tr>
<tr>
<td>Be able to devise appropriate strategies for research exploration of the chosen subject</td>
<td>2.2 Collect information, using primary and secondary sources, to develop and support intentions</td>
</tr>
<tr>
<td></td>
<td>2.3 Experiment with appropriate fine art media</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Carry out a sustained investigation which reflects a personal standpoint</td>
</tr>
<tr>
<td>Be able to develop a personal identity through an imaginative and creative portfolio</td>
<td>3.2 Apply and exploit appropriate levels of technical expertise</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Devise and apply criteria against a personal portfolio</td>
</tr>
<tr>
<td>Be able to demonstrate an informed critical understanding of the work produced</td>
<td>4.2 Plan opportunities to further develop a fine art identity.</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 84: 2D, 3D and Time-based Digital Applications
  - Unit 130: Drawing Techniques and Processes in Art and Design
- Level 5:
  - Unit 133: Personal Development Through Drawing.

This unit links with all other Fine Art units in that it encourages learners to develop aspects of their own artistic identity.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Crafts
  - Design
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games.

Essential requirements

To allow diversity and choice of response, learners should have good access to a wide variety of resources. These must include various wet and dry drawing and painting media, collage, computer image manipulation, and a range of conventional and non-conventional 3D materials, both plastic and rigid.

Learners are also likely to carry out visual research through visits to locations, galleries, museums, libraries, and by using the internet.

As this unit offers learners such diverse and individual opportunities for personal involvement, specific texts relating to delivery will be recommended by the centre and updated as their programme proceeds.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience.

Links with employers are essential to the delivery of the programme for work experience and future employment.

Vocational learning support resources:

- Learning and Skills Network – www.vocationallearning.org.uk

Business and finance advice:

- Local, regional business links – www.businesslink.gov.uk

Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.

Creative and Cultural skills (www.ccskills.org.uk), the sector skills council for design has launched the web portal Creative Choices (www.creative-choices.co.uk). This portal has a range of information about careers in the design sector, including job descriptions.
Unit 133: Personal Development through Drawing

Unit code: L/601/6795
Level: 5
Credit value: 15

Aim

This unit aims to develop learners’ understanding and skills in working practices, using drawing as a fundamental tool for self-expression.

Unit abstract

Drawing and mark making are used by fine artists to explore ideas, record, analyse and as a means for creative expression. The applications for drawing and the range of media used are wide and varied in contemporary fine art practice. This unit reflects current drawing practice by asking learners to look again at ways in which drawing may be fundamental to their work. Learners should be encouraged to research and adopt inventive and experimental approaches to drawing that use a variety of materials, processes and techniques. Research into the work of established artists should provide useful knowledge, and support understanding of how drawing has been used as a creative tool.

Visual thinking should be developed through experimental work and learners may wish to explore a variety of fine art work, including paper-based two- and three-dimensional work and digital formats. Emphasis should be placed on the development of a personal and creative approach to the mark-making materials and processes used to convey personal intentions. Learners should consider how they can extend their working practice through exploring and adopting alternative mark-making techniques. Learners may explore drawing in 2D, 3D and 4D applications, and consider how they can develop mark making ideas in future work.

Learning outcomes

On successful completion of this unit a learner will:
1. Understand the potential of drawing to realise intentions
2. Be able to develop skills in selected mark-making techniques
3. Be able to produce drawing-led work
4. Be able to reflect on drawing practices.
1 **Understand the potential of drawing to realise intentions**

Potential: methods; materials; mark making; ideas eg generation, development; experimentation; conventional combinations; conventions; personal intentions; record; illuminate; illustrate; narrate; highlight; obscure; simplicity; complexity; situations; installations

Artists: historical; contemporary; recording; observing; proposing; time-based; developing; ideas; mark making; approaches; themes; materials

Intentions: recording eg source materials, subjects, environments, situations; mark making eg grids, mixed media, dripping, dragging, reducing, tearing, combining, accidents; exploring eg states, suggestions, associations, ideas, references

2 **Be able to develop skills in selected mark-making techniques**

Mark making: dry; wet; established techniques eg pencil, charcoal, tonal, colour, analytical, systems based, installed; intuitive eg accidental, dripping, smudging, reducing, combining, automatic; process eg transfer, overlay, additive, mixed media; electronic eg digital; trace eg found marks, photographic media; time-based; web-based

Sources: observed world; imagined world; personal intention; intuitive systems

Activities: identify eg tasks, frames, units, procedures, common software, language, control logic, database access, performance requirements

Development: experimentation; techniques; materials; processes; own work eg current, previous; work of others

3 **Be able to produce drawing-led work**

Work: drawing eg initial studies, analytical, experimental, systems-led, process-led, scale, ideas, emotional states, constructional, architectural

Relate: ideas; materials; techniques, processes; intentions

Media: materials eg choices, aims, scope, suitability, intuitive approach, mixed, digital, electronic, dry, wet

Techniques: approaches; choice; experimentation; reflection; refinement; adaptation; conclusion

4 **Be able to reflect on drawing practices**

Evaluate: planning; intuition; response; technological; communication; content; format; intentions; reaction

Reflect: practices; outcomes; strengths; weaknesses; successes; failures; proposals eg further intentions, actions
Future developments: adaptation; combination; modification; de-construction; re-construction; further work eg developmental, outcomes; working practices eg approaches, techniques, sources, methods
Learning outcomes and assessment criteria

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<th>Assessment criteria for pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
<td>The learner can:</td>
</tr>
<tr>
<td><strong>LO1</strong></td>
<td>1.1 Evaluate artists’ use of drawing as a creative tool</td>
</tr>
<tr>
<td>Understand the potential of drawing to realise intentions</td>
<td>1.2 Analyse own creative intentions in relation to drawing</td>
</tr>
<tr>
<td><strong>LO2</strong></td>
<td>2.1 Apply mark-making techniques appropriate to personal ideas</td>
</tr>
<tr>
<td>Be able to develop skills in selected mark-making techniques</td>
<td>2.2 Extend mark-making experimentation with reference to personal intentions</td>
</tr>
<tr>
<td><strong>LO3</strong></td>
<td>3.1 Apply mark-making techniques to produce drawing-based outcomes</td>
</tr>
<tr>
<td>Be able to produce drawing-led work</td>
<td>3.2 Present a portfolio of drawing-led work confirming personal intentions</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>4.1 Recognise work that reflects personal intentions</td>
</tr>
<tr>
<td>Be able to reflect on drawing practices</td>
<td>4.2 Identify opportunities for further personal development</td>
</tr>
</tbody>
</table>
Guidance

Links to other BTEC units

This unit forms part of the BTEC Art and Design sector suite. This unit has particular links with the following unit titles in the BTEC Art and Design suite:

- Level 4:
  - Unit 129: Drawing in Fine Art
  - Unit 131: Development of Fine Art Language
- Level 5:
  - Unit 6: Critical Study in Art and Design
  - Unit 132: Development of a Fine Art Identity.

Links to National Occupational Standards

This unit also provides development opportunities for some of the underpinning skills, knowledge and understanding of the following National Occupational Standards:

- **CCSkills Sector Skills Council**
  - Design
  - Crafts
- **Skillset Sector Skills Council**
  - Animation
  - Design for the Moving Image
  - Interactive Media and Computer Games
  - Photo Imaging
  - Textiles and Material Design.

Essential requirements

Tutors will need to provide access, support and guidance in relation to specialist materials and techniques within the context of 2D, 3D and 4D drawing. Learners should be encouraged to explore a range of mark-making techniques across a broad range of specialist areas when developing their working ideas. They should also carry out historical and theoretical research into artists’ approaches to using drawing as a means to an end and as a vehicle for self-expression.

Opportunities should be provided for discussion, both on a one-to-one basis and as a group. Practical demonstrations in relation to specific materials and techniques may be required. Learners should be encouraged to carry out individual research alongside practical experimentation. Tutors should motivate learners to be analytical and critical in relation to both practical and theoretical work and to modify their work accordingly. Tutorial guidance should be provided to identify areas for further development.
Employer engagement and vocational contexts

Centres should develop links with practising artists, craftspeople and designers, to deliver assignments to learners or to provide work experience. A lecture or visit by a designer, programmer or practitioner local to the centre may provide useful and pertinent information on working practice.

Links with employers are essential to the delivery of the programme for work experience and future employment. Assignments should be vocationally relevant; centres should consider the delivery of ‘live projects’ for example to support the vocational content of the unit and programme.