

Module Descriptors for the following qualifications:

Issue 3

Pearson BTEC Higher Nationals in the Animation Industry

Pearson BTEC Higher Nationals in Fashion and Textiles

Pearson BTEC Higher Nationals in Film and Television

Pearson BTEC Higher Nationals in Fine Art

Pearson BTEC Higher Nationals in Game Development

Pearson BTEC Higher Nationals in Graphic Design

Pearson BTEC Higher Nationals in Interior Design

Pearson BTEC Higher Nationals in Journalism

Pearson BTEC Higher Nationals in Photography

Pearson BTEC Higher Nationals in Product Design

Pearson BTEC Higher Nationals in Sound Media

Pearson BTEC Higher Nationals in Visual Effects

Pearson BTEC Higher Nationals in Web Design

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Summary of Unit Descriptors Issue 3 changes

Summary of changes made between previous issue and this current issue	Page number
'Unit' has been replaced by 'Module'	Throughout

If you need further information on these changes or what they mean, contact us via our website at: qualifications.pearson.com/en/support/contact-us.html.

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1.0 Introduction

The module descriptors included in this document are for use with the following qualifications:

- Pearson BTEC Higher Nationals in the Animation Industry
- Pearson BTEC Higher Nationals in Fashion and Textiles
- Pearson BTEC Higher Nationals in Film and Television
- Pearson BTEC Higher Nationals in Fine Art
- Pearson BTEC Higher Nationals in Graphic Design
- Pearson BTEC Higher Nationals in Interior Design
- Pearson BTEC Higher Nationals in Journalism
- Pearson BTEC Higher Nationals in Photography
- Pearson BTEC Higher Nationals in Product Design
- Pearson BTEC Higher Nationals in Sound Media
- Pearson BTEC Higher Nationals in Visual Effects
- Pearson BTEC Higher Nationals in Web Design.

2.0 Programme structures

HNC – 120 credits = 2 units

Total qualification time = 1,200 hours

Total guided learning hours = 480 hours

Pearson BTEC Level 4 Higher National Certificate in the Animation Industry, Fashion and Textiles, Film and Television, Fine Art, Graphic Design, Interior Design, Journalism, Photography, Product Design, Sound Media, Visual Effects, Web Design and Games Management		Unit credit	Level
Module A: Process & Practice	Unit A1: Concept & Development	85	4
	Unit A2: Creative Project	35	4

HND – 240 credits = 4 units

Total qualification time = 2,400 hours

Total guided learning hours = 960 hours

Pearson BTEC Level 5 Higher National Certificate in the Animation Industry, Fashion and Textiles, Film and Television, Fine Art, Graphic Design, Interior Design, Journalism, Photography, Product Design, Sound Media, Visual Effects, Web Design and Games Management		Unit credit	Level
Module A: Process & Practice	Unit A1: Concept & Development	85	4
	Unit A2: Creative Project	35	4
Module B: Professional Creative Practice	Unit B1: Personal Professional Development	45	5
	Unit B2: Professional Project	75	5

3.0 Assessment: Generic Learning Outcomes

Learning Outcomes for Units A1 and A2

A1: Concept & Development (340 GLH – 85 credits)

This Assessment Unit is designed to enable the practice and development of underpinning knowledge, understanding and proficiency of creative practice through exploration of the subject area.

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

This Assessment Unit is designed to give students the opportunity to consolidate and apply their learning through the production of a portfolio of work related to project outcomes.

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Learning Outcomes for Units B1 and B2

B1: Personal Professional Development (170 GLH – 45 credits)

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

3.1 Assessment: Generic Assessment Criteria for Level 4

Criterion	Ungraded Limited/insufficient/superficial/generic	Pass Competent/appropriate/adequate	Merit Effective/considered/clear/consistent/ secure	Distinction Confident/perceptive/proficient/highly skilled/comprehensive
Contextual Knowledge	Insufficient evidence of an understanding of the underlying concepts and principles within the area of practice. Superficial interpretation of the impact of relevant contextual factors within the area of practice.	Competent understanding of relevant concepts and principles within the area of practice. Appropriate interpretation of the impact of relevant historical, social and cultural contexts within the area of practice.	Clear understanding of relevant concepts and principles within the area of practice. Considered interpretation of the impact of relevant historical, social and cultural contexts within the area of practice.	Comprehensive understanding of relevant concepts and principles within the area of practice. Perceptive interpretation of the impact of relevant historical, social and cultural contexts within the area of practice.
Ideas Generation and Development	Insufficient use of research and analysis to develop ideas and solve creative problems. Limited application of iterative development processes.	Competent use of research and analysis to develop ideas and solve creative problems. Appropriate application of iterative development processes incorporating adequate exploration, testing and review.	Considered use of research and analysis to develop ideas and solve creative problems. Effective application of iterative development processes incorporating considered exploration, testing and review.	Perceptive use of research and analysis to develop ideas and solve creative problems. Confident application of iterative development processes incorporating comprehensive exploration, testing and review.
Technical Knowledge and Skill	Insufficient development and application of technical practices to undertake creative work. Work demonstrates limited understanding of how tools, materials, techniques and processes are used within the area of practice.	Appropriate development and application of technical practices to undertake creative work and produce appropriate outcomes. Work demonstrates competent understanding of how tools, materials, techniques and processes are used within the area of practice.	Effective development and application of technical practices to undertake creative work and produce consistent outcomes. Work demonstrates secure understanding of how tools, materials, techniques and processes are used within the area of practice.	Highly-skilled development and application of technical practices to undertake creative work and produce high-quality outcomes. Work demonstrates perceptive understanding of how tools, materials, techniques and processes are used within the area of practice.
Professional Practice	Limited understanding of contemporary professional practices used within the sector. Insufficient application of professional behaviours, processes and transferable skills.	Competent understanding of contemporary professional practices used within the sector. Appropriate application of professional behaviours, processes and transferable skills necessary for employment within the sector.	Clear understanding of contemporary professional practices used within the sector. Consistent application of professional behaviours, processes and transferable skills necessary for employment within the sector.	Comprehensive understanding of contemporary professional practices used within the sector. Confident application of professional behaviours, processes and transferable skills necessary for employment within the sector.
Communication	Superficial communication of development and outcomes of work and ability to convey ideas and concepts. Generic use of media and formats to convey intentions, with superficial understanding of the needs of the audience.	Competent communication of development and outcomes of work and ability to convey ideas and concepts. Appropriate use of media and formats to convey intentions, supported by adequate understanding of the needs of the audience.	Effective communication of development and outcomes of work and ability to convey ideas and concepts. Considered use of media and formats to convey intentions, supported by clear understanding of the needs of the audience.	Proficient communication of development and outcomes of work and ability to convey ideas and concepts. Confident use of media and formats to convey intentions, supported by perceptive understanding of the needs of the audience.

3.2 Assessment: Generic Assessment Criteria for Level 5

Criterion	Ungraded Limited/insufficient/superficial/generic	Pass Effective/considered/clear/thorough/ secure	Merit Confident/perceptive/highly skilled/proficient	Distinction Fluent/sophisticated/critical/strategic/ insightful
Contextual Knowledge	Limited application of the concepts and principles within the area of practice in different contexts, making insufficient links to concepts beyond the area of practice. Superficial understanding of own work within the historical, social and cultural context of the area of practice.	Effective application of the concepts and principles within the area of practice in different contexts, making considered links to concepts beyond the area of practice. Clear understanding of own work within the historical, social and cultural context of the area of practice.	Confident application of the concepts and principles within the area of practice in different contexts, making perceptive links to concepts beyond the area of practice. Perceptive understanding of own work within the historical, social and cultural context of the area of practice.	Fluent application of the concepts and principles within the area of practice, making sophisticated links to concepts beyond the area of practice. Critical understanding of own work within the historical, social and cultural context of the area of practice.
Ideas Generation and Development	Limited use of methods of enquiry and analysis of information to support ideas generation and development. Superficial selection of solutions based on evaluation of approaches.	Effective use of methods of enquiry and considered critical analysis of information to support ideas generation and development. Considered selection of solutions based on thorough evaluation of diverse approaches.	Confident use of methods of enquiry and perceptive critical analysis of information to support ideas generation and development. Confident selection of solutions based on perceptive evaluation of diverse approaches.	Strategic use of methods of enquiry and insightful critical analysis of information to support ideas generation and development. Sophisticated selection of solutions based on critical evaluation of diverse approaches.
Technical Knowledge and Skill	Insufficient refinement of skills and limited use of industry-standard tools and techniques to undertake work and produce high-quality outcomes. Work demonstrates superficial understanding of technical practice and quality assurance in professional contexts.	Clear refinement of skills and secure use of industry-standard tools and techniques to undertake work and produce effective outcomes. Work demonstrates thorough understanding of technical practice and quality assurance in professional contexts.	Confident refinement of skills and highly-skilled use of industry-standard tools and techniques to undertake work and produce high-quality outcomes. Work demonstrates perceptive understanding of technical practice and quality assurance in professional contexts.	Strategic refinement of skills and fluent use of industry-standard tools and techniques to undertake work and produce sophisticated outcomes. Work demonstrates critical understanding of technical practice and quality assurance in professional contexts.
Professional Practice	Superficial use of self-reflection to develop limited professional skills, knowledge and practices and support personal progression. Limited application of planning and management processes to deliver projects in professional contexts.	Thorough use of self-reflection to develop effective professional skills, knowledge and practices, and support personal progression. Clear application of planning and management processes to deliver projects in professional contexts.	Perceptive use of self-reflection to develop confident professional skills, knowledge and practices, and support personal progression. Confident application of planning and management processes to deliver projects in professional contexts.	Critical use of self-reflection to develop fluent professional skills, knowledge and practices, and support personal progression. Strategic application of planning and management processes to deliver projects in professional contexts.
Communication	Limited use of communication to generically convey ideas, purpose and intentions through work. Insufficient use of communication techniques, demonstrating superficial understanding of context and audience needs.	Considered use of communication to effectively convey ideas, purpose and intentions through work. Effective use of communication techniques, demonstrating clear understanding of context and audience needs in order to maximise engagement.	Highly-skilled use of communication to confidently convey ideas, purpose and intentions through work. Proficient use of communication techniques, demonstrating perceptive understanding of context and audience needs in order to maximise engagement.	Sophisticated use of communication to fluently convey ideas, purpose and intentions through work. Fluent use of communication techniques, demonstrating critical understanding of context and audience needs in order to maximise engagement.

3.3 Essential Information for Assessment: A1 and A2

Each Assessment Unit requires a unique set of evidence.

Assessment Unit A1: Concept & Development (340 GLH – 85 credits)

- Assessment Unit A1 requires students to produce a portfolio of work evidencing the exploration and development of creative outcomes, with outputs addressing diverse audiences and requirements.

Recommended Evidence

The body of work developed to support this Assessment Unit should evidence the student's ability to generate ideas and develop them through a creative process, achieving outcomes that meet the requirements of the briefs. The assignments developed for this Assessment Unit should provide sufficient diversity to allow students to evidence their achievement in relation to the assessment criteria.

Types of evidence may include:

- a portfolio of development work and outcomes
- physical and digital prototypes
- written reports, essays or case studies
- planning and research documents, files, links.

Assessment Unit A2: Creative Project (140 GLH – 35 credits)

- Assessment Unit A2 requires students to develop project-based outcomes that evidence their application of creative, technical and professional knowledge.

Recommended Evidence

The evidence developed for the *Creative Project* should give students the opportunity to clearly show their achievement of the assessment criteria through a coherent body of development work and outcomes.

Types of evidence may include:

- written work (for example reports, case studies)
- a portfolio of development work
- collection of garments or textiles applications
- a portfolio/showreel of development work
- final production.

3.4 Essential Information for Assessment: B1 and B2

Assessment Unit B1: Personal Professional Development (170 GLH – 45 credits)

Recommended Evidence

Assessment evidence for *Personal Professional Development* should be based on a diverse range of outputs that combine to show the student's awareness of their own professional development, through both creative and technical processes, and their ability to produce detailed plans and materials for continued professional development.

Types of evidence may include:

- written work (for example reports, case studies)
- planning documents (for example personal development plan, skills audit)
- a reflective journal evidencing the ability to evaluate own development and plan for the future
- videos of mock-interviews and presentations
- a portfolio.

Assessment Unit B2: Professional Project (310 GLH – 75 credits)

Recommended Evidence

Assessment evidence for the *Professional Project* should include a diverse range of professionally relevant creative and technical outcomes, based on the student's response to a professional brief. Evidence should include work that shows the ability to plan and manage a professional project through different stages and arrive at professional quality outcomes that are presented using industry-standard methods.

Types of evidence may include:

- a portfolio of development work, showing a coherent development process
- project management plans and logs
- finished garment collection or textiles application(s) that meet the requirements of a professional brief
- communication material for presenting process and outcomes in a professional context.

4.0 Modules in the BTEC Higher Nationals in the Animation Industry

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The animation industry is undergoing significant change. Internationally, there are increasing opportunities to engage in major productions with a wider use of animation skills across products beyond cartoons and animated feature films. From online adverts to interfaces, games to how-to-videos, animation plays a significant role in our experience of visual culture.

Working in the animation industry requires a range of knowledge and skills that span planning, production, marketing and business. Understanding the social trends that drive interest in different forms of animation is essential in providing a business rationale for development and is the starting point for producing the concept, art and documentation that will convince others to support an animation idea.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the animation industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the animation sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: A/650/4797

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: D/650/4798

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative

development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Milestones, movements, styles and trends:
 - global and cross-cultural influences
 - pre-camera (e.g., Shahr-E Sukteh, magic lantern, Lumière brothers, zoopraxiscope)
 - early innovators (e.g., *Fantasmagorie*, Windsor McCay, Katsudō Shashin, Fleischer Brothers, *The Adventures of Prince Achmed*)
 - studios (e.g., Bosko, Merrie Melodies, Looney Tunes, Disney's Silly Symphonies plus feature projects Myslenska Hledajici Svetlo, *Momotaro: Sacred Sailors*)
 - optical years – matte painting
 - television (e.g., Crusader Rabbit, Hanna-Barbera, theatrical animation (50s, 60s), Fritz the Cat, anime, Saturday morning cartoons (e.g. Smurfs, He-Man, The Simpsons)
 - advent of digital and go-motion
 - 3D (e.g., *Toy Story*, *Jurassic Park*, *Avatar*, *Lord of the Rings*)
 - internet (e.g., 2D experimental, short films, advertising, music videos).

Disciplines

- 2D animation.
- 3D animation.
- Cartoon versus realism.
- Freeform animation.
- Animation cycles.
- Scripted animation.
- In-game animation.
- Cut scene animations.
- Motion graphics.
- Kinetic typography.
- Visual effects.

Platforms and uses

- Cinema.
- Television.
- Online.
- Game.
- Installation.
- Virtual and augmented reality.
- Operating systems and interfaces.
- Device displays.

Cultural theories and principles for interpreting the subject

- Persistence of vision.
- Analysis (e.g., premise, context, characterisation, structure).
- Key theories (e.g., narrative structure, genre, audience theory).
- Audiences, stakeholders and users.
- Formal elements (e.g., narrative, movement, sound, mise en scène, montage, continuity, abstract, figurative).
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).

- Principles:
 - squash and stretch
 - anticipation
 - staging
 - straight ahead action/pose-to-pose
 - slow in/slow out
 - secondary action
 - timing
 - exaggeration
 - solid drawing
 - appeal.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Context.
- Feasibility.
- Regulations.
- Proposal.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview).
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing

- forced relationships
- 'Thinking Hats' (de Bono)
- lateral thinking.

Narrative and concept ideation

- Unique selling point.
- Proof of concept.
- Narrative (e.g., plot, arc, surprise, twist, emotion, core message).
- Logline (e.g., single line of short form concepts).
- Treatment (e.g., title, logline, story summary, and character descriptions).
- Script/screenplay (e.g., format, location, action, dialogue).

Storyboards

- Locations.
- Character actions.
- Camera angles and movements.
- Sound direction.
- Transitions.
- Edits.
- Layout conventions.

Solving problems through testing and reflection

- Concept.
- Techniques.
- Processes.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Drawing and artwork

- Real and digital.
- Vector and raster.
- Realistic and stylised.
- Experimental media.
- 2D and 3D.
- Hand-eye coordination.
- Anatomy (e.g., proportion, ergonomics, anthropometrics, poses, settings, body language).
- Spatial (e.g., weight, mass, movement, perspective).
- Techniques (e.g., sketching, outline, contour, silhouette, shape, gesture).

Models

- Real and digital.
- People, objects, spaces.
- Experimental media.

Software

- 2D and 3D software.
- Game engines.

Camera

- Real and virtual.
- Aperture, focal length, shutter speed, ISO.
- Management (e.g., framing, stabilisation, rigging, movement).

Light

- Real and digital.
- Colour temperature.
- One-point, two-point, three-point, high key, low key, skydome, area, directional, global, area, fill, backlight, ambient, key, diffusion, specular.

Sound

- Capture and creation.
- Effects, dialogue, music, ambient sound.
- Levels and layers, (e.g., mix down, multilayer sound).

- Synch.
- Db, compression, channels, KhZ, Db, clipping.

Animating

- Tweening, key frame and motion graphs.
- Body mechanics.
- Layers.
- Type and graphics.
- Filters and effects.

3D production

- Modelling:
 - NURBS-based and polygon-based
 - solid modelling
 - surface modelling
 - Boolean operations
 - detail
 - polygon count
 - affordance
 - edge-loops
 - topology/retopology
 - sculpting.
- Technical:
 - viewports
 - navigation
 - reference
 - scale
 - software
 - materials.
- Materials and shaders:
 - limitations
 - poly limit
 - UV maps
 - texture mapping
 - displacement mapping
 - bump mapping
 - normal maps
 - shader types
 - PBR materials (physical based rendering)
 - baking
 - tile textures
 - procedural textures.

Rigging

- Forward kinematics (FK) and inverse kinematics (IK).
- Rig type and limitations.

Editing

- Visuals.
- Sound.
- Compositing.
- Synthesis of software.
- Titles and credits.

Rendering

- Pre-visualisation.
- Pre-rendered.
- Real-time rendering.
- Type (e.g., wireframe, hidden line, shaded, photorealistic).

Work management

- Video (e.g., format, safe area, resolution, frame rate, aspect ratio, colour mode).
- File types (e.g., compression, import and export).
- Asset management.
- Standards and protocols.
- Back-up facilities.
- File name conventions.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., concept artist, layout artist, creative director, artist, designer, script writer).
- Production roles (e.g., director, creative director, roto artist, artist, animator, match move artist, matte painter, editor, programmer, engineer).
- Management roles (e.g., coordinator, producer, project manager, distributor).
- Technical roles (e.g., VFX supervisor, compositor, programmer, engineer, developer).
- Support roles (e.g., paint prep, runner, tester, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Privacy and security.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Process (e.g., pre-production, production, post-production).
- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, workshop, location).
- Posture and repetitive strain injury (RSI).
- Desk and chair set up for safe working.
- Lighting for screen-based working.
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress:
 - prototypes
 - models
 - mock-ups
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual language.
- Audio language.
- Culmination of elements.
- Application of formal elements and principles.
- Impact.
- Mood, style and atmosphere.

- Message and impact.
- Timing (e.g., pace, suspense, narrative, experience).
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The animation industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: F/650/4799

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: R/650/4801

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills to the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes, demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Narrative theory (e.g., Todorov structure theory, Propp's character types, linear/non-linear).
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/postcolonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/postcolonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).
- Gamification of business/education.

Animation economies

- Industry context (e.g., independent studio, large studio, niche studio).
- Lifecycle (e.g., financing, production, distribution, exhibition/broadcast).
- Models of financing.
- Models of distribution.
- Drivers for production and commercial needs.
- Sustainability.

- Key challenges:
 - sustainability (e.g., carbon footprint, Albert certification)
 - lack of diversity in workforce
 - outsourcing work to lower-wage employees
 - overbidding for work
 - working practices (low pay, long hours, overtime expectation)
 - high price of technology.
- Technological developments:
 - virtual reality
 - augmented reality
 - artificial intelligence (AI)
 - game engines (Unreal Engine, Unity)
 - pre-fabricated assets
 - free software
 - software plug-ins.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, releases, updates)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Approaches to the design process, e.g.:
 - design thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stage design – exploration, generation, evaluation, communication
 - design sprint – understand, diverge, converge, prototype, test
 - Double Diamond
 - design methods phases – definition, creative, analysis and selection, presentation.

Animation concept development

- Concept generation (mind maps, mood boards).
- Concept design (concept art/storyboards/previs).
- Proof of concept.
- Narrative.
- Treatment.
- Script.
- Character development.
- Environment development.
- Concept art.
- Storyboards.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equity and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Equipment and tools

- Hardware:
 - computers and monitors
 - storage and backup (e.g., local backup, cloud backup)
 - graphics tablets
 - camera.
- Software:
 - 3D
 - 2D
 - editing
 - sound
 - digital art.
- Asset management:
 - sourcing
 - storage (e.g., RAID, local, cloud storage)
 - sharing
 - backup
 - file management and naming conventions
 - asset data
 - presets
 - real time tracking
 - colour space.

Artwork

- 3D modelling:
 - polygon
 - surface
 - solid
 - traditional sculpting
 - digital sculpting
 - materials and shaders
 - textures
 - lighting
 - atmosphere effects
 - rendering.

- Environment and object design:
 - thumbnails, sketching
 - layout, blocking
 - hard-surface modelling (e.g., buildings, objects)
 - organic modelling
 - spatial (e.g., weight, mass).
- Character design e.g.:
 - character concept art
 - character plates
 - features
 - anatomy, body structure, proportions, skeletal structure and muscle groups
 - physical constraints
 - skin
 - elasticity.

Animation

- Character animation:
 - motion archotyping (standing, walking, running, eye movement, body language)
 - timing
 - posing/acting
 - rigging
 - motion capture vs key-framing.
- Other animation:
 - objects
 - environments.
- Camera:
 - positioning
 - movement (e.g., zooming, rotating, panning)
 - focal point.

Output

- Export formats.
- Resolutions.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, production stages).
- Interim outputs (e.g., render, rough-cut, dailies, visualisation).
- Testing:
 - error checking (e.g., resolution, safe area)
 - audience/client testing/feedback (e.g., observation, focus group, interview, survey)
 - broadcast/distribution readiness (e.g., resolution, frame rate).

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborators).
- Relationships within the project (e.g., contractual, financial, user).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations
 - mapping own skills to specific job roles.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., packaging, trailers).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, applications).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstrations).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

5.0 Modules in the BTEC Higher Nationals in Fashion and Textiles

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The fashion and textiles industry is the fourth biggest industrial sector in the world. Yet it is undergoing significant change, where rapid developments in technologies and increases in demand bring significant challenges and opportunities for practitioners. Alongside these issues, there are also socioeconomic shifts from consumers demanding new approaches to fashion and textiles economies.

Working in the fashion and textiles industry requires a range of knowledge and skills that spans forecasting, designing, planning, production, marketing and business. Understanding the interests that drive needs for different forms of fashion and textiles is essential in providing a business rationale for development and is the starting point for producing the concept and materials that will convince others to support fashion and textiles ideas.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the fashion and textiles industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: T/650/4759

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: F/650/4761

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions
 - body image.
- Technological:
 - new technologies
 - obsolete technologies
 - wearable technology.
- Economic:
 - buying trends
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Milestones, movements, styles and trends, e.g.:
 - African tribal art
 - Islamic decorative art
 - Chinese ornamentation
 - Japanese minimalism
 - Egyptian tomb art
 - Mesoamerican carvings
 - Greek art
 - Arts and Crafts
 - aesthetic dress
 - Art Nouveau
 - Modernism
 - Expressionism

- Constructivism
- Cubism
- Futurism
- Art Deco
- Bauhaus
- Surrealism
- Pop Art
- Minimalism
- Postmodernism
- Memphis
- deconstruction
- fast fashion.

Disciplines and applications

- Sport and performance.
- Uniform services.
- Leisure.
- Formal.
- Shoes.
- Accessories.
- Upholstery.
- Interior.
- Automotive and transport.
- Marketing and promotion.
- Retail.
- Buying.
- Art direction.
- Journalism.
- Forecasting.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Formal elements (e.g., shape, form, colour, texture, narrative, movement, pattern).
- Colour theory.
- Intention and purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Styles (e.g., classic, relaxed, elegant, dramatic, rebellious, feminine, masculine, unisex, formal, informal).
- Structure (e.g., balance, proportion, composition, focal points, hierarchy, organisation).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview).
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Concept.
- Materials.
- Techniques.
- Processes.
- Form and function.
- Quality.
- Reliability.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Testing:
 - samples
 - prototypes
 - toiles
 - model fittings.
- Stakeholder input:
 - user/audience
 - client
 - peer
 - social media
 - focus groups.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Photography, imaging and media applications

- Working with models and spaces.
- Art direction.
- Lighting (e.g., natural, artificial, colour temperature, white balance, modification, gels, reflectors).
- Camera operation.
- Image manipulation (e.g., enhancing photographs, layers, effects, colouring).
- Web and page layouts (e.g., hierarchy, grids, structure, organisation).
- Typography.
- Web design (e.g., templates, content, fonts, pages, links).
- Social media content production (e.g., adverts, posts, type, image).
- Copy writing.
- Storage and back up.
- File types.

Materials

- Natural fibres (e.g., wool, cotton, linen, silk, hemp, flax, sisal, leather).
- Synthetic fibres (e.g., polyester, nylon, rubber, stretch materials, faux leather and fur, Lyocell, Tencel).
- Applications:
 - dyes and inks
 - yarns
 - surface treatments.

Measuring, grading and tools

- Measures.
- Ergonomics and anthropometrics.
- Tracing wheels.
- Block making.
- Spot and cross paper.
- Grading square.
- Pattern hooks.
- French curve.
- Needles.
- Dress stand.

- Fabric weights.
- Cutting table.
- Machine feet.
- Notcher.
- Cutting software.

Drawing and design

- Illustration and visualising (e.g., traditional, digital, vector).
- Collage, assemblage and mixed media.
- Digital drawing and rendering.
- Technical drawing.
- Specification drawing.

Knit and crochet

- Jersey and knits.
- Interlock and Raschel.
- Intarsia.
- Terry.
- Velour.
- Fleece.
- Machinery (e.g., circular, warp, flat, tricot).

Weave

- Twill and basket.
- Jacquard and dobby.
- Tapestry.
- Herringbone and houndstooth.
- Piqué.
- Bedford cord.
- Gabardine.
- Looms (e.g, frame, tapestry heddle, inkle, floor, table, bead, power).

Print

- Screen and stencil.
- Block.
- Tie-dye.
- Wax, discharge and sublimation.
- Photo reactive.
- Spray.

- Inkjet.
- Heat transfer.
- Laser.
- 3D.

Embroidery and surface treatments

- Hand/machine embroidery and beading.
- Freestyle stitch painting.
- Quilting.
- Smocking, pleating and pintucking.
- Tapestry and canvas work.
- Drawn thread, distressing and cutwork.
- Broderie anglaise and lacework.
- White and black work.
- Crewelwork.
- Stumpwork.
- Felting.

Fashion processes

- Flat pattern cutting.
- Block making and adapting.
- Grading.
- Lay planning.
- Draping on the stand.
- Moulage.
- Toile production.
- Sample cutting.

Sewing

- Machine sewing (e.g., seaming, overlocking, French seams, twin needle, canvassing, buttonholes, pressing, forming, steaming, fusing, labelling, digital machine programming).
- Hand sewing (e.g., soft tailoring, hemming, finishing).
- Computer compatible machines.

Fashion and textiles documents

- Textiles specifications (e.g., project planning, equipment, digital applications, screen printing, transfer printing, loom weaving, knitting machines, textile techniques, surface applications, finishes, refinements, presentation).
- Fashion specifications (e.g., project planning, pattern cutting, drafting, moulage, toile making, lay planning, spec drawings, manufacture, finishing, styling, illustration, fashion show production).

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., designer, illustrator, stylist, visual merchandiser, copywriter, artist, animator).
- Production roles (e.g., creative director, fashion show producer, photographer, stylist, press officer).
- Management roles (e.g., client manager, production manager, project manager, design studio head, editor, buyer, distribution manager, purchasing manager, team manager, public relations manager, store manager, fabric buyer, curator).
- Technical roles (e.g., machinist, digital artist, cutter, finisher, pattern grader, loom technician, quality control, video and film, websites and blogs, wholesaler).
- Support roles (e.g., tester, community manager, packer, presser, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Buying trends

- Online (e.g., mail order, catalogues, mail outs).
- On-site (e.g., retail parks, high street, shopping malls, charity shops, street markets, festivals).
- Alternative buying (e.g., eco stores, wholesale, trade fairs, ateliers, home-made, community swaps, social media local freecycle groups, livestream shopping, in-store phone alerts).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.

- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, workshop, location).
- Posture and repetitive strain injury (RSI).
- Manual handling.
- Personal protective equipment (PPE).
- Desk and chair set up for safe working.
- Lighting for screen-based working.
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress:
 - prototypes
 - models
 - mock-ups
 - samples
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual language.
- Textual language.
- Style.
- Message and impact.
- Applying/subverting codes and conventions.

- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The fashion and textiles industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: H/650/4762

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: J/650/4763

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills to the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes, demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Fashion and textile economies

- Globalisation.
- Commercialisation.
- Drivers for production and commercial needs.
- Trend forecasting.
- Fashion marketing.
- Consumer attitudes.
- Industrial revolution (e.g., sewing machine invention, yarn spinning, weaving, silhouettes over time, fashion decades, ready-to-wear).
- Digital revolution.

- Buying trends:
 - online (e.g., mail order, catalogues, mail outs)
 - on-site (e.g., retail parks, high street, shopping malls, charity shops, street markets, festivals)
 - alternative buying (e.g., eco stores, wholesale, trade fairs, ateliers, home-made, community swaps, social media local freecycle groups, livestream shopping, in-store phone alerts).
- Sustainability:
 - material
 - process
 - sourcing
 - natural resources
 - upcycling
 - waste management
 - craftivism
 - ethical labour chains
 - renewable energy
 - complex biodiversity emergencies.
- Technical advancements:
 - wearable tech
 - new selling platforms
 - virtual reality (VR) and augmented reality (AR)
 - the metaverse
 - digital systems
 - cloud-based systems.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - multi-channel/collection/textile multi-application
 - brand
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses)
 - how audiences are engaged.

Trends

- Identifying current trends.
- Trade shows.
- Trend forecasting in different markets/disciplines.
- The structure of trend forecasting.
- Trend timelines, cycles and patterns.
- Forecasting for different markets.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).

- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.
- Approaches to the design process, e.g.:
 - design thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stage design – exploration, generation, evaluation, communication
 - design sprint – understand, diverge, converge, prototype, test
 - Double Diamond
 - design methods phases – definition, creative, analysis and selection, presentation.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Textile properties

- Colour.
- Weight.
- Flexibility.
- Surface.
- Finish.
- Hardness.
- Durability.
- Integrity.
- Breathability and porosity.
- Reflective/transparency/opacity.

Design specification

- Performance specification.
- Technical specification.
- Functional specification.
- Technical pack.
- Garment spec sheet.
- Fabric spec sheet.
- Accessory spec sheet.

Textile design and manufacture

- Fibres, filaments, yarn and thread:
 - fibres (natural, animal, vegetable)
 - cellulose based, protein based, mineral
 - natural polymer based, synthetic polymer based
 - yarn spinning and recycling
 - printed (screenprinted, digitally printed, placement printed)
 - woven
 - weave types – basic (plain, basket, ribbed, twill)
 - weave types – fancy (Jacquard, piqué)
 - mixed media.
- Patterns:
 - layout (e.g., all over, directional, multi-directional, engineered)
 - repeat (e.g., full drop, half drop, brick, diamond, mirror, continuous)
 - colour (e.g., digital printing, painting, printing, dyeing).

- Dyes (e.g., acid, reactive, dispersal, pigment).
- Process (e.g., prefibre, fibre, yarn, fabric and sewn product dying).
- Ecological dying techniques (e.g., pigment bacteria).
- Constructed textiles.
- Embroidery (hand and machine).
- Surface embellishment (beading, flocking, puff binding).
- CAD/CAM.
- Software (e.g., Illustrator, Photoshop, Browzwear).
- Laser cutting.
- Preservation (e.g., crease resistant, waterproof, anti-static).
- Finishes (e.g., functional, crease resistant, waterproof, anti-static).
- Aesthetics (e.g., softening, napping, sueding).

Fashion manufacturing and production

- Sketching/drawing.
- Design selection.
- Flat pattern cutting.
- CAD pattern cutting.
- Modelling on the stand.
- Toiling (garment sampling).
- Lay planning.
- Textile/fabric sourcing and selection.
- Regenerative luxury.
- Textile/fabric testing.
- Accessories, trims, closures.
- Sizing.
- Pattern construction.
- Spreading and cutting.
- Tailoring.
- Bespoke fitting.
- Sewing, stitches and seams.
- Defect resolution.
- Seamless and alternative fabric joining technologies.
- Finishing.
- Care labelling.
- Accessories:
 - hats and caps, scarfs, bags, footwear
 - CAD rendering on 3D software for product design for accessories.

CAD/CAM in fashion

- Software (e.g., Illustrator).
- 3D fashion design (e.g., Substance 3D with Clo, Browzwear).
- Avatar development.
- Creating virtual prototypes.
- Application of fabrication and pattern.
- Render to exact specification.
- Rectify and modify garments and accessories.
- Illustration.
- Flat drawings:
 - alternate views
 - details (e.g., seams, darts, pockets, fastenings, topstitching)
 - proportions.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes).
- Testing methodologies (e.g., fitting to a body or bespoke).
- Interim outputs (e.g., samples, toiles, prototypes).
- Parameters for testing:
 - error checking (e.g., defects)
 - user testing/consumer feedback (e.g., influencer, focus group, interview, survey)
 - ergonomics and function
 - comfort
 - lifespan
 - budget control
 - comparisons with market
 - technical execution
 - purpose/function
 - sustainability.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborators).
- Relationships within the project (e.g., contractual, financial, user).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients
 - pitching for work
 - outsourced work and contributing to parts of a larger project
 - communication with potential clients
 - competitions
 - fashion cities and trade shows.
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - fashion industry memberships (Business of Fashion (BoF))
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Customer service.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., instructions, guides, care labels).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, applications).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes).
- Technical standards, e.g.:
 - plans
 - garment tech packs
 - accessory tech packs
 - specification drawings with fabric swatches
 - method of assembly for production.
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstrations).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

6.0 Modules in the BTEC Higher Nationals in Film and Television

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The film and television industry is a major contributor to the economy, and moving image consumption is set to expand. There are rapid developments in technologies, along with major shifts in moving image consumption and monetisation, such as streaming, emerging markets and video-first platforms. These bring significant challenges, as well as opportunities, for practitioners.

Working in the film and television industry requires an understanding of historic and current developments in order to develop relevant concepts and solve creative problems. Creating content requires an understanding of the development processes and the technical skills to produce outcomes. These are balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the film and television industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: K/650/4764

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: L/650/4765

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Milestones, movements, styles and trends, e.g.:
 - National Cinema
 - avant-garde
 - Soviet Montage
 - continuity editing
 - post-war
 - Neorealism
 - New Wave
 - New Queer Cinema
 - Black cinema and TV
 - TV formats (e.g., design and marketing of programming)
 - live broadcasting
 - music video
 - 24-hour rolling news

- reality TV
- video marketing
- interactivity
- non-linear.

Disciplines

- Pre-production.
- Single camera production.
- Multi-camera production.
- Sound production.
- Post-production.
- Distribution.
- Narrative film.
- Factual (e.g., news, documentary, instructional).
- Live production.
- Music video.
- Advertising
- Video marketing.

Platforms and uses

- Cinema.
- Television.
- Mobile devices.
- Online.
- Gaming.
- Virtual reality (VR) and augmented reality (AR).

Cultural theories and principles for interpreting the subject

- Audience theory:
 - uses and gratification (e.g., diversion, personal relationship, surveillance)
 - stimulus-response
 - reception (e.g., dominant, negotiated, oppositional)
 - two-step flow.
- Representation.
- Narrative theories and constructs (e.g., Todorov, Propp, Lévi-Strauss, Kuleshov).
- Denotation and connotation (e.g., mise en scène, sound, editing).
- Codes and conventions (e.g., genre, audience expectation).
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Regulations.
- Proposal.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - recce
 - thematic research (e.g., visual and contextual references)
 - audience segmentation
 - data-collection methods (e.g., focus groups, observation, interview).
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Narrative and concept ideation

- Proof of concept.
- Narrative (e.g., sub-text, story arc, parallel time, suspense/shock, omniscient/restricted, linear/non-linear, interactive).
- Logline (e.g., single line of short form concepts).
- Treatment (e.g., title, logline, story summary, and character descriptions).
- Script/screenplay (e.g., format, location, action, dialogue).

Planning

- Pre-production checklist.
- Risk assessment.
- Shot list.
- Call sheet.
- Continuity log.
- Casting.
- Talent release.
- Location release.
- Recce.
- Booking equipment, studios and post-production facilities.
- Music release.

Solving problems through testing and reflection

- Concept.
- Production techniques.
- Iterative development (e.g., research, analyse, plan, script notes, blocking).
- Rough cut/dailies.
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Storyboarding

- Settings/locations.
- Character actions.
- Camera movements and angles.
- Sound direction.
- Transitions.
- Motivational editing.
- Use of sound (e.g., diegetic, non-diegetic, effects, music).

Camera

- Cameras (e.g., studio, field, modular, consumer, 180°, 360°).
- Camera settings (e.g., aperture, shutter speed ISO, the exposure triangle, white balance).
- Focus (e.g., focus modes, zebras, depth of field).
- Shot classifications and composition.
- Movement (e.g., dolly, track, zoom, pan, tilt, remote).
- Sensor size and resolution.
- Lenses (e.g., fixed, zoom, macro, telephoto, depth of field).
- Stabilisation (e.g., tripod, rigs, sliders, gimbal, Steadicam, track, crane).
- Recording media (e.g., SD cards, external SSD).
- RAW and onboard codecs.

Sound

- Microphones (e.g., condenser, shotgun, lavalier, mono/stereo, ambisonic, radio).
- Capture and creation (e.g., microphone positioning, dialogue, wild tracks, Foley, sound libraries).
- Effects, (e.g., normalisation, noise reduction, noise printing, time and pitch).
- Wave form editing (e.g., panning, fading in/out, amplitude).
- Monitoring levels.
- Synchronisation of tracks/pictures.
- Db, channels, KhZ, clipping.
- Mixdown, compression and export.

Light

- Colour temperature.
- One-point, two-point, three-point, high key, low key, fill, backlight, ambient.
- Power.
- Studio/stage and portable.
- Modifiers (e.g., reflectors, diffusers, gels, soft box, umbrellas, cones).
- Lighting controller.
- Lighting rig.

Talent and art direction

- Talent (e.g., directing, booking, release forms, auditioning and rehearsal).
- Props.
- Backdrops.
- Styling.
- Costume.
- Hair and make-up.

Equipment

- Location/studio.
- Maintenance, storage, protection.
- Cables and connectors.
- Power management.
- Media storage and management.

Production studio

- Set.
- Production control room.
- Vision mixer.
- Audio mixing.
- Auto-cue.
- Communication signals.

Editing

- Assets (e.g., shot footage, stock footage, graphics, recorded sounds, stock sounds, music).
- Visuals:
 - transitions
 - dissolves
 - soft cuts
 - fades
 - wipes
 - match cuts
 - manipulation of time and space.
- Titles and credits.
- Effects (e.g., green screening, basic simulations, timelapse).
- Sound (e.g., levels, pans, fades, synchronisation).

Settings

- Format (e.g., codecs and containers).
- Safe areas.
- Resolution.
- Frame rate.
- Aspect ratio.
- Colour mode.

Work management

- Standards and protocols.
- Back-up facilities.
- File name conventions.
- Asset management.
- Export and delivery.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., art direction, designer, sound designer).
- Production roles (e.g., director, cinematographer, sound recorder, editor).
- Management roles (e.g., producer, project manager, distributor).
- Technical roles (e.g., engineer, DIT).
- Support roles (e.g., runner, assistant director, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Release forms.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Process (e.g., pre-production, production, post-production).
- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, workshop, location).
- Posture and repetitive strain injury (RSI).
- Manual handling.
- Personal protective equipment (PPE).
- Desk and chair set up for safe working.
- Lighting for screen-based working.
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress:
 - rough cuts
 - dailies
 - storyboards.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure, and delivery.
- Selection and editing of content.
- Presentation skills.
- Characteristics of outcomes
- Visual and audio language.
- Mood, style and atmosphere.
- Messaging and impact.
- Timing, e.g., pace, suspense, narrative, experience.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.

- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The film and television industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skill to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: M/650/4766

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: R/650/4767

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills to the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Narrative theory (e.g., modernist, postmodernist, emergent, interactive, VR).
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Film and television economies

- Globalisation (e.g., content, funding, distribution, platforms).
- Monetisation (e.g., box office, TV advertising, subscription on demand, transactional video on demand, advertising-based video on demand).
- Drivers for production and commercial needs (e.g., personalisation, digitisation, All-IP technology, converging technologies, AR, VR).
- Significant challenges and developments:
 - inclusivity and diversity
 - sustainability (e.g., carbon calculator, virtual production environments, Albert certification)
 - demand for content (e.g., personalised content, personalised advertising)
 - data collection and management
 - fast-shifting media landscape (e.g., mergers and acquisitions, unstable platforms, ratings, shift of advertising revenue, 'over the top' content providers)

- social media (e.g., user-generated content, video-first platforms)
- political influences (e.g., censorship, fake news, external political influence)
- artificial intelligence (AI).

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses)
 - how audiences are engaged (e.g., hidden messaging, USP, Maslow's hierarchy of human needs, call to action).

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Concept development:
 - concept generation (e.g., sources of inspiration, adaption, mind maps)
 - narrative structure (e.g., story arcs, linearity, suspense, shock, omniscient, restricted)
 - treatment (title, logline, synopsis, character development)
 - script
 - script notes
 - audience testing.

Approaches to production design

- Design thinking (e.g., collaboration, discovery, experimentation, iteration).
- Audience reception (e.g., anchorage, relatability, suspension of disbelief, continuity).
- Visualisation (e.g., mood boards, storyboards).
- Mise en scène (e.g., settings, camera angles, framing, lighting, colour, props, costume, hair and make-up).
- Sound design (e.g., automated dialogue replacement (ADR), ambiance, Foley, audio effects, voice over, non-diegetic, contrapuntal, parallel).
- Editing (e.g., motivational, montage, time management, space management, pace, suspense, tension, restricting information).

Management of production design development

- Location reconnaissance.
- Shot list.
- SFX List.
- Permissions and clearances.
- Call sheets.
- Props list.
- Scheduling.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - how new learning shapes response to the brief.

- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equity and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Cinematography

- Supportive cinematography (e.g., test shoot, reconnaissance, A-roll, B-roll).
- Aesthetics (e.g., atmosphere, tone, depth, looks, lines, patterns, scale, colour, balance).
- Shot selection (e.g., establishing, POV, cutaway, reaction, 180° rule, motivational).
- Composition (e.g., framing, use of angles, eye lines, negative space, rule of thirds, depth, scale, contrast, perspective, balance, distortion).
- Camera movement (e.g., panning, tracking, dolly, whip pans, tilt, push, handheld).
- Lighting:
 - lighting techniques (e.g., fill, key, reverse key, back, bounce, butterfly, loop, Rembrandt, chiaroscuro)
 - light sources (e.g., HDMI, LED, tungsten, natural)
 - light modifiers (e.g., flags, scrims, gels, reflectors, barndoors, snoots, gobos).
- Cameras:
 - camera systems (e.g., electronic news gathering (ENG), modular cinema, 180°, 360°, photogrammetry, volumetric video, 3D scanning)
 - lens mounts
 - sensors
 - frame rates
 - dynamic range
 - log gamma
 - looks
 - resolution
 - RAW, codecs and bitrates
 - external recording
 - power
 - camera support (e.g., tripod, slider, gimbal, crane, jib, wire rig, drone, suction, mounts, handheld).
- Lens:
 - characteristics (e.g., prime, zoom, focal length, T-stops, aperture, anamorphic, telephoto, wide angle, stereoscopic, 360°, bokeh)
 - focus (e.g., depth of field, deep, shallow, rack, tilt-shift, follow focus)
 - lens filters (e.g., UV, neutral density, graduated, polarising, mist).

Sound design and production

- Microphones.
- Audio cables (e.g., XLR, ¼ inch, RCA, balanced, unbalanced).
- Pre-amps.
- Recording clean sound (e.g., microphone placement, reverb, echo, wind, electrical interference).
- Recording systems (e.g., field recorders, onboard camera recording, single-system, double-system, sampling rates, bit-depth, multi-track).
- Automatic dialogue replacement (ADR) (e.g., uses, room tone, microphone choice, synchronisation).
- Foley and sound effects (e.g., creating and recording sounds, sound libraries).
- Music (e.g., diegetic, non-diegetic, sourcing, rights management).

Multi-camera production

- Planning (e.g., production script, block through, stagger through, run through, camera cards).
- Camerawork:
 - rigging
 - cabling
 - movement (e.g., zoom, steady static, tracking, crabbing, simultaneous movement in developing shots, motivation for move)
 - focus pulls
 - continuity.
- Lighting (e.g., plan, Fresnel, controls, key to fill ratio).
- Vision mixing (e.g., control surfaces, video inputs, audio inputs, switchers, keying, picture in picture, layering, multi-viewers).
- Talkback (e.g., uses of, 2 wire, 4 wire).
- Teleprompt.
- Tally.
- Livestreaming.

Editing

- Visual:
 - stock assets
 - transitions (e.g., match cuts, cutaway, jump cut, cross-cut, dissolves, fades)
 - 180° rule
 - manipulation of time and space
 - creation of suspense and shock.

- Audio:
 - asynchronous sound
 - enhancing pace and rhythm to a narrative sequence
 - dubbing
 - multi-track mixing
 - sound bridges
 - mutes, cuts and fades
 - levels and panning.

Post-processing

- Visual:
 - lens correction (e.g., vignetting, stitching for VR, plating for VR)
 - white balance correction
 - colour grading: (e.g., hue, saturation, luminance, lift, gain, lookup tables, scopes)
 - noise reduction
 - warp stabilisation
 - crop
 - timelapse.
- Audio:
 - normalisation
 - noise reduction (e.g., noise print, DeHummer, clicks, adaptive noise, phase)
 - export (e.g., mixdown, formats, compression, sample rate)
 - batch processing
 - VR sound (e.g., binaural, spatial, ambisonic).
- Motion graphics and visual effects.
- Project management (e.g., pre-composition, nesting, pre-rendering, managing layers, VR, 3D).
- Key frames (e.g., generation, manipulation, Easy Ease, rove across time).
- Behaviour controls (e.g., position, opacity, scale, anchor, rotation, particle count, parent and child, expressions).
- Transparency and compositing (e.g., alpha channels, masks, mattes).
- Motion tracking (e.g., tracking and stabilising motion, face tracking, mask tracking, time-stretching, time-remapping).
- Effects editors (e.g., simulation, stylise, audio, distort, perspective, 3D).
- Keying (e.g., colour keys, luminance keys and difference keys, rotoscoping).
- Rendering and exporting.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, production stages).
- Interim outputs (e.g., render, director's monitor, dailies, rough-cut).
- Script supervision (e.g., continuity, dialogue, eyelines, actions, story day).
- Audience/client testing/feedback (e.g., observation, focus group, interview, survey).
- Broadcast/distribution readiness (e.g., resolution, frame rate, codec, screen ratio, safe, area, compliance with legal and ethical frameworks).

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, audience, collaborators).
- Relationships within the project (e.g., contractual, financial, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations
 - mapping own skills to specific job roles.
- Professional networking:
 - festivals
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., instructions, guides, care labels).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, agenda, budget, schedule, call sheets).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment hire).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, showcase).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

7.0 Modules in the BTEC Higher Nationals in Fine Art

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The fine art economy is incredibly diverse – from individual artists creating unique works, to artists contributing to elements of larger productions. However, artists are particularly susceptible to socioeconomic changes and need to engage with new platforms and technologies to engage audiences. This brings significant challenges, as well as opportunities, for practitioners.

Working as a creative practitioner requires an understanding of historic and current developments in order to develop relevant concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. These are balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the Art industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: T/650/4768

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: Y/650/4769

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Development of the creative industries.
- Historical and contemporary precedents and practitioners.
- Milestones, movements, styles and trends, e.g.:
 - Impressionism
 - Arts and Crafts
 - Art Nouveau
 - Cubism
 - Futurism
 - Constructivism
 - Bauhaus
 - Art Deco
 - Surrealism
 - Abstract Expressionism
 - Swiss Design
 - Pop Art
 - Minimalism

- Postmodernism
- Feminist Art
- Dada
- Suprematism
- Neue Sachlichkeit
- Colour-field painting
- Genbi Shinkansen
- Gutai Art Association
- Kyūshū-ha
- Fluxus
- Mono-ha
- Cynical Realism
- Vulgar Art
- Stridentism
- Négritude
- AfriCOBRA
- Pan-Arabism
- Hurufiyya
- Saqqakhana
- Post-colonialism
- British Black Arts Movement
- Queer Art.

Disciplines

- Painting, drawing and mark-making.
- Ceramics.
- Textiles.
- Sculpture and 3D objects.
- Installation and site-specific.
- Time-based and digital media.
- Performance.
- Print.
- Sound.
- Mixed media.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Codes and conventions.
- Uses and function.

- Values and tastes.
- Subcultures.
- Gender.
- Fluid identities.
- Feminism.
- Queer theory.
- Cultural difference.
- Ethics.
- Drivers for production.
- Elements and principles:
 - formal elements (e.g., line, tone, shape, form, texture, pattern, colour, light, narrative, scale)
 - composition (e.g., rule of thirds, focal points, hierarchy, structure)
 - colour theory
 - visual analysis
 - textual analysis
 - inter-textual analysis
 - engagement (e.g., interaction, narrative).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints.
- Timeline.
- Budget
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - object/artefact analysis
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Visual, auditory or textual language:
 - concept
 - materials
 - techniques
 - processes.
- Iterative development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - tutor
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Drawing

- Hand to eye coordination.
- Media and materials.
- Observation.
- Visualisation.

Development

- Draft.
- Prototype.
- Model.
- Visual.
- Sample.
- Test.
- Rough.
- Experiment.

Digital

- Recording (e.g., photography, video, sound).
- Image manipulation.
- Editing.
- Design (e.g., text, image, layout).
- Asset management (e.g., file types, storage).
- Compression.
- Colour space (e.g., print, screen).

Materials and mediums

- Paper and card.
- Oil- and water-based mediums and inks.
- Fabric and textiles.
- Ceramic materials and glazes.
- Construction materials (e.g., cement, wood, metal, fasteners).
- Found materials.
- Synthetic materials and plastic.

- Organic materials.
- Natural materials.
- Electronics.

Practice within specialist areas

- Painting, drawing and mark-making, e.g.:
 - underpainting, layers and glazes
 - line, blocking and filling
 - texture and sgraffito
 - spray and airbrush
 - dry/wet
 - mediums (consistency, drying and texture)
 - finishes
 - digital drawing.
- Ceramics, e.g.:
 - throwing and trimming
 - coil and hand building
 - moulds
 - batch and one-off techniques
 - carving and sgraffito
 - glazing
 - firing (e.g., traditional, raku, smoke, salt).
- Textiles, e.g.:
 - knit and crochet
 - weave
 - print
 - embroidery
 - surface treatments
 - fabric making
 - sewing
 - forming (e.g., folding, creasing, stuffing, supports)
 - digital textiles production.
- Sculpture and 3D objects, e.g.:
 - additive
 - subtractive
 - 3D printing
 - machining and fabricating
 - moulding
 - joining
 - finishes.

- Installation and site specific, e.g.:
 - manipulation of space
 - arrangement
 - appropriation of materials
 - juxtaposition
 - audience participation.
- Time-based and digital media, e.g.:
 - lighting
 - directing
 - narrative construction
 - projection
 - editing
 - image manipulation
 - typography
 - broadcast and distribution.
- Performance, e.g.:
 - movement
 - choreography
 - timing
 - costume
 - dance
 - voice
 - audience participation.
- Print, e.g.:
 - intaglio
 - relief
 - screen
 - digital
 - block
 - heat-press
 - transfer
 - light sensitive
 - letterpress.
- Sound, e.g.:
 - capture (e.g., studio, location)
 - microphones, recorders, speakers and headphones
 - creation (e.g., synthesisers, Foley)
 - editing
 - music, voice, effects
 - broadcast, distribution and playback.

- Mixed media, e.g.:
 - assemblage
 - collage
 - installation
 - sculptural objects
 - appropriation of materials.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., artist, illustrator, designer).
- Management roles (e.g., project manager, creative director).
- Technical roles (e.g., engineer, operator, technician, workshop/studio manager).
- Support roles (e.g., curator, journalist, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Personal protective equipment (PPE).
- Safe Systems of Work (SSOW).
- Control of Substances Hazardous to Health (COSHH).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Recording.
- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress:
 - prototypes
 - models (e.g., digital, physical)
 - mock-ups
 - digital and physical models
 - samples
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual and textual language.
- Mode of address.
- Codes and conventions.
- Relation to existing precedents.
- Mood, style and atmosphere.
- Message and impact.
- Timing (e.g., pace, suspense, narrative, experience).
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The fine art industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skill to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress into employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: F/650/4770

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: H/650/4771

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Film and television economies

- Globalisation (e.g., distribution, supply chains, labour).
- Commercialisation and monetisation.
- 'Art for art's sake'.
- Drivers for production and commercial needs.
- Significant challenges, opportunities and developments:
 - virtual reality (VR) and augmented reality (AR)
 - the metaverse
 - digital systems
 - virtual work and ownership (e.g., non-fungible tokens (NFTs))
 - new selling platforms
 - artificial intelligence (AI)
 - sustainability (e.g., social, economic, environmental)
 - inclusivity and diversity
 - exposure and engaging markets

- balancing creativity and administration
- pricing and the ethics of selling
- the need to be multi-skilled
- adapting to technological change
- staying relevant.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - production or execution
 - longevity (e.g., lifespan, maintenance, future uses)
 - how audiences are engaged (e.g., exhibited or experienced).

Ideas development

- Research:
 - research objectives
 - primary research (e.g., field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.
- Approaches to the creative process, e.g.:
 - creative thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stages – exploration, generation, evaluation, communication
 - Double Diamond

- design methods phases – definition, creative, analysis and selection, presentation.

Creative problems and constraints

- Opportunities and limitations.
- Accessibility.
- Communication needs.
- Time and cost
- Engaging audiences.
- Diversity of audiences.
- Standing out.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Developing own practice

- Developing and refining practice within specialist areas, e.g.:
 - painting, drawing and mark-making
 - ceramics
 - textiles
 - sculpture and 3D objects
 - installation and site-specific
 - time-based and digital media
 - performance
 - print
 - sound
 - mixed media.
- Mastery:
 - technical proficiency
 - strategic skills development
 - visual language
 - communication of concepts and ideas
 - developing a personal aesthetic.
- Risk taking:
 - new approaches
 - deviating from conventions
 - pushing boundaries (e.g., aesthetically, conceptually, materialistically).

Visualisation

- Visualisation of concepts and ideas.
- Plans and diagrams.
- Recording and observing.
- Prototyping and drafting.

Selecting and using optimal materials

- Materials context.
- Material traditions.
- Material properties.
- Qualities and characteristics of materials.
- Material testing.
- Limitations of materials.

- Industry standards.
- Preparation.
- Exploitation.
- Sustainability.

Processes

- Production processes (e.g., pre-production, production, post-production, finishing).
- Professional processes, e.g.:
 - surface treatments
 - finishes
 - additive and subtractive processes
 - manipulating light
 - creating structure and form
 - compositional techniques
 - combining media
 - spatial manipulation
 - temporal processes
 - digital processes.
- Selecting and using optimal processes based on parameters:
 - visual, textual, auditory or kinaesthetic characteristics
 - quality and detail
 - speed and efficiency
 - accuracy
 - cost and availability
 - sustainability
 - scale/volume of production.
- Working with space/locations:
 - arrangement of space (e.g., framing, perspective, scale, contrast, balance)
 - positioning of work
 - movement (e.g., audience movement through space/location, vantage points)
 - context (e.g., impact, relationship with other works/surrounding architecture/landscape)
 - lighting (e.g., ambient, artificial light, mixed light sources, spotlights)
 - audience engagement/interactivity
 - sustainability/longevity.

Digital practice

- Integrating digital technology into work process (e.g., modelling, sketching, scanning, computer aided design (CAD), automation, fabrication).
- Recording (e.g., photography, video, sound, lighting).
- Preparing media for promotional materials.
- Working with moving image:
 - video formats
 - camera
 - stabilisation
 - sound
 - editing.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes).
- Interim outputs (e.g., draft, maquette, rough).
- Parameters for testing:
 - error checking (e.g., defects, proofreading)
 - audience testing/feedback (e.g., group critique, observation, focus group, interview, survey)
 - accessibility
 - technical execution
 - sustainability.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, audience, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients, e.g.
 - pitching for work
 - tender
 - outsourced work and contributing to parts of a larger project
 - communication with potential clients
 - competitions
 - exhibitions.
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., instructions, guides, statements).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, agenda, budget, schedule, specification).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment hire).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, showcase).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

8.0 Modules in the BTEC Higher Nationals in Game Development

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The game industry is now a larger contributor to the global economy than the film industry. From casual mobile games produced by individual developers, to major ~AAA titles produced by large studios, gaming is one of the most popular forms of entertainment for people of all ages.

Working in the games industry requires a range of knowledge and skills that span design, programming, marketing and business. Understanding the social trends that drive interest in different forms of gaming is essential to provide a business rationale for game development and the starting point for producing the concept, art and documentation that will convince others to support a game idea.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the games industry. Combining research, design and programming, students will explore both the knowledge, design and technical skills required to progress within the growing games sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: H/650/6661

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: J/650/6662

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the Centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual Influences

- Social:
 - demographic change
 - media and culture
 - traditions
 - evolving consumption of games.
- Technological:
 - new technologies
 - obsolete technologies
 - growth of mobile devices.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.

- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Milestones, movements, styles and trends:
 - mainframe games (e.g., Star Trek, Empire, Hunt the Wumpus)
 - early consoles (e.g., Magnavox Odyssey, Atari Home Pong, Coleco Telstar)
 - second generation consoles (e.g., Atari 2600, ColecoVision, Magnavox Odyssey 2)
 - arcade video games (e.g., Atari Pong, Space Invaders, Pac-Man)
 - handheld games (e.g., Nintendo Game Boy, Sega Game Gear, Nintendo DS)
 - PC games
 - modern consoles (e.g., Sony Playstation, Microsoft Xbox, Nintendo Switch)
 - mobile games (e.g., iOS, Android)
 - cloud gaming (e.g., Nvidia Geforce, Google Stadia)
 - virtual production.

Genres

- Action.
- Adventure.
- RPG.
- Simulation.
- Strategy.
- Puzzle.
- Sports.
- Platform.
- Hybrid.
- Dance and rhythm.

Disciplines

- Games design.
- Production.
- 2D art development.
- 3D art development.

Platforms and uses

- Cinematics.
- Online.
- Games.
- Virtual and augmented reality.
- Operating systems and interfaces.
- Device displays.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Formal elements (e.g., interaction, narrative, movement, sound, mise-en-scene, montage, continuity).
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Representation (e.g., ethnicity equity, diversity equity and inclusion).
- Making connections (e.g. references, patterns, relationships, similarities, differences).
- Game design theory:
 - MDA (8 types of fun)
 - Schell's Elemental Tetrad
 - core loops
 - game design psychology
 - compulsion loops
 - meta game design.
- Analysis (e.g., premise, context, characterisation, structure).
- Key theories (e.g., narrative structure, genre, audience theory).
- Formal elements (e.g., narrative, movement, sound, mise-en-scene, montage, continuity, abstract, figurative).
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g. references, patterns, relationships, similarities, differences).

Ideas generation and development

- The development of propositions based on research and analysis.
- The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and needs.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.
- Concept.
- Pitch.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview).
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (deBono)
 - lateral thinking.

Storyboarding

- Storyboard content:
 - settings/locations
 - character actions
 - camera movements and angles
 - edits and transitions
 - use of sound (e.g., diegetic, non-diegetic, effects, music)
 - layout conventions.

Art definition

- Art style analysis:
 - references
 - core characteristics definition
 - style tests.

Game design

- Game definition:
 - genre
 - objectives (e.g., goal, challenge, conflict, rules)
 - interaction (e.g., single player, multiplayer, competitive, cooperative)
 - input and control
 - visual considerations (e.g., style, colour, safe area, user interface, affordance)
 - platform
 - audio considerations (e.g., ambience/mood, realism/impact, feedback)
 - game engine selection (e.g., Unreal, CryEngine, custom).
- Game design documents:
 - artwork and images
 - revisions and updates
 - design decisions
 - game engine
 - diagrams
 - explanations
 - prototypes.
- Story/narrative/plot:
 - characters (design, backstory)
 - level/environment design
 - gameplay
 - audio
 - user interface.

- Component prototype:
 - game play mechanism tests
 - oververtical slice
 - user interface.
- Final prototype:
 - core mechanics
 - game mechanisms
 - game play dynamics
 - game play aesthetics.

Solving problems through testing and reflection

- Concept.
- Techniques.
- Processes.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new, skills that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Development processes

- Pre-production:
 - storyboarding
 - technical specification
 - prototyping
 - project management scheduling.

- Production:
 - art production
 - level design
 - digital modelling
 - audio development
 - visual effects
 - physics, mechanics
 - programming
 - rendering.
- Testing:
 - bug identification
 - feature testing
 - balancing
 - internal play-testing
 - controlled user-testing
 - user feedback.
- Pre-launch:
 - alpha/beta release
 - alpha/beta test feedback
 - marketing/advertising
 - community development.
- Launch:
 - final bug squashing
 - polishing
 - master release
 - launch events.
- Post-production:
 - ongoing bug squashing
 - community engagement
 - patching/maintenance
 - balancing
 - new content development (e.g., DLC, perks, items).

2D and 3D visual expression techniques

- Drawing and visual expression:
 - real and digital
 - anatomy (e.g., proportion, ergonomics, anthropometrics, poses, settings, body language)
 - spatial (e.g., weight, mass, movement, perspective).

- Modelling:
 - polygon-based
 - topology/retopology
 - sculpting.
- Materials and shaders:
 - UV maps
 - texture mapping
 - PBR (physical based rendering) materials
 - baking
 - tile textures
 - procedural textures.
- Animating
 - tweening, key frame and motion graphs
 - body mechanics
 - layers.
- Rendering
 - pre-visualisation
 - pre-rendered
 - real-time rendering.

Hardware

- Design systems (e.g., computers, hard drives, external GPU, rendering rigs).
- Development systems (e.g., computers, hard drives, network equipment, storage and back-up).
- Testing systems (e.g., computers, consoles, mobile devices).
- Servers (e.g., render farms, network storage, game servers).

Software

- Art software (e.g., 2D software, 3D modelling, digital sculpture, texture creation, rendering, animation, visual effects).
- Programming languages (e.g., C, C++, C#, Swift, Java, Javascript, Python).
- Integrated Development Environment (IDE).
- Debuggers.
- Network management.
- Back-up systems (e.g., local, remote, redundancy).
- Game engines.

Assets and work management

- File naming conventions.
- File types (e.g., compression, import and export).
- Asset management.
- Asset types (e.g., scripts, animations, models, audio, fonts, UI elements).
- Asset storage (e.g., local, cloud).
- Asset acquisition (e.g., asset libraries, in-house development, asset capture).
- Video (e.g., format, safe area, resolution, frame rate, aspect ratio, colour mode).
- Standards and protocols.
- Back-up facilities.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Production roles (e.g., director, assistant director, creative director, artist, animator, matte painter, editor, programmer, engineer).
- Creative roles (e.g., designer, artist, concept artist, layout artist, creative director, artist, designer, script writer).
- Management roles (e.g., producer, project manager, publisher, co-ordinator, producer, project manager, distributor).
- Technical roles (e.g., programmer, engineer, technical artist, VFX supervisor, compositor, programmer, engineer, developer).
- Support roles. (e.g., tester, community manager, paint prep, runner, tester, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in-person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Privacy and security.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.
- Process (e.g., pre-production, production, post-production).
- Time management (e.g., schedule, milestones, deadlines).

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, workshop, location).
- Posture and repetitive strain injury (RSI).
- Desk and chair setup for safe working.
- Lighting for screen-based working.
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognise the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress:
 - prototypes
 - models
 - mock-ups
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure, and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual, textual and auditory language.
- Mood, style and atmosphere.
- Message and impact.
- Timing, e.g., pace, suspense, narrative, experience.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.

- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.
- Visual language.
- Audio language.
- Culmination of elements.
- Application of formal elements and principles.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The games industry offers a wide variety of careers – ranging from design to technical, publishing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many cross-overs; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build upon their creative, technical and contextual knowledge and skill to begin applying these to more complex and professionally oriented outcomes. In the curriculum and assessment units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress into employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: K/650/6663

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: L/650/6664

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the Centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Game theory (e.g., compulsion loops, core loops, game design psychology, meta game design, shell's elemental tetrad).
- Narrative theory (e.g., Todorov structure theory, Propp's character types, linear/non linear).
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/postcolonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).

- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects [SIDE]).
- Gamification of business/education.

Games design and development economies

- Industry context (e.g., independent studio, large studio, niche studio).
- Globalisation (e.g., distribution, markets).
- Financing.
- Commercialisation (e.g., commodification of experience, digital economies, gamification, educational applications).
- Revenue models.
- Drivers for production and commercial needs (e.g., cultural movements, social happiness, interactive leisure).
- Privacy and security.
- Censorship and regulation.
- Sustainability:
 - controlling power usage
 - downloads vs physical formats
 - opting out of 'upgrade culture'
 - backwards compatibility (e.g., new games for old hardware)
 - raising awareness of sustainability through games
 - sustainable business practices.
- Technologies:
 - game engines
 - console SDK
 - mobile OS
 - programming languages
 - emerging technologies.
- Technological developments:
 - new platforms and devices for video games
 - wearables
 - immersion (virtual reality (VR), augmented reality (AR), mixed reality (MR), 360° video)
 - cloud-based gaming (e.g., Google Stadia, nVidia Geforce, Playstation Plus, Xbox Live)
 - internet of things (IoT)
 - big data
 - artificial intelligence and machine learning
 - physical cybernetics
 - collaborative robotics
 - game engines (Unreal Engine, Unity)
 - pre-fabricated assets

- free software
- software plug-ins.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - game tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, maintenance, release, updates)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).

- Problem solving, e.g.:
 - GROW: goal, reality, obstacles, options, way forward
 - lateral thinking: idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - Five 'W's: who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.
- Approaches to the design process, e.g.:
 - design thinking: discovery, interpretation, ideation, experimentation, evolution
 - four-stage design: exploration, generation, evaluation, communication
 - design sprint: understand, diverge, converge, prototype, test
 - double diamond
 - design methods phases: definition, creative, analysis and selection, presentation.

Game development process

- Pre-production.
- Concept development/pitch
 - game design document
 - genre
 - target audience
 - key features
 - target platform
 - core mechanics
 - control scheme/user interface
 - scoring/achievements
 - social/online features
 - screen flow
 - game flow.
- Technical specification.
- Legal issues (e.g., copyrights, licensing, software, assets).
- Project planning.
- Prototype (proof of concept).
- Funding.
- Production:
 - design
 - programming
 - art production
 - audio production
 - quality assurance.

- Post-production (e.g., publishing, marketing).
- Release strategy
 - market/audience
 - platform(s)
 - distribution model (e.g., early access, publishing, digital distribution platforms).
- Maintenance.

Concept development

- Aesthetics.
- Concept generation (mind maps, mood boards).
- Concept design (concept art/storyboards/previs).
- Proof of concept.
- Character development.
- Environment development.
- Narrative.
- Architecture.
- Sketching.
- Players.
- Map making.
- Control systems.
- Achievements, goals, collectibles.
- Navigation and wayfinding.
- Choke points.
- Areas of interest.
- Spawn points.
- Rules.
- Hazard.
- Field of view (FOV).
- Ludic qualities.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - how new learning shapes response to the brief.

- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - ethnicity equity, diversity equity and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new, skills that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Equipment and tools

- Hardware and asset management:
 - storage and backup (e.g., file naming, sharing, backup)
 - network
 - test platforms (e.g., PC, VR, console, mobile)
 - control methods
 - adaptation/development of hardware for accessibility
 - graphics tablets.
- Software:
 - platform software development kit (SDK)
 - 3D modelling (e.g., Maya, Blender, Cinema4D, ZBrush, 3ds Max)
 - integrated development environment (IDE)
 - game engines (e.g., Unreal, Unity, CryEngine, Phaser)
 - compilers
 - debugger
 - digital art.

Asset management

- Asset types (e.g., art work, video, models, audio).
- Asset capture.
- Asset libraries (e.g., in-house, commercial).
- Asset sharing, storage and backup.
- File management and naming conventions.
- Asset data:
 - presets
 - real time tracking
 - colour space.

Programming and scripting

- Languages (e.g., Objective C, Swift, Java, JavaScript, C#, mobile development frameworks).
- Scripting:
 - scripting versus programming
 - common scripting languages (e.g., Lua, C#, Haxe, Javascript, HTML, Python).
- Scripting fundamentals:
 - variables
 - data types
 - operators
 - functions
 - arrays
 - strings
 - expressions
 - file input/output.

Art production

- Character design: (e.g., character concept art, features, anatomy, body structure, proportions, skeletal structure and muscle groups):
 - player characters
 - non-player characters (NPC)
 - character poses
 - silhouette
 - archetypes
 - backstory
 - attributes
 - gameplay (e.g., movement style, weight, speed)
 - character relationships.
- Assets for 2D games:
 - character sprites
 - graphics for objects
 - background tiles
 - sprites for the environment.
- 3D assets and modelling:
 - polygon
 - surface
 - solid
 - traditional sculpting
 - digital sculpting
 - materials and shaders
 - textures
 - lighting

- atmosphere effects
- rendering
- thumbnails, sketching
- layout, blocking
- hard-surface modelling (e.g., buildings, objects)
- organic modelling
- spatial (e.g., weight, mass).
- Rendering:
 - rendering types (e.g., ray casting, ray tracing, scanline)
 - real-time rendering vs offline rendering
 - multi-pass rendering
 - materials and shaders
 - textures and texture baking
 - lighting
 - atmosphere effects.
- Environment and object design (e.g., thumbnails, sketching, layout, blocking, hard-surface modelling, organic modelling):
 - hard-surface modelling (e.g., buildings, objects)
 - organic modelling
 - white boxing
 - triggered events
 - artificial intelligence (e.g., non-player characters, environmental obstacles).
- User interface (UI) design:
 - game setup interface
 - gameplay interface (e.g., HUD, overlay)
 - interface animations
 - integration of UI with game experience.
- Animating assets and characters:
 - technical requirements
 - character rigging
 - motion capture/key framing
 - motion archotyping
 - camera positioning.
- Asset data:
 - metadata
 - positioning
 - motion and movement
 - measurements
 - lens
 - markers
 - presets
 - photogrammetry

- real time tracking
- colour space.

Quality Assurance

- Interim outputs (e.g. first playable, alpha, code freeze, beta, code release, gold master, release).
- Testing:
 - manual testing (e.g., whitebox, combinatorial, blackbox, test flow diagram, test trees)
 - automated testing (e.g., unit, integration, smoke, assertion, feature, stress, performance)
 - user testing:
 - type (e.g., play testing, ad-hoc testing, performance testing)
 - user/audience/client feedback (e.g., play, observation, focus group, survey, discussion forum)
 - bug tracking:
 - version control
 - error logging
 - balancing
 - optimisation
 - refactoring.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborator).
- Relationships within the project (e.g., contractual, financial, user).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.

- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations
 - mapping own skills to specific job roles.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.

- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognise the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct
- Cultural awareness
- Accessibility
- Representation
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).

- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., instructions, guides, customer service, packaging).
- Consistency.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, applications).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstrations).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

9.0 Modules in the BTEC Higher Nationals in Graphic Design

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The graphic design industry contributes significantly to the economy; it supports the communication of concepts and ideas, opening up experiences for consumers, and has the potential to remove barriers and enable engagement. In this space, new technologies and socioeconomic changes bring significant challenges as well as opportunities for graphic design practitioners.

Working as a graphic designer requires an understanding of historic and current developments in order to develop relevant concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. This is balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the graphic design industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: J/650/4772

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: K/650/4773

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Development of the creative industries.
- Historical and contemporary precedents and practitioners.
- Milestones, movements, styles and trends, e.g.:
 - movable type (Bi Sheng)
 - global and cross-cultural influences
 - Art Nouveau
 - Futurism
 - Art Deco
 - De Stijl
 - Bauhaus
 - Modernism
 - International Style
 - Postmodernism
 - sub-cultures

- Cranbrook Academy of Art
- digital revolution
- practitioners (e.g., Carolyn Davidson, Gail Anderson, E. Simms Campbell, Saul Bass, Paula Scher).

Disciplines

- Typography.
- Editorial, layout, book arts and mass publishing.
- Motion graphics.
- Information visualisation.
- Illustration.
- Photography.
- Print.
- Online user interface (UI) and user experience (UX).
- Packaging.

Cultural theories and principles for interpreting the subject

- Communication.
- Audiences, stakeholders and users.
- Functionalism.
- Gestalt.
- Metaphor and symbolism.
- Colour theory.
- Purpose (e.g., instruct, inform, educate, entertain, subvert, persuade, narrate, experience).
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Principles and elements:
 - formal elements (e.g., shape, colour, space, form, line, value and texture)
 - design principles (e.g., emphasis, balance, unity, contrast, rhythm, proportion, repetition, harmony, negative space, balance)
 - moving image principles (e.g., eases, anticipation, arcs, squash, stretch and smears, follow through, overlapping action, exaggeration, secondary and layered animation, appeal)
 - structure (e.g., organisation, hierarchy, mise en scène, montage, continuity)
 - engagement (e.g., interaction, narrative)
 - compositional techniques (e.g., rule of thirds, focal points, movement, sound)
 - accessibility and readability.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics, psychographics and audience needs.
- Client types and expectations.
- Constraints (e.g., house and brand styles).
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations and ethical considerations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - user studies
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Interpreting and presenting data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - storyboarding, mind maps, mood boards
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Concepts.
- Materials.
- Techniques.
- Processes.
- Compatibility.
- Readability and legibility.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluate
 - critique
 - questioning assumptions
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Typography

- Classification (e.g., serif, sans serif, Old Style, decorative, humanist, grotesque, transitional, modern, slab serif, decorative, script-cursive).
- Anatomy.
- Weight.
- Spacing.
- Alignment and justification.

Editorial, layout, book arts and mass publishing

- Page elements (e.g., text, image, line, shape, white space, numbers).
- Layout and grids.
- Binding.
- Stock and finishes.
- Formats.
- Print processes.
- Flatplan.

Motion graphics

- Assets (e.g., 2D, 3D, typography, audio, video, vector, raster images).
- Video (e.g., frame rate, aspect ratio, colour space, file types, import and export settings).
- Motion (e.g., keyframe, tweening, stop-motion, time slice, morph, loop, kinetic typography).
- Processes (e.g., precomposing, compositing, transparency, mattes, keying, rotoscoping, motion tracking, match moving).
- Video editing (e.g., layers, transitions, effects).

Information visualisation

- Medium (e.g., static, animated, interactive).
- Type (e.g., numerical, flowchart, visual article, timeline, process, informational, geographic, comparison, hierarchical).
- Element (e.g., the story, data, copy, colours, fonts, graphs, charts).

Image creation, manipulation and illustration

- Image (e.g., raster and vector).
- Digital (e.g., file types, colour space, resolution, compression, import and export settings).
- Creation techniques (e.g., drawing, painting, print, scanning, collage, mixed media, photography, multimedia, 3D designs, freehand, digital and vector).
- Styles (e.g., stylised, expressive, technical, realistic).

Photography

- Camera operation (e.g., aperture, shutter speed, ISO, focus, depth of field, RAW).
- Lighting (e.g., light meter, natural, enhanced, artificial, colour temperature, white balance, histogram).
- Light modification (e.g., gel, filter, soft box).
- Lenses.
- Stabilisation.
- Storage.
- Darkroom (e.g., chemicals, enlarger, exposure, developing, drying).
- Editing techniques (e.g., image manipulation, filters, enhancement, RAW).

Print

- Printmaking techniques (e.g., relief, intaglio, stencil, planographic, dry printing).
- Printmaking processes (e.g., monoprinting, stamp/block, lino, woodcutting, etching, lithography, screen printing, colography, digital, masking, stencilling registration).
- Controlling inks (e.g., mixing, using mediums and extenders, transparency, opacity).

Online UI and UX

- Developing (e.g., visualisation, wireframes, mock ups, flow charts, storyboard, site map).
- Assets (e.g., type, photo, graphic, video, audio, page elements).
- Platform (e.g., web, mobile, app).
- Interaction and motion (e.g., hot spots, hyperlinks, scrolls, durations, keyframes, motion tracking).

Packaging

- Types (e.g., paperboard, corrugated, plastic, rigid, crates and pallets, shrink wrap, vacuum packaging, preservation packaging, shock mount packaging).
- Stock, material and finishes.
- Nets.
- Material manipulation (e.g., cut, fold, join, assemble).

Technical management

- Organisation (e.g., naming conventions, directories).
- Document set up (e.g., resolution, colour mode, import and export).
- File types.
- Storage and back up.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Production roles (e.g., art director).
- Creative roles (e.g., designer, artworker, copywriter).
- Management roles (e.g., project manager, publisher).
- Technical roles (e.g., programmer, developer).
- Support roles (e.g., tester, community manager).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Personal protective equipment (PPE).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Recording.
- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Sign off.
- Ideas and progress, e.g.:
 - proof
 - prototype
 - mock-up
 - visualisation.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual language.
- Mood, style and atmosphere.
- Message and impact.
- Timing, e.g., pace, suspense, narrative, experience.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The graphic design industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: L/650/4774

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: M/650/4775

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes, demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Communication theories.
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Graphic design economies

- Globalisation (e.g., distribution, supply chains, labour).
- Drivers for production and commercial needs.
- Challenges for designers:
 - sustainability (e.g., social, cultural, economic, environmental)
 - competition within the marketplace
 - shift of designed content from print to digital content in managed media
 - media saturation
 - proliferation of design technology and emerging new practice
 - design automation (e.g., platforms that allow anyone to design, design templates)
 - multi-channel marketing expectations

- digitisation of design practice
- turnaround times
- artificial intelligence (AI)
- commercialisation of culture.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - production or execution
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses, content management)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Approaches to the design process, e.g.:
 - creative thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stages – exploration, generation, evaluation, communication
 - Double Diamond
 - design methods phases – definition, creative, analysis and selection, presentation.

Design problems and constraints

- Corporate identity and values.
- Communication form.
- Platform opportunities and limitations.
- Accessibility.
- Communication needs
- Time and cost.
- Engaging audiences.
- Diversity of audiences.
- Standing out.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equity and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Visual asset design

- Font:
 - font production (e.g., upper/lower case, punctuation, ligatures, system application, exporting, platform availability)
 - access and management
 - pairing
 - typography.
- Illustration:
 - digital and traditional media
 - asset production (e.g., characters, spaces, objects, patterns, textures).
- Page/package:
 - layout and composition
 - grids
 - image and text
 - page elements (e.g., margins, page numbering, headers)
 - mass text design.
- Lens-based:
 - photography and video
 - lighting (e.g., artificial, natural, enhanced)
 - working with people
 - timing and sequences
 - art direction.
- Digital 3D:
 - objects and materials
 - modelling
 - materials and shaders
 - rendering
 - lighting.

Print based design

- Stock and surfaces characteristics and properties.
- Printer requirements (e.g., registration marks, bleed, CMYK, colour separations).
- Book arts (e.g., binding, pagination, imposition).
- Packaging (e.g., nets, assembly).
- Commercial print processes (e.g., digital, lithography, pigment and dye inks).

- Specialist print processes (e.g., letterpress, thermography, screen printing, foil, spot colours, die-cut, emboss, vinyl).
- Lamination and varnish (e.g., spot, UV, coating, gloss/satin/matt).

User-based design

- Code based design (e.g., HTML, CSS frameworks, JavaScript).
- Platforms and screen sizes (e.g., browser, app, responsive layouts).
- Colour standards (e.g., RGB, hexadecimal).
- Rapid development (e.g., wireframes, flow charts, mock-ups).
- UI (e.g., navigation, multi-page).
- UX (e.g., hierarchy of information, call to action, logical sequencing).
- Content management systems.
- Augmented reality (e.g., UI design, combining digital and physical worlds, graphic overlays, digital surface graphics).
- Virtual reality (VR) (e.g., UX design, engaging with emerging new technologies, modelling 3D artefacts and virtual assets for a VR environment, immersive design).

Time-based design

- Audio-visual integration.
- Narrative and montage.
- Motion graphics:
 - kinetic type
 - animated illustration
 - integration of sound/music to visuals.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes).
- Testing methodologies (e.g., mock-up, tree-testing, A/B testing, third party checks).
- Interim outputs (e.g., visualisation, proof, render, rough-cut).
- Parameters for testing:
 - error checking (e.g., missing links, copyediting, proofreading)
 - user testing/user feedback (e.g., observation, focus group, interview, survey)
 - print readiness (e.g., colour spaces, bleed, registration marks, font-embed, pre-flight checks)
 - cross platform/device functionality
 - analytics.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, audience, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., construction and focus breakdowns).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, applications).
- Visual (e.g., storyboards, concept art, reference materials).
- Audio/ visual (e.g., presentations, animatics, previsualisation, dailies, breakdowns).
- Demonstration (e.g., tech demo, testing).
- Logistical communication (e.g., booking, schedules, quotes).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, showcase).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

10.0 Modules in the BTEC Higher Nationals in Interior Design

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The way people use spaces is continually evolving, along with materials and technologies. The demands placed on interior spaces are also affected by socioeconomic changes and the need for more sustainable lifestyles. These changes bring significant challenges, as well as opportunities, for interior design practitioners.

Working in the interior design industry requires an understanding of historic and current developments in order to develop bespoke concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. This is balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the interior design industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: R/650/4776

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: T/650/4777

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

- A2.3 Apply technical knowledge and skill in the production of a project outcome.
- A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.
- A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Development of the creative industries.
- Historical and contemporary precedents and practitioners.
- Milestones, movements, styles and trends, e.g.:
 - global and cross-cultural influences
 - decoration
 - Art Nouveau
 - Bauhaus
 - Art Deco
 - Modernism
 - Postmodernism
 - Hypermodernism
 - Industrial
 - sub-cultures.

Disciplines

- Commercial/retail.
- Industrial.
- Residential.
- Working and learning environments.
- Hospitality.
- Decorative.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Sociology and new social trends.
- Diversity and identities.
- Colour theory.
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Principles and elements:
 - function and purpose
 - composition and formal elements (e.g., balance, scale, proportion, focus, accord, harmony)
 - ergonomics and anthropometrics
 - construction methods and systems.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints (e.g., house and brand styles).
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - survey
 - thematic research (e.g., visual and contextual references)
 - user studies
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - storytelling and the user journey
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Concepts.
- Materials.
- Techniques.
- Processes.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluate
 - critique
 - questioning assumptions
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Drawing and visual representation

- Sketch.
- Digital drawing.
- Architectural drawing.
- Model making.
- Digital prototyping.

Measuring and surveying

- Site surveys.
- Material and structures.
- Building/interior surveys.
- Topographic surveys.
- Photographic surveys.
- Recording and measuring processes.
- Ergonomics and anthropometrics.
- 3D object measuring.
- Measuring material properties.
- Measuring environmental conditions.

CAD

- CAD hardware and software applications.
- Storage, files and output formats.
- Rendering methods.
- Integration with other software.
- Digital workflows.
- Conventions:
 - orthogonal drawings
 - isometric/axonometric drawings
 - technical drawings
 - scale
 - line thickness/line types
 - annotation.

- 3D modelling:
 - solid and surface modelling
 - materials/textures
 - lighting.

Installing and implementation

- Lighting.
- Repurposing/refurbishing existing structures, fixtures and fittings.
- Decorative techniques.
- Textiles manipulation.
- Finishes.
- Floor treatment.

Imaging

- Photography – location, interior, architectural, promotional.
- Lighting.
- Video
- Art direction and staging.
- Image manipulation.

Materials

- Properties:
 - hardness
 - porosity
 - durability
 - elasticity
 - visual
 - tactile
 - sustainability.
- Material testing:
 - non-destructive testing
 - destructive testing
 - structural testing.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., junior/senior designer).
- Production roles (e.g., junior/senior designer, drawing-render specialist).
- Management roles (e.g., team leader, project leader, design lead, project manager, budget controller, compliance controller).
- Technical roles (e.g., render specialist, drawing and visual representation, model maker, photographer).
- Support roles (e.g., model maker, researcher, engineer, render specialist, building systems specialist, structures specialist, lighting specialist, landscape specialist, etc.).
- Construction stage roles (e.g., design lead, project leader, project manager, etc.).
- Commercial practice roles (e.g., seller, intermediary, distributor, store manager).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Professional ethics (e.g., codes of conduct, contractual obligations, service level agreements).
- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Personal protective equipment (PPE).
- Control of Substances Hazardous to Health (COSHH).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes
- Ideas and progress, e.g.:
 - prototypes
 - models (e.g., digital, physical)
 - mock-ups
 - samples
 - visualisations
 - technical drawings
 - simulations.

Communication mechanisms

- Temporary/permanent spaces.
- Blogs.
- Portfolios.
- Creative schematics.
- Interactive in-person and online meeting.
- Social media.
- Websites.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual and textual language.
- Mood, style and atmosphere.
- Message and impact.
- Timing (e.g., pace, suspense, narrative, experience).
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The interior design industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers, requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: Y/650/4778

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: A/650/4779

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes, demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Influences (e.g., human behaviour, culture, diversity, inclusivity).
- Integration of designs (e.g., engagement, interaction, comprehension, demographic).
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Interior design economies

- Trend adoption theories (e.g., trickle-down, trickle-across, trickle-up, populist model).
- Consumer attitudes.
- Globalisation (e.g., distribution, supply chains, labour).
- Commercialisation of spaces.
- Drivers for production and commercial needs.

- Technical advancements:
 - internet of things and smart devices (e.g., security/access, climate control, lighting, entertainment)
 - augmented reality (AR) and virtual reality (VR)
 - artificial intelligence (AI).
- Challenges:
 - boundaries (e.g., geographical, demographic, commercial, industrial, internal, external, sustainable)
 - advances in technology
 - client expectations and project changes
 - demand for increasing flexibility of spaces
 - focus on hygiene and safety
 - integrating specialist trades into the development process
 - developing circular economies
 - sustainability
 - material
 - process
 - source
 - transport
 - waste management.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses, content management)
 - integration of technology
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Approaches to the design process, e.g.:
 - creative thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stages – exploration, generation, evaluation, communication
 - Double Diamond
 - design methods phases – definition, creative, analysis and selection, presentation.

Design constraints

- Client type (e.g., single, family, community, commercial, cultural, religious).
- Domestic/commercial/business needs.
- End-user needs/activities/experience.
- Site specifications.
- Cohesive location.
- Building regulations.
- Local regulations (e.g., planning, cultural, community).
- Health and safety.
- Sustainability: environmental, social, cultural, economic.
- Services required.
- Running costs of space.
- Lifespan of space.
- Security.
- Time and cost restraints.
- Leased/rental property.
- User volume, traffic flow and congestion points.
- Space organisation.
- Placement and use of furniture and equipment.
- Space/interior/brand identity.
- Lighting use and impact of natural light.
- Climate heating/ventilation.

Aesthetics ideas development

- Style.
- Connection to architecture.
- Colour application.
- Lighting.
- Furniture.
- Fixtures.
- Surfaces.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equity and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Site survey and analysis

- Measuring, diagrams and photographic surveys.
- Structural analysis (building properties).
- Environmental setting (e.g., urban/natural environment, orientation, availability of light access to community access to facilities).
- Function (end-user activities/use).
- Location (e.g., access, floor level, adjacent spaces, fire exits).
- Utilities (e.g., water, electric, heating, internet, switches).
- Heating and ventilation.
- Lighting.
- Security.
- Capacity and usable space for identified activities/use.
- Structural changes required.

Measurements and calculations

- Measurement tools (e.g., tape/laser range finders/theodolites/ultrasonic distance meter/3D scanning equipment/light meter).
- Furniture measurements.
- Window and door measurements.
- Floor plan measurements.
- Materials quantities calculations.
- Wall surface calculations.
- Heating and ventilation requirements (e.g., thermal unit calculations, airflow calculations).
- Lighting requirements (e.g., lumen method, lumen-to-wattage ratio, foot-candles).
- Procedures (e.g., algebra, ratios, geometry, trigonometry).
- Running costs.
- Accounting (materials, trades, running costs).

Drawing, visualisation and specifications

- Sketches and ongoing annotation for design development.
- Drawing plans for design proposals and presentation to client.
- 3D model (e.g., scale models, 3D printing).
- Digital visualisation and walk-through.
- Technical drawings:
 - plans
 - sections
 - elevations
 - 2D, 3D shape
 - geometry
 - assembly
 - structural changes.
- Design visuals:
 - material samples, mood boards and colour themes
 - hard furnishing
 - soft furnishing
 - surfaces and finishes
 - design within working parameters:
 - technical specifications functionality/durability/reliability/serviceability
 - environmental suitability/impact/sustainable/ethical
 - furniture and equipment performance specifications
 - engineering (civil, construction)
 - civil drawings.

CAD

- CAD software.
- Rendering methods.
- Integration with other software.
- Digital workflows.
- Conventions.
- Orthogonal drawings.
- Isometric/axonometric drawings.
- Technical drawings.
- Scale.
- Line thickness/line types.
- Annotation.
- 3D modelling.

- Solid and surface modelling.
- Materials/textures.
- Lighting.
- Extended CAD software (AutoCAD, FlexCAD, SolidWorks, FreeCAD).

Materials selection for design optimisation

- Standard supply scales and quantities.
- Impact of environmental conditions (e.g., heat swelling, movement).
- Quality benchmarks and standards.
- Material, furnishings and equipment performance specifications.
- Standard components.
- Bespoke components.
- Properties:
 - fire resistance
 - hardness
 - porosity
 - durability
 - elasticity
 - visual
 - tactile
 - sustainability.
- Materials application:
 - surface applications
 - patterning for floor wall surface/coverings
 - adhesives and fastenings
 - material joins
 - pre-installation treatments
 - post-installation treatments
 - lighting (e.g., natural, ambient, focused).

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes).
- Project integration solutions (e.g., design, construction, maintenance, Building Information Modelling (BIM)).
- Interim outputs (e.g., render, visualisation, samples in situ).
- Material testing:
 - non-destructive testing
 - destructive testing
 - structural testing.

- Parameters for testing:
 - health and safety
 - building codes and regulations
 - fault checking (e.g., finish, tolerances, measurements)
 - spatial flow
 - environmental testing
 - cleaning and maintenance review
 - user testing/user feedback (e.g., observation, focus group, interview, survey)
 - user readiness
 - functionality
 - ergonomics and anthropometrics.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Financial management

- Financial plan.
- Establishing costs.
- Setting fees and establishing contracts.
- Budget monitoring.
- Costings (e.g., creative, supplies, delivery, equipment, installation, consulting).

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., instructions, guides, care labels, signage).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., risk assessment, survey, proposal, plans, specification, agenda, budget, applications, contracts, agreements).
- Visualisations (e.g., renders, animations, design concepts, progress video).
- Legal (e.g., structural engineer, health and safety representative).
- Logistical communication (e.g., booking, schedules, quotes, specialist trades).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, showcase).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

11.0 Modules in the BTEC Higher Nationals in Journalism

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The way people engage with information and journalism content is continually evolving; new platforms enable alternative distribution and audience engagement. The proliferation of journalistic media and new technologies brings significant challenges, as well as opportunities, for journalists.

Working in the journalism industry requires an understanding of historic and current developments in order to develop bespoke concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. This is balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the journalism industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: H/650/4780

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: J/650/4781

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Journalism movements:
 - Marxist
 - advancing
 - action
 - social movement
 - constructive
 - radical.

Disciplines

- News.
- Investigative.
- Political.
- Crime.
- Business.
- Column.

- Celebrity.
- Education.
- Review.
- Sports.

Cultural theories and principles for interpreting the subject

- The four theories (e.g., authoritarian, Soviet-communist, libertarian, social responsibility).
- The five concepts (e.g., Western, revolutionary, developmental, authoritarian, communist).
- Audiences, stakeholders and users:
 - audience theory
 - uses and gratification (e.g., diversion, personal relationship, surveillance)
 - stimulus-response
 - reception (e.g., dominant, negotiated, oppositional)
 - two-step flow.
 - categorisation and demographics
 - income generation through audience and advertising
 - news consumption behaviours
 - audience right of reply
 - statutory complaints procedure
 - right to individual privacy.
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Historical approaches.
- Contemporary approaches:
 - globalisation of content
 - fragmentation of audience
 - rise of citizen journalism
 - push/pull media
 - media convergence
 - media aggregators.
- Principles:
 - research
 - narrative
 - gate keeping
 - news agenda
 - mediation
 - televisual imperative
 - objectivity
 - balance
 - accuracy

- confidentiality
- representation.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - location research
 - thematic research (e.g., visual and contextual references)
 - user studies
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Reliable sources, verification and cross-checking.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - reverse thinking
 - SCAMPER
 - brainstorming and mind mapping
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Developing a story

- Sources of information:
 - developing contacts
 - press releases
 - freedom of information requests
 - social media
 - news agencies
 - media outlets
 - events
 - anniversaries
 - national statistics agencies.
- Assessing a story:
 - timing
 - localisation
 - impact
 - conflict
 - prominence
 - relevance to target audience.
- Planning a story:
 - clarifying intent
 - research plan
 - identifying issues/questions
 - gaining access/accreditation
 - structuring a story
 - interview preparation
 - contemporaneous notes
 - verification of facts
 - re-purposing for multimedia distribution
 - interactivity
 - narrative presentation
 - audience participation.

Solving problems through testing and reflection

- Concept.
- Approach.
- Processes.
- Iterative development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Writing

- Headlines.
- Lead.
- Paragraphs.
- Syntax.
- Vocabulary.
- Grammar.
- Word selection.
- Passive voice sentences vs active.
- Ambiguity.
- Captions.

Digital and design

- Design:
 - house style
 - use of text
 - illustrations and images
 - page elements (e.g., columns, lines, margins, numbers)
 - juxtaposition of picture and text.
- Digital:
 - file types and formats
 - compression
 - file management and back up
 - re-purposing content (e.g., converting video to GIFs)
 - combining digital techniques (e.g., streaming live video via Twitter on a mobile phone).

Photography and imaging

- Framing, angles of view, composition.
- Exposure controls.
- 360° photography.
- Stabilisation.
- Image manipulation.

Lighting

- Artificial, natural, enhanced.
- Studio, location.
- White balance.
- Reflectors and diffusors.

Video

- Storyboarding.
- Scriptwriting.
- Framing.
- Mode of address.
- Composition.
- Exposure control.
- Camera support.
- Editing.
- Voiceovers.
- Live streaming.
- 180°/360° VR.

Sound skills

- Scriptwriting.
- Microphone selection.
- Microphone placement.
- Levels.
- Minimising noise.
- Editing.

Delivery

- Broadcast.
- Transmission.
- Publish.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., editor, sub-editor, journalist, art director, graphic designer, picture editor, sound editor, reception and coordinator).
- Production roles (e.g., director, creative director, artist, animator, sound designer, editor, programmer, engineer).
- Management roles (e.g., producer, project manager, distributor).
- Technical roles (e.g., programmer, engineer).
- Support roles (e.g., tester, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Sensitivity.
- Use of clandestine devices.
- Chequebook journalism.
- Lobby system.
- Accessibility and protected characteristics.
- Harassment, privacy and intrusion.
- Equality, diversity and representation.
- Objectivity, subjectivity and balance.
- Sustainability (e.g., energy consumption and carbon footprint).

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Risk assessments.
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Conducting interviews

- Research.
- Devising questions.
- Ethics and appropriateness of questions.
- Mode of address.
- Body language.

Messaging within outcomes

- Language (e.g., written, visual and vocal).
- Mood, style and atmosphere.
- Message and impact.
- Timing, (e.g., pace, suspense, narrative, experience).
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- Intent (e.g., function, meaning, purpose).
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The journalism industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: K/650/4782

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: L/650/4783

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes, demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Freedom (e.g., information, speech, privacy, balance, intent).
- How cultural difference impacts journalism approaches.
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Journalism economies

- Audiences (e.g., local, national, international, general interest, specialist).
- Income streams.
- Consumption.
- Globalisation (e.g., distribution, labour).
- Commercialisation.
- Drivers for journalism and commercial needs.
- Sustainability (e.g., social, economic, environmental, Albert certification).

- Challenges:
 - the rise of 'citizen journalism' (e.g., social media, blogging)
 - 'fake news' (e.g., reliability, bias and politicisation of facts, social media and uncorroborated information)
 - 'spin' (e.g., press manipulation by political parties)
 - celebrity culture vs news culture
 - the 24-hour news cycle
 - news vs editorial vs opinion.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, running stories, releases, updates, future uses)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.
- Approaches to the concept development, e.g.:
 - creative thinking – discovery, interpretation, ideation, experimentation, evolution
 - concept generation (e.g., sources of inspiration, adaption, mind maps)
 - narrative structure (e.g., story arcs, linearity, suspense, shock).

Developing content

- Initial pitch.
- Draft.
- Revisions.
- Final.
- Layout/post-production.
- Publishing/release.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes, voice, perspective, approach, language)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Editorial requirements

- House styles.
- Target audiences.
- Editorial guidelines.
- Advertising influences.

Media formats

- Traditional print (e.g., newspaper, magazine).
- Online:
 - writing (e.g., news site, blog, magazine site)
 - multimedia (e.g., vlog, podcast).
- Broadcast (e.g., radio, television).
- Lens based (e.g., film, photography).
- Cross-platform (e.g., print and digital/online, online and broadcast).

Writing

- Note-taking.
- Draft production.
- Language (e.g., spelling, grammar, structure, vocabulary).
- Page layout.
- Writing style (formal, informative, entertaining, interactive, unique, multiplatform).
- Narrative tools.

Interviewing

- Preparation (e.g., question sequencing, structuring and setting).
- Media format (e.g., written, correspondence, audio, video).
- Live/recording.
- Positions (e.g., face-to-face, oblique).
- Questions (e.g., open-ended, follow-up).
- Active listening.

Photography

- Photojournalism.
- Photograph relationship to writing.
- Processing (e.g., automation, manipulation, selection).

Recording

- Audio (e.g., interview, podcast, radio).
- Film/video.
- Post-production processes.

Proofreading

- Multiplatform language (e.g., spelling, grammar, structure, vocabulary).
- Print, online, social media, audio, moving image scripting.
- Standard mark-up symbols.
- Page layout.
- Ensuring structure of the argument and continuity of voice.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes).
- Interim outputs (e.g., draft, visualisation, proof, flat-plan).
- Parameters for testing:
 - media requirements
 - technical quality
 - aesthetic quality
 - error checking (e.g., missing links, copyediting, proofreading)
 - audience/client feedback (e.g., observation, focus group, interview, survey)
 - print readiness (e.g., colour spaces, bleed, registration marks, font-embed, pre-flight checks)
 - cross-platform/device functionality
 - analytics
 - house style.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, public, broadcaster, sponsor, advertiser, funding, users, collaborator).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Legislation and regulation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Insurance.
- Frameworks:
 - discrimination law
 - defamation
 - contempt
 - copyright
 - GDPR
 - Official Secrets legislation
 - children
 - victims of sexual assault.
- Legal:
 - defamation
 - confidentiality
 - privacy (as legally defined)
 - copyright (e.g., use of quotes, film, photographs)
 - bribery
 - data protection
 - hacking/intercepting
 - contempt.

- Ethics in journalism:
 - press standards
 - accuracy
 - privacy (as ethically defined)
 - harassment (by journalists/of journalists)
 - sensitivity
 - protection of sources.

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Financial management

- Financial plan.
- Establishing costs.
- Setting fees and establishing contracts.
- Budget monitoring.
- Costings (e.g., creative, supplies, delivery, equipment, installation, consulting).

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - International Federation of Journalists (IFJ)
 - European Federation of Journalists (EFJ)
 - Reporters Without Borders (RWB)/Reporters sans Frontières (RSF)
 - Associated Press (AP)
 - Article 19
 - International Press Institute (IPI)
 - Committee to Protect Journalists (CPJ)
 - national/regional organisations.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.
- Transparency including referencing and citation of sources.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., contacts, follow-up articles, statements).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

- Audience interaction:
 - survey/questionnaire
 - discussion forums
 - online comments
 - social media
 - 'letter to the editor'.
- Responding to an audience:
 - social media
 - discussion forums.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution
- Platforms for collaboration.
- Documents (e.g., proposal, plans, drafts, agenda, budget, applications).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, showcase).

Communication for progression

- Employers/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

12.0 Modules in the BTEC Higher Nationals in Photography

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

From artificial intelligence (AI) to new platforms for distributing images and new camera technologies to increasing image consumption, photographic practice and the audience's relationship to it is rapidly evolving. These changes bring significant challenges, as well as opportunities, for photographic practitioners.

Working in the photography industry requires an understanding of historic and current developments in order to develop bespoke concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. This is balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the photography industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: M/650/4784

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: T/650/4786

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Development of the creative industries.
- Historical and contemporary precedents and practitioners.
- Movements, styles and trends, e.g.:
 - Pictorialism (e.g., Julia Margaret Cameron)
 - Straight Photography (e.g., Lewis Hine, Alfred Stieglitz)
 - Constructivism (e.g., Alexander Rodchenko)
 - Futurism (e.g., Anton Giulio Bragaglia, Mario Bellusi, Filippo Masoero)
 - <f64> Group (e.g., Ansel Adams, Edward Weston, Imogen Cunningham)
 - Farm Security Administration (e.g., Dorothea Lange, Walker Evans, Gordon Parks)
 - Dada (e.g., Man Ray, Lee Miller, Hannah Höch)
 - Bauhaus (e.g., László Moholy-Nagy, Walter Peterhans)
 - Modernism (e.g., Henri Cartier-Bresson, Eugène Atget, Irving Penn, Tina Modotti, Margaret Bourke-White)
 - Magnum Photos

- documentary (e.g., Robert Frank, Paul Graham, Martin Parr, Joel Meyerowitz, Nan Goldin, Diane Arbus, Daido Moriyama)
- postmodern and conceptual photography (e.g., Cindy Sherman, William Eggleston, Jeff Wall, Andreas Gursky, Barbara Kruger, Lorna Simpson, Andres Serrano, Hiroshi Sugimoto)
- contemporary image manipulation and use of digital technology (e.g., Oleg Dou, Flora Borsi, Ewa Doroszenko, Lucas Blalock, Philipp Frank).
- Technological milestones, e.g.:
 - pinhole cameras, camera obscura, cyanotypes (Anna Atkins)
 - first permanent images (Joseph Nicéphore Niépce)
 - dry plates (Richard Leach Maddox)
 - instant cameras (e.g., Polaroid Model 95)
 - Eastman (Kodak), flexible roll film, 35 mm film
 - digital cameras, CMOS sensors, full-frame, mirrorless
 - Adobe Photoshop
 - phones with inbuilt cameras
 - Instagram
 - 360 camera technology
 - computational photography.

Disciplines

- Documentary/photojournalism.
- Landscape.
- Street photography.
- Fine art.
- Fashion.
- Product.
- Food.
- Sports.
- Architectural.
- Portraiture.
- Commercial.
- Content creation.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Visual language and communication.
- Textual analysis.
- Globalisation.
- Subcultures.
- Purpose (e.g., commercial, educational, subversive, entertainment, political).

- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Principles:
 - formal elements (e.g., line, tone, colour, pattern, shape, form, depth, scale etc.)
 - colour theory (e.g., contrasting colour, colour temperature, psychology of colour etc.)
 - compositional techniques (e.g., rule of thirds, golden ratio, focal points, hierarchy, framing, balance, proportion, rhythm, pattern, contrast)
 - engagement (e.g., interaction, narrative, guided, combined, journalistic)
 - ethics (e.g., representation, bias, stereotyping, manipulation).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics, psychographics and audience needs.
- Client types and expectations.
- Constraints (e.g., house and brand styles).
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - user studies
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Interpreting and presenting data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - mood and inspiration boards
 - storyboarding
 - mind mapping
 - reverse thinking
 - SCAMPER
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Concepts.
- Techniques.
- Processes.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluate
 - critique
 - questioning assumptions
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Camera, video and lens

- Cameras (e.g., film and digital, digital single-lens reflex (DSLR), mirrorless, point and shoot, rangefinder, 35 mm, medium format, large format, instant).
- Camera settings (e.g., aperture, shutter speed ISO, the exposure triangle).
- Camera control (e.g., focus, focus modes, focal length, depth of field).
- Sensor size and resolution.
- Lenses (e.g., fixed, zoom, macro, telephoto).
- Stabilisation (e.g., hand, tripod, gimbal, Steadicam).
- Experimental (e.g., pinhole, obscura).

Lighting

- Language properties and science of light (e.g., circle of confusion, reciprocity law failure, angle of incidence, light/colour temperature, law of reflection).
- Lighting styles (e.g., Rembrandt, split loop, short broad, high key, low key).
- Controlling natural light.
- Using flash (e.g., through-the-lens (TTL) meter on location, fill flash, speed light systems).
- Light modifiers (e.g., reflectors, diffusers, gels, soft box, umbrellas, cones).
- Metering (e.g., in camera, external, direct/indirect).
- White balance.
- Histograms.
- Power.

Art direction, equipment and resources

- Location.
- Studio.
- Models (e.g., directing, booking, release forms).
- Props.
- Backdrops.
- Styling.
- Costume.
- Make-up.
- Equipment: maintenance, storage, protection.

Digital production

- Editing techniques and tools (e.g., image correction, manipulation, special effects, VFX).
- Image manipulation.
- Storage and back-up.
- Compression and resolution.
- Screen calibration.
- File types.
- File name conventions and version control.
- Colour space.
- Design (e.g., image and text, layout, typography).
- Scanner.

Output

- Print:
 - digital
 - giclée
 - darkroom
 - liquid light and cyanotype
 - transparency
 - C-type
 - spot colour
 - silkscreen.
- Projection:
 - installation
 - combination with audio.
- Screen based:
 - devices
 - aspect ratio
 - resolution.
- Physical and digital publication:
 - sequencing
 - layout
 - copy and body text
 - binding (e.g., saddle stitch, perfect, concertina)
 - digital publishing software
 - image production for web
 - web-based file formats
 - website design.

- Moving image:
 - codes and conventions
 - shot type
 - moving image file formats
 - editing
 - rendering and output.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., creative director, photographer, creative assistant, stylist, creative art worker, editor, freelance practitioner, videographer, creative producer).
- Production roles (e.g., director, creative director, editor, post-production assistant, production coordinator).
- Management roles (e.g., project manager, studio manager, lead creative designer).
- Technical roles (e.g., technician, lighting technician, camera assistant).
- Support roles (e.g., curator, assistant, creative assistant, stylist, make-up/props assistant, sales assistant, editor, re-toucher, post-production assistant).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Release forms.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Personal protective equipment (PPE).
- Safe Systems of Work (SSOW).
- Control of Substances Hazardous to Health (COSHH).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress, e.g.:
 - RAW
 - contact sheets
 - mock-ups
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure, and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual and textual language.
- Mood, style and atmosphere.
- Message and impact.
- Timing (e.g., pace, suspense, narrative, experience).
- Applying/subverting codes and conventions.
- References and relationship to wider culture.

- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The photography industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: Y/650/4787

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: A/650/4788

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Photography economies

- Globalisation.
- Drivers for production and commercial needs.
- Sustainability.
- Significant challenges:
 - social media
 - deep fakes
 - media saturation
 - proliferation of photographic technology
 - image processing automation (e.g., filters, phones)
 - multi-channel marketing expectations
 - image libraries
 - turnaround times
 - artificial intelligence (AI)
 - commercialisation of culture.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'Ws' and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Approaches to the design process, e.g.:
 - creative thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stages – exploration, generation, evaluation, communication
 - Double Diamond
 - design methods phases – definition, creative, analysis and selection, presentation.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Cameras, optics and light

- Cameras:
 - camera (e.g., formats, sensor types, mirrorless, still capture, moving image capabilities)
 - exposure (e.g., reciprocity, duration, errors, compensation)
 - ISO (e.g., noise, 'expose to the right').
- Optics:
 - lenses (e.g., selection, angle of view)
 - focus (manual, auto, focus points, focus modes, focus tracking, hyperfocal)
 - perspective (e.g., 'true', 'apparent', magnification of foreground)
 - optical aberrations (e.g., chromatic, flare, distortion, tilt shift, bokeh, vignetting)
 - aperture and depth of field (e.g., relationship to focal length, hyperfocal distance)
 - focal length (e.g., lens coverage, sensor size, relationship to shutter speed)
 - extension tubes/bellows.
- Light:
 - properties of light (e.g., intensity, colour, quality, direction)
 - visible light and wider light wavelengths (infrared, ultraviolet)
 - science of light (e.g., inverse-square law, dispersion)
 - colour temperature
 - histograms
 - law of reflection and refraction
 - light interference (e.g., humidity, pollution)
 - filters (e.g., UV, ND, polarising, colour correction).

Creative production

- Working with light:
 - ambient light (e.g., external/internal, controlling light, supplementing light, portable flash, mixing light sources, controlling flash, multi flash set up)
 - equipment (e.g., modifiers, lighting support, flash meters, triggers, slaves, flash sync)
 - lighting for target audience (e.g., lighting ratio, high/low key, soft/hard, lighting styles)
 - advanced flash and special effects (e.g., flash and blur, multiple exposure, rear curtain flash, multi-flash set ups, high-speed synch, macro flash).

- Working with space:
 - composition of space (e.g., negative space, framing, perspective, scale, contrast, balance, distortion)
 - positioning
 - movement.
- Working in a studio:
 - practice (e.g., food, model, product)
 - styling, sets and backdrops (e.g., conceptualisation, materials, props, colour schemes, scale, perspective, construction).
- Working with locations:
 - practice (e.g., architecture, landscape, portraiture, event, editorial, fashion)
 - shooting (e.g., exposure, bracketing, differential focus, motion blur, tilt shift)
 - lighting (e.g., impact of location, correction filters, exposure compensation, portable lighting/power sources)
 - techniques (e.g., vantage point, framing, timing, blur, panning, silhouetting).
- Working with people:
 - casting, rehearsal and direction
 - positioning
 - dress, make-up and hair.
- Working with moving image:
 - video formats (e.g., frames per second, resolution, aspect ratio)
 - camera (e.g., ISO, shutter speed, aperture, exposure mode, focus mode)
 - sound (e.g., int/ext mics, line in/out, diegetic, non-diegetic)
 - editing (e.g., conventions, software, shot list, sequence, transitions, video effects, soundtrack, titles)
 - stabilisation (e.g., tripod, gimbal/Steadicam, dolly, track, drone).

Post-production and output media development

- Processing e.g.:
 - RAW editing
 - lens correction
 - highlight recovery
 - filters and presets
 - batch processing.
- Working with narrative:
 - image selection (e.g., single, sequence)
 - structure, relationship and juxtaposition
 - format (e.g., online, book, moving image).
- Working with image and text:
 - building meaning (e.g., sequencing, juxtaposition, sub-text)
 - fonts
 - grids and layout (e.g., hierarchy, order).

- Working with interaction:
 - format (e.g., web, app, interface, point of sale)
 - navigation (e.g., links, instructions, buttons)
 - screen properties and characteristics.
- Image manipulation:
 - image design (e.g., filters, effects, manipulation, typography, layering)
 - illustration (e.g., vector drawing, graphics tablets, layering artwork).
- Print:
 - stock and surface properties and characteristics
 - advanced printing processes (e.g., fine art inkjet, laser, cylinder, giclée)
 - book arts and packaging (e.g., imaging software, online services, self-publishing).
- Working with a darkroom:
 - film processing and enlarging
 - creative darkroom practice (e.g., photograms, double exposure)
 - printing (e.g., contrast filters, dodging, burning, split grade printing)
 - print finishing (e.g., spotting, retouching, archival treatment).
- Exhibiting:
 - presentation (e.g., frames, boxes, lightbox, mounts, support)
 - install (e.g., hanging, fixing, lighting).

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, production stages).
- Interim outputs (e.g., test shoot, rough-cut, RAW, proof).
- Testing:
 - error checking (e.g., resolution, colour accuracy, copyediting)
 - audience testing/audience feedback (e.g., observation, focus group, interview, survey)
 - print readiness (e.g., colour spaces, bleed, registration marks, font-embed, pre-flight checks)
 - cross-platform/device functionality.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, audience, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.
- Legal and ethical (e.g., permission, model release forms, risk assessment, public liability, health and safety, electrical safety, environmental impact, insurance).

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., articles, statements, instructions, guides).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, agenda, budget, schedule, specification).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment hire).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, showcase).

Communication for progression

- Employer/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

13.0 Modules in the BTEC Higher Nationals in Product Design

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

The product design industry is vast, spanning from traditional consumer goods to innovative designs solving unique problems. Product designers are experiencing significant developments within the industry; changes in design processes, new materials and manufacturing methods, demands for more sustainable products and a more circular economy all bring significant challenges, as well as opportunities, for product design practitioners.

Working in the product design industry requires an understanding of historic and current developments in order to develop bespoke concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. This is balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the product design industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: D/650/4789

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: J/650/4790

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation
 - sustainability.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Development of the creative industries.
- Historical and contemporary precedents and practitioners.
- Movements, styles and trends, e.g.:
 - Arts and Crafts
 - Art Nouveau
 - De Stijl
 - Bauhaus
 - Art Deco
 - Modernism
 - Postmodernism
 - Memphis
 - Deconstructivism
 - Organic.

Disciplines

- Commercial.
- Mechanical and electronic.
- Wearable.
- Industrial.
- Domestic.
- Decorative.
- Consumable.
- Packaging.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Ergonomics and anthropometrics.
- Colour theory.
- Visual analysis.
- Textual analysis.
- Inter-textual analysis.
- Materiality and immateriality.
- Discourse.
- Semiotics.
- Subcultures.
- Gender.
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Principles:
 - formal elements (e.g., space, form, surface, time, sound, material, assets, light, audience)
 - function (e.g., fitness for purpose, efficacy, serviceability, ethical).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints (e.g., house and brand styles).
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - user studies
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Interpreting and presenting data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - mood and inspiration boards
 - mind mapping
 - reverse thinking
 - SCAMPER
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Concept.
- Aesthetic.
- Materials.
- Techniques.
- Processes.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Operation of tools, equipment, software and hardware

- Selection.
- Set up.
- Measuring.
- Use/operation.
- Management and maintenance.

Materials, properties and characteristics

- Materials, e.g.:
 - metal
 - plastic and polymers
 - glass
 - fabric
 - foam
 - wood, card and paper
 - electronics
 - bonding and joining materials.
- Properties and characteristics:
 - visual
 - tactile
 - conductivity
 - strength
 - elasticity
 - plasticity
 - malleability
 - reliability
 - porosity
 - ductility
 - hardness
 - toughness
 - durability
 - sustainability.

Material sources

- Stock (e.g., common stocks of materials).
- Proprietary parts (e.g., ready made and available).
- Custom parts.
- Components.

Prototyping

- Sketches/wireframes.
- Drafts.
- Models/maquettes.
- Rapid.
- 3D.

CAD and drawing

- 2D.
- 3D.
- Modelling.
- Surfaces and textures.
- Rendering.
- Technical drawing (e.g., orthographic, isometric, perspective).
- Codes and conventions for drawing annotations.

Manipulation of media

- Adaptation, combination and manipulation of materials and media:
 - additive
 - subtractive
 - joining
 - moulding and casting
 - cutting
 - electrical
 - mechanical
 - finishing.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.
- Accuracy, precision, finish.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., creative director, artist, designer, designer/maker).
- Production roles (e.g., director, creative director, artist, programmer, engineer, maker).
- Management roles (e.g., producer, project manager, distributor).
- Technical roles (e.g., programmer, engineer, technician).
- Support roles (e.g., tester, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in-person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Personal protective equipment (PPE).
- Safe Systems of Work (SSOW).
- Control of Substances Hazardous to Health (COSHH).
- Disposal of materials.
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress, e.g.:
 - prototypes
 - models (e.g., digital, physical)
 - mock-ups
 - digital and physical models
 - samples
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual language.
- Textual language and feel.
- Style, aesthetic and functionality.
- Production methods.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The product design industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: K/650/4791

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: L/650/4792

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Product design economies

- Product design language.
- Trend adoption theories (e.g., trickle-down, trickle-across, trickle-up, populist model).
- Consumer attitudes.
- Patents.
- Technical advancements.
- Production:
 - production scales
 - globalisation (e.g., distribution, supply chains, labour)
 - commercialisation
 - drivers for production and commercial needs.

- Sustainability:
 - material
 - process
 - sourcing
 - natural resources
 - upcycling
 - waste management.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - production/manufacturing
 - cost/financial viability
 - scalability
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses)
 - how audiences/end users are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Approaches to the design process, e.g.:
 - creative thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stages – exploration, generation, evaluation, communication
 - Double Diamond
 - design methods phases – definition, creative, analysis and selection, presentation.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Specifications

- Types:
 - performance specification
 - outline specification
 - full specification
 - specification templates/standards.
- Details:
 - features
 - measurements and tolerances (e.g., dimensions, weight, margins)
 - materials
 - appearance
 - finish
 - components
 - visualisation.

Visualisation

- Sketching/drawing.
- CAD: 2D and 3D.
- BS 8888 standards.
- Mock-ups.
- Models/maquettes
- Prototypes.
- Renders.
- VR/AR simulations.
- Plans.
- Swatches.
- Technical drawing:
 - projections
 - views
 - component
 - information coordination
 - clash detection
 - 'red-lining'
 - assembly drawings.

- 3D modelling:
 - modelling – surface, solid, NURBs, parametric
 - rendering
 - lighting
 - scanning
 - data formatting.

Digital fabrication/production techniques and processes

- CAM.
- Additive fabrication, e.g.:
 - stereolithography
 - laser sintering/laser melting
 - extrusion
 - jetting
 - lamination.
- Subtractive fabrication, e.g.:
 - CNC milling
 - laser cutting/etching
 - plasma cutting.
- Post processing, e.g.:
 - cooling
 - cleaning
 - curing
 - porous infiltration
 - heat treatments, firing/glazing.

Selecting and using optimal materials

- Types.
- Quality: visual, tactile.
- Availability (e.g., source, standard forms, cost).
- Sustainability.
- Properties and performance characteristics.

Selecting and using optimal production process based on parameters

- Quality.
- Detail.
- Speed/time.
- Accuracy.
- Cost.

- Efficiency.
- Scale/volume of production.
- Stability.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes, batches, stages of production).
- Interim outputs (e.g., render, prototype, visualisation, model).
- Tests (e.g., material, production process, use, stress).
- User testing/user feedback (e.g., observation, focus group, interview, survey).
- Parameters for testing:
 - design validation
 - safety and ISO standards
 - error checking
 - production readiness
 - functionality
 - ergonomics.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., care labels, instructions, guides).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, schedule).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment hire).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstration).

Communication for progression

- Employer/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

14.0 Modules in the BTEC Higher Nationals in Sound Media

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

Sound media includes a broad area of commercial and non-commercial products ranging from live broadcasts to pre-recorded media such as radio and podcasts. It also includes the production of sound for other areas such as sound media, film and events. The way the audience consumes audio and the developments in technology and production are evolving and these changes bring significant challenges as well as opportunities for sound media practitioners.

Working in the sound media industry requires an understanding of historic and current developments in order to develop concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. These are balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the sound media industry. Combining research, development and production, students will explore both the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrates Essential Content across two Assessment Units:

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: M/650/4793

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: R/650/4794

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the content of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies
 - distribution channels.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation
 - sustainability.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Development of the creative industries.
- Historical developments in sound for media:
 - the talkies
 - technological development
 - from live to pre-recorded sound
 - sound editing development and techniques
 - stylistic use of sound (e.g., Orson Welles, Alfred Hitchcock, David Lynch)
 - development of sound design
 - Foley
 - mono, stereo, surround
 - Dolby noise reduction.

- Milestones, movements, styles and trends in:
 - radio
 - film
 - television
 - animation
 - gaming.

Disciplines

- Live/Pre-recorded.
- Commercial and non-commercial.
- Audio books, guides and podcasts.
- Radio.
- Sound for moving image.
- Sound for sound media and apps.
- Music.
- Dance, theatre and events.

Cultural theories and principles for interpreting the subject

- Cultural theories and principles for interpreting the subject.
- Audience theory:
 - uses & gratification
 - diversion, personal relationship, personal identity, surveillance
 - stimulus-response hypodermic needle theory
 - reception theory (e.g., dominant, negotiated, oppositional two step flow theory)
 - listener context (e.g., in motion, background, intimacy, imagination of listener, private/public listening, competing sounds, mode of address).
- Narrative theories and constructs.
- Representation.
- Denotation and connotation.
- Codes and conventions.
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Principles:
 - language style and mode of address
 - accuracy (e.g., objectivity, subjectivity and balance)
 - genre (e.g., drama, sitcom, current affairs, documentary, religious, public service)
 - time (e.g., bridges, queues, passages of time, effects, summarising)
 - spatial (e.g., diegesis, acoustics, layers).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Planning and pre-production

- Plan of performance area.
- Health and safety checks.
- Studio session arrangements.
- Channel list.
- Equipment list.
- Track sheets.
- Scheduling studio time.
- Instrumentation considerations.
- Spot effects.
- Sourcing assets.
- Acquiring rights.
- Rehearsal.
- Script.
- Outline.
- Playlist.

Research

- Research ethics
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - user studies
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Interpreting and presenting data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Narrative construction (e.g., scripting, drafts, table reads, linearity, treatment, plot).
- Techniques, e.g.:
 - mind mapping
 - reverse thinking
 - SCAMPER
 - emulation and role playing
 - forced relationships
 - 'Thinking Hats' (deBono)
 - lateral thinking.

Solving problems through testing and reflection

- Concept.
- Production techniques and processes.
- Quality benchmarks.
- Sound (e.g., quality, levels).
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.

- Audience response:
 - aircheck
 - audience reaction
 - listener group
 - call in
 - online tools
 - cume (cumulative audience)
 - gross impressions
 - actives
 - focus groups
 - interview.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Writing

- Structuring interview clips for packages.
- Writing speech/dialogue.
- Language style.
- Language structure.
- Writing links.
- Avoiding ambiguity.
- Summarising.
- Narration (diegetic, omniscient).
- Script conventions.

General equipment

- Software and hardware.
- Cables, connectors, adapters and converters.
- Sound proofing.
- Studio.
- Storage.
- Power.

Sound qualities

- Decibels.
- Levels/gain.
- Metering.
- Proximity.
- Sample rate and bit depth.
- Signal to noise ratio.
- Noise reduction.
- Actuality.

Sound, microphones and recording

- Microphone types.
- Position and proximity.
- Sensitivity.
- Phantom power.

- Polar pattern (e.g., dynamic, ribbon, condenser, lapel, radio, cardioid/hypercardioid, omnidirectional).
- Recording:
 - studio/location
 - acoustics, reverb and sound absorption
 - environmental sound
 - Foley
 - recording chain
 - microphones mixers
 - linear and non-linear recording
 - multi-track recording.
- Monitoring:
 - headphones
 - group and master faders.
 - types of speaker.

Digital audio workstation

- Industry-standard workstations/software.
- Workflow.
- Navigation.
- Transport controls.
- Track controls.
- Mixdown.
- Export (file formats).

Mixer

- Metering.
- Input gain.
- Equalisation.
- Auxiliary output.
- Groups.
- Sources.
- Effects.
- Dynamics.
- Output.
- Radio production.
- Interview.
- Presenting.
- Cue material.

- Links.
- Soundbite.
- Jingle.
- Liner.
- Live assist.
- Narration.
- DJ.

Post-production and mastering

- Editing:
 - cut, copy, paste
 - fades, crossfades and transitions
 - compressor/limiter:
 - threshold
 - noisefloor
 - ratio
 - attack/release
 - clip based level
 - editing modes.
- Effects:
 - reverberation
 - equalisation (graphic and parametric)
 - filters (low pass, high pass, notch)
 - pitch change.
- Editing music:
 - radio edits, creating loops, music beds
 - ambience and background noise.
 - equaliser types
 - side-chaining
 - levels
 - automation
 - overdubbing and layering techniques
 - equalisers
 - compressors
 - dynamic
 - time-based effects (e.g., reverb and delay)
 - using midi.

Broadcast

- Broadcast operations:
 - logging
 - encoding
 - bandwidth
 - scheduling playlists
 - stream hosting
 - sample rates.
- Broadcast considerations:
 - broadcast processing
 - online/on air
 - live
 - pre-recorded
 - hosting
 - streaming
 - scheduling
 - quality, file type and compression
 - setting levels throughout signal chain.
 - music library/database
 - playlist
 - track display (title, artist, time, cue, ramp, pre-fade)
 - live assist.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., creative director, writer, sound designer).
- Production roles (e.g., reporter, presenter, disc jockey, producer, director, editor).
- Management roles (e.g., producer, project manager, distributor).
- Technical roles (e.g., technician, programmer, engineer).
- Support roles (e.g., tester, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in-person).

Ethics

- Regulators (e.g., professional bodies, media regulators).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property, royalties).
- Privacy, confidentiality and protection of sources.
- Censorship.
- Release forms.
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Objectivity, subjectivity and balance.
- Reliability.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources
 - product lifecycle and disposal/recyclability.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, workshop, location).
- Electrical hazards.
- Reporting accidents.
- Posture and repetitive strain injury (RSI).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the Creative Industries (e.g., critics, self reflection, rejection).
- Manual handling.
- Hearing health:
 - sound levels
 - the noise dose
 - tinnitus
 - Personal protective equipment (PPE).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Mood, style and atmosphere.
- Mode of address.
- Message and impact.
- Timing, e.g. pace, suspense, narrative, experience, economy.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The sound media industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many cross-overs; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build upon their creative, technical and contextual knowledge and skill to begin applying these to more complex and professionally oriented outcomes. In the curriculum and assessment units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress into employment or continued study.

The learning and teaching for this module integrates Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: T/650/4795

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem-solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: Y/650/4796

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the content of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Narrative theories (e.g., Levi-Strauss, Barthes, Propp, Todorov, Campbell).
- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/postcolonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects [SIDE]).

Sound media economies

- Globalisation (e.g., distribution, social media).
- Commercialisation and monetisation (e.g., purchase, rent, subscription, royalties, commissioning).
- Rights (e.g., copyright, public domain, creative commons, licence, agency, publishing).
- Drivers for production and commercial needs.
- Impact of technologies (e.g., download, streaming, directories and aggregators, algorithms, NFTs).
- Sustainability (e.g., social, economic, environmental, Albert certification).

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Contributors (e.g., musicians, voice actors, talent, live audiences).
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, releases, updates, future uses)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking: idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

Product concept development

- Concept.
- Selling points.
- Treatment (e.g., step, master scene).
- Synopsis.
- Script:
 - type (e.g., original writing, adaptation, abridged)
 - narrative/script development:
 - structural approach
 - character development
 - narrative and plot
 - theme
 - pace/tone.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equity and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Sound and hearing

- Principles of sound:
 - waveform propagation
 - amplitude
 - wavelength and frequency
 - harmonics.
- Physiology of hearing.
- Loudness perception.
- Directional perception.
- Interaural differences.
- Psychoacoustics.
- Sound clarity.
- Actuality.
- Background sounds.
- Sound effects.

Recording

- Microphone techniques:
 - mono
 - stereo (coincident and spaced arrays, A-B stereo, mid-side)
 - surround and multi microphone arrays
 - binaural
 - ambisonic
 - portable and location recording.
- Microphone stands and rigging.
- Minimising unwanted sound (e.g., shield, filter, screen).
- Pre-amplification:
 - solid state and valve
 - clean vs. character
 - creative pre-amp selection
 - gain staging
 - distortion (creative vs. destructive).

- Digital audio conversion:
 - sampling theory
 - sample rate
 - quantisation
 - bit depth
 - audio file types
 - audio data compression techniques
 - audio file type conversion
 - perceived impact of digital audio sampling on recorded sound.
- Acoustics:
 - spaces (e.g., recording, mixing, location)
 - dead vs live spaces
 - surface materials
 - acoustic treatment (e.g., absorption, diffusion)
 - sound proofing
 - Sabine equation
 - the critical distance
 - room modes/standing waves
 - acoustic considerations:
 - clarity of source in recorded sound
 - reverb (creative and corrective inclusion, exclusion or balancing of the natural reverb of a recording space)
 - spill
 - phase.
- Recording levels and sound management:
 - metering
 - in-record marking.

Recording contexts

- Seminar/group discussions:
 - seating/podium arrangement
 - audience positioning.
- Music/performance:
 - approaches for different genres
 - performance spaces
 - ambience/atmosphere.
- Studio based recording:
 - recording and tracklaying sound elements in the studio
 - Foley/spot effects
 - sound effects library
 - looping/automated dialogue replacement.

- Location sound recording:
 - wild track/atmosphere
 - syncing sound.
- Expletives:
 - time-delays
 - bleeping
 - editing.

Editing and mixing

- Sonic aesthetics and the client:
 - describing sound
 - sound source relationships:
 - pitch
 - dynamic
 - timbre.
- Listening and evaluating sound:
 - subjectivity
 - musical balance
 - sound quality
 - spatial sound:
 - localisation
 - width
 - depth
 - sense of space, environment
 - mixing for multi speaker playback.
- Digital audio workstations (DAWs).
- Editing and mixing:
 - corrective and creative approaches and techniques
 - EQ
 - compression/limiters
 - software/plugins
 - editing
 - noise reduction.
- Levels.
- Automation.
- File management and metadata.
- Audio post-production for moving image:
 - dubbing
 - narration
 - filters
 - sound effects
 - music.

Final mastering

- Overall equalisation.
- Overall compression (multi-band, limiter).
- Top and tail.
- Mixdown.
- Peak/RMS levels.
- Delivery file formats.
- Resolution/sample rate.
- Loudness:
 - the loudness wars
 - loudness units (LUFS).

Broadcasting and distribution

- Analogue (AM/FM)/digital (DAB)/web-based radio broadcasting.
- Transmitters/receivers.
- Time-delays.
- Streaming.
- Codecs.
- Loudness.
- Picture lock.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, production stages).
- Testing:
 - interim outputs (e.g. script read through, rehearsal, rough cut, rough mix)
 - error checking (e.g., variation in levels, compression, background noise, audio glitches, stereo phasing)
 - audience/client testing/audience feedback (e.g., observation, focus group, interview, survey)
 - continuity
 - broadcast/distribution readiness.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, audience, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., demo reel, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., bid, pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/Regulation/Taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.
- Broadcasting law.
- Media law.
- Health and safety legislation.
- Broadcasting codes of practice.
- Editorial guidelines.
- Advertising standards.
- Licence commitments.
- Complaints policies.

Business planning

- Business plan:
 - mission statement
 - monetisation strategy (e.g., paid subscription, advertising, royalties)
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., work space, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., packaging, instructions, guides).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, agenda, budget, schedule).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment hire).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstration).

Communication for progression

- Employer/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/demo reel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

15.0 Modules in the BTEC Higher Nationals in Visual Effects

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

Visual effects (VFX) make a huge and increasing contribution to the audience's engagement with moving image. New technological developments and practices continually evolve, alongside a proliferation of channels for consuming and changing audience attitudes. These changes bring significant challenges, as well as opportunities, for VFX practitioners.

Working in the VFX industry requires an understanding of historic and current developments in order to develop bespoke concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. These are balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the VFX industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: T/650/4802

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: Y/650/4803

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies
 - distribution
 - access to software.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Pioneers in VFX, e.g.:
 - Joseph Plateau (phenakistiscope, 1832)
 - J. Stuart Blackton (*Humorous Phases of Funny Faces*, 1906)
 - Winsor McCay (*Gertie the Dinosaur* (1914))
 - Willis H. O'Brien (*The Lost World* (1925) and *King Kong* (1933))
 - Lotte Reiniger (*The Adventures of Prince Achmed* (1926))
 - Disney (*Steamboat Willie* (1928) and *Snow White and the Seven Dwarfs* (1937))
 - John Whitney (*Vertigo* (1958) and *Westworld* (1973))
 - Gary Demos and Richard F. Taylor (*Adam Powers, The Juggler* (1981)
 - *Tron* (1982)
 - Lucasfilm Computer Graphics Project (*The Adventures of André and Wally B.* (1984))
 - Disney (*Toy Story* (1995)).

- Advances and future of VFX:
 - virtual reality (VR)
 - augmented reality (AR)
 - motion capture
 - Universal Scene Description (USD)
 - virtual production
 - major players (e.g., DNEG, Motion Picture Company, Industrial, Light and Magic, Disney (including Pixar), Milk, The Mill, Weta Digital, Cinesite).

Disciplines

- Film.
- Television.
- Online media.
- Games.
- Animation.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Media language (e.g., mise en scène, cinematography, editing, sound, light).
- Genre.
- Representation.
- Narrative.
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Creation of meaning, message and impact.
- Mood, style and atmosphere.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market.
- Demographics and audience needs.
- Client types and expectations.
- Constraints (e.g., house and brand styles).
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.
- Proposal (e.g., concept, storyboard).

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Interpreting and presenting data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Concept development.
- Techniques, e.g.:
 - storyboarding
 - mind mapping
 - reverse thinking
 - SCAMPER
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Dailies/rough cuts.
- Concept.
- Technical execution of techniques and process.
- Testing:
 - animatics
 - previsualisation
 - bug fixing.
- Application of production processes:
 - iterative development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat)
 - pre-production
 - production
 - post-production.
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Equipment and tools

- Hardware:
 - computers
 - monitors
 - cameras and lenses
 - stabilisation
 - storage and backup (e.g., local backup, cloud backup)
 - network.
- Software (e.g., Autodesk Maya, Blender, Cinema4D, ZBrush, 3ds Max, After Effects, Nuke, Houdini, Mari, Adobe Substance 3D).
- Tools:
 - Macbeth chart
 - grey and chrome balls
 - laser measure.

Pre-production techniques

- Storyboarding.
- Concept art.
- Visualisation.

VFX techniques

- Digital compositing.
- Blue screen/green screen.
- Chromakey.
- Computer generated imagery (CGI).
- Mattes.
- Morphing.
- Rotoscoping.
- 3D graphics.
- Photogrammetry.
- VFX paint (mattes, set extension, rig removal).
- Motion/performance capture.
- Light matching.
- Match move.

3D modelling

- Solid modelling.
- Surface modelling.
- Boolean operations.
- Detail.
- Polygon count.
- Affordance.
- Materials.
- Edge-loops.
- Topology/retopology.
- Viewports.
- Navigation.
- Reference.
- Scale.
- Sculpting.

Materials and shaders

- Poly limit.
- UV maps.
- Texture mapping.
- Displacement mapping.
- Bump mapping.
- Normal maps.
- Shader types.
- PBR materials (physical based rendering).
- Limitations.
- Baking.
- Tile textures.
- Procedural textures.

Rendering

- Pre-rendered.
- Real-time rendering.
- Wireframe.
- Hidden line.
- Shaded.
- Photorealistic.

3D animation

- Rigging.
- Body mechanics.
- Keyframes.
- In-betweens.
- Motion graphs.
- Camera position.
- Timing.
- Posing.
- Acting.

Rigging

- Forward kinematics (FK).
- Inverse kinematics (IK).
- Rig type and limitations.

Shot acquisition

- Camera (e.g., settings, operation).
- Framing (e.g., scale, focus, shot types).
- Sequence continuity.
- Motion and pace.
- Miniatures.
- Virtual set.
- VFX paint.
- Light matching.

Compositing

- Alpha channel.
- Layering.
- Rotoscoping.
- Stereoscopic conversion.
- Edge quality.
- Focus.
- Colour.
- Grain/noise.
- 2D effects.

Output and asset management

- File types and format.
- Resolution and frame rate.
- Colour space.
- Exporting.
- File structure and naming conventions.
- Up-versioning.
- Storage, backup and logging.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., concept artist, digital matte painter (DMP), roto artist).
- Production roles (e.g., director, technical director, supervisor).
- Management roles (e.g., producer, project manager, publisher).
- Technical roles (e.g., compositor, lighting technical director, match move artist, layout artist, digital preparation artist, motion capture specialist).
- Support roles (e.g., runner, community manager, researcher, health and safety).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in-person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Release (e.g., talent, location).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Sustainability:
 - energy consumption and carbon footprint
 - sustainable sources.

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and welfare

- Workspace (e.g., screen, equipment, studio, location).
- Posture, manual handling and repetitive strain injury (RSI).
- Personal protective equipment (PPE).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress, e.g.:
 - dailies
 - models
 - mock-ups
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure, and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual language.
- Mood, style and atmosphere.
- Message and impact.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.

- In relation to brief:
 - clarity of concept and purpose
 - cohesion and relationship to existing material
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The VFX industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: A/650/4804

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: D/650/4805

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills in the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Philosophy (e.g., perceptions of reality, simula and simulacra, uncanny valley, structuralist film theory – meaning through codes and conventions, perception, cognition and narrative understanding).
- Political theories (e.g., Marxist film theory – Sergei Eisenstein, Jean Luc Goddard, Kuleshov Effect, propaganda as moving image, situationist film making, political interpretation, power, oppression).
- Psychology (e.g., psychoanalysis, cultural myth analysis, character analysis, dreams and fantasy, memory and emotions, spectatorship, star/celebrity).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities, male gaze, female gaze).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis, Auteur theory).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

VFX economies

- Globalisation (e.g., distribution, supply chains, labour).
- Rise of streaming services (e.g., impact on the industry, new audiences).
- Drivers for production and commercial needs.

- Technological developments:
 - virtual production
 - machine learning
 - artificial intelligence (AI)
 - Universal Scene Description
 - camera technology (e.g., 3D, Ultra High Definition (UHD), immersive formats, virtual reality (VR), augmented reality (AR), mixed reality (MR), large format cameras – IMAX)
 - production technology (e.g., UHD workflows, high frame rates, storage solutions, adapting established pipelines, multidimensional viewing formats, real-time technologies, virtual production).
- Significant challenges:
 - maintaining currency with evolving technology (e.g., retraining, integration of new hardware/software, risk management, research and development)
 - sustainability (e.g., virtual production, Albert certification)
 - AI (e.g., deep fakes, impact on established roles)
 - working conditions (e.g., overtime, working practices, unions, unsociable working hours)
 - audience response
 - disconnect between production and post-production
 - increasing reliance on VFX
 - availability and impact of automated processes
 - rise of video first social media (e.g., audience interests, industry disruption)
 - cost versus time vs quality.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities.
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - platform/channel
 - multi-channel
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Visual effects design:
 - concept art/thumbnails
 - storyboards
 - visualisation – pre vis, tech vis, post vis
 - animatics
 - storyboards and digital narrative software
 - consistent look development
 - maintaining continuity.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Hardware and software

- Workstation (e.g., set up, maintenance and optimisation).
- Storage (e.g., RAID log, server, portable, solid state, cloud storage).
- Networks (e.g., set up, security, encryption, efficiency and maintenance).
- Broadcast technology.
- Virtual production technology (e.g., VR tech, led volumes, performance capture, pre vis).
- Software:
 - 3D modelling
 - layout and look development
 - game engines
 - renderers
 - 2D compositing.

Plate acquisition and preparation

- Cinematography (e.g., language of cinema, shot terminology).
- Still photography.
- Codecs: RAW, log, linear.
- Impact of compression (lossless and lossy).
- Working colour space.
- On-set data capture:
 - light probes (HDRI)
 - measurement tools
 - documentation.
- VFX production technology:
 - light meters
 - lens distortion grids
 - Macbeth charts
 - 360° cameras.
- Plate preparation:
 - image prep (e.g., green screen, roto, paint)
 - plate stitching
 - fix it shots (e.g., removal, beauty, stabilisation, retiming).

Working with assets

- Interoperability of different assets across VFX pipeline:
 - 2D
 - 3D
 - effects
 - scene data
 - camera information
 - asset requirements (e.g., hero asset, levels of detail).
- Asset management:
 - archiving and publishing
 - up-versioning
 - element types
 - file types and naming conventions (e.g., USD)
 - broadcast specifications (e.g., broadcast monitors, scopes)
 - working with metadata
 - asset sourcing.
- Programming:
 - driving assets with code
 - languages (e.g., MEL (Maya Embedded Language), Python, C#).
- Programming:
 - expressions
 - functions
 - bug fixing.

Asset design and development

- Asset design:
 - hard surface modelling (building, props)
 - orthographic imagery
 - organic modelling (e.g., plants, creatures)
 - white boxing and previsualisation
 - effects animation (explosions, particles, fluid dynamics, fur)
 - 2D.
- 3D modelling:
 - box modelling
 - Booleans
 - procedural modelling
 - poly count management
 - photogrammetry – retopologised scan data.

- 3D sculpting:
 - character/creature design
 - skeletal and biology reference
 - projection of detail
 - polycount management
 - retopology
 - sculpting for animation
 - topology and edge flow.
- Textures/shaders/look development:
 - UV preparation
 - UV and UDIM workflow
 - texel density and consistency.
- 3D animation:
 - principles of animation
 - animation, interfaces
 - motion capture and data clean up
 - dynamics (e.g., fur, skin, deformations)
 - rigging
 - keyframe animation
 - using reference material
 - edge flow for animation.
- 2D asset development:
 - motion graphics
 - animation
 - textures
 - titles and credits
 - textures
 - manipulated video.
- Rendering:
 - stylised and photoreal
 - CPU/GPU rendering
 - real-time renders (using game engine content)
 - render passes (AOVs)
 - preservation of image quality.
- Compositing and finishing:
 - colour space – SRGB, ACES
 - AOVs and multi-pass compositing
 - layers management
 - alpha channel manipulation and pre-multiplication

- filters and effects
- grading and colour correction – LUTs
- embedding CG object into plates (e.g., adding/removing grain, noise, lens distortion, chromatic aberration)
- 3D compositing (e.g., set extensions and digital matte painting (DMP)).

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes, test-screening, demo reel).
- Interim outputs (e.g., dailies, play blasts, rough-cut and animatics).
- Online review platforms.
- Error checking (e.g., resolution, colour, frame rate, image accuracy).
- Working with meta data.
- Audience/client testing/feedback (e.g., observation, focus group, interview, survey).
- Tracking changes.
- Publishing new versions.
- Analytics.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Non-disclosure agreements.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material
 - festivals, events and trade shows.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, breakdowns, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., shot bidding, pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - rates
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - international memberships (e.g., SIGGRAPH, Visual Effects Society (VES))
 - membership
 - grants
 - residencies/internship
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licenses
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licencing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., construction and focus breakdowns).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, schedule).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes, equipment hire).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstration).

Communication for progression

- Employer/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

16.0 Modules in the BTEC Higher Nationals in Web Design

Module A: Process & Practice

Level: 4

Guided learning hours: 480

Introduction

Web designers contribute significantly to the economy and the sector is set to grow. Many retailers and services would not function without their audience being able to engage with their content through web pages. There are also huge advancements in technology, and socioeconomic changes in attitude, that place increasing responsibility on web designers. These developments bring significant challenges, as well as opportunities, for practitioners.

Working in the web design industry requires an understanding of historic and current developments in order to develop bespoke concepts and solve creative problems. Creating work requires an understanding of the development processes and the technical skills to produce outcomes. This is balanced with the need for professional practice skills and the ability to communicate to audiences.

Through this module, students will develop the underlying knowledge and skills that will enable them to begin their journey in the web design industry. Combining research, development and production, students will explore the knowledge, understanding and technical skills required to progress within the sector.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

A1: Concept & Development (340 GLH – 85 credits)

Unit code: F/650/4806

A1.1 Explore the history, theories and developments related to the area of practice.

A1.2 Explore and develop ideas, based on an iterative approach to problem solving in creative practice.

A1.3 Explore technical knowledge and skills necessary to support creative practice.

A1.4 Explore professional knowledge, behaviours and practices within the sector.

A1.5 Explore techniques, media and formats to communicate ideas and concepts for diverse audiences.

A2: Creative Project (140 GLH – 35 credits)

Unit code: H/650/4807

A2.1 Apply relevant contextual knowledge to inform a creative project.

A2.2 Analyse a given brief to develop creative solutions, applying an iterative development process.

A2.3 Apply technical knowledge and skill in the production of a project outcome.

A2.4 Demonstrate professional knowledge, behaviours and practices in response to a given brief.

A2.5 Present the development process and outcomes of a creative project for a specified audience.

Essential Content

Students must engage with the following content before they are assessed.

The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

Contextual influences

- Social:
 - demographic change
 - media and culture
 - traditions.
- Technological:
 - new technologies
 - obsolete technologies.
- Economic:
 - global/national/regional economies
 - impact of broader economies and globalisation.
- Political:
 - conflict
 - government and laws.
- Geographic:
 - place
 - environment.

Historical developments

- Creative subject areas.
- Creative subject relationships.
- Historical and contemporary precedents.
- Design trends.
- Milestones:
 - hypertext and HTML
 - web servers
 - search engines
 - browsers
 - validation and W3C
 - scripting and CSS
 - active pages and databases.
- Web evolution:
 - static and dynamic content
 - rich media content
 - Web 2.0
 - user-generated content
 - multiplatform development.

Areas of application

- Websites/browsers.
- Mobile devices.
- TV and consoles.
- Information and libraries.
- Entertainment.
- Ecommerce.
- Forums and communication.
- Communities.

Cultural theories and principles for interpreting the subject

- Audiences, stakeholders and users.
- Purpose (e.g., commercial, educational, subversive, entertainment, political).
- Making connections (e.g., references, patterns, relationships, similarities, differences).
- Principles:
 - formal elements (e.g., narrative, movement, image, text)
 - structure (e.g., hierarchical, linear, database, webbed)
 - interactivity (e.g., navigation, behaviour, responsiveness)
 - experience (e.g., learnability, machine learning, consistency, user expectation).

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Analysing the brief

- Aims and objectives.
- Competitors and the market context.
- Demographics and user needs.
- Client types and needs.
- Brand identification and style guides.
- Longevity.
- Constraints.
- Timeline.
- Budget.
- Deliverables.
- Context.
- Regulations.

Research

- Research ethics.
- Research and analysis methodologies:
 - primary research
 - secondary research
 - market research
 - thematic research (e.g., visual and contextual references)
 - audience segmentation
 - data collection methods (e.g., focus groups, observation, interview)
 - bibliography, references and citation.
- Validity and reliability.
- Research bias.
- Quantitative and qualitative data.
- Interpreting and presenting data.
- Reputable sources.

Ideas generation

- Informing ideas with research.
- Techniques, e.g.:
 - mind mapping
 - reverse thinking
 - SCAMPER
 - simulation and role playing
 - forced relationships
 - 'Thinking Hats' (de Bono)
 - lateral thinking.

Solving problems through testing and reflection

- Concept.
- Technical observations:
 - usability
 - media
 - functionality
 - error logging
 - validation
 - test plans
 - performance metric.
- Iterative design development (e.g., research, analyse, plan, ideate, explore, test, present, review, repeat).
- Stakeholder input:
 - user/audience
 - client
 - peer.
- Review:
 - evaluation
 - critique
 - making changes in response to feedback
 - the role of reflection for creative practitioners
 - reflective practice and lifelong learning.

Technical Knowledge and Skill

The use of existing skills, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Technology requirements

- Operating systems.
- Browsers.
- Devices and displays (e.g., resolution, scaling, aspect ratio, capabilities).

Web tools and technologies

- HTML.
- CSS.
- Document Object Model.
- Client-side scripting.
- Server-side scripting.

Languages

- Java.
- JavaScript.
- Python.
- C# and script variants of the C language.
- PHP.
- Ruby.

Data

- SQL.
- DBMS.
- Cloud technologies.
- Content management systems.

Design and development

- Software.
- File types.
- Image manipulation and creation (e.g., vector and raster).
- User interface (UI).
- User experience (UX).
- Layout and templates.
- Responsive design.
- Copy writing.

- Assets:
 - image and video
 - text
 - content
 - graphics.

Prototyping

- Wireframes.
- Flow diagrams.
- Mock-up.
- Alpha/beta.

Delivery to client

- Compression.
- Hosting.
- Servers.
- Domain names.
- Updates.
- Client management back end.
- Search engine optimisation.

Quality assurance

- Documentation.
- Technical.
- Aesthetic.
- Version control.
- Testing and inspection.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Roles

- Creative roles (e.g., creative director, user experience manager, user interface developer).
- Production roles (e.g., multimedia creator, graphic designer, copy writer).
- Management roles (e.g., producer, project manager).
- Technical roles (e.g., programmer, quality assurance, hosting/storage/backup).
- Support roles (e.g., tester, content sourcer, community manager, researcher).

Relationships

- Management/hierarchies.
- Workflow relationships.
- Creative relationships.
- Support relationships.
- Collaboration (e.g., online, in person).

Ethics

- Regulators (e.g., professional bodies, media regulators, censorship).
- Protecting vulnerable audiences/stakeholders.
- Professional ethics (e.g., codes of conduct).
- Ownership (e.g., copyright, intellectual property).
- Accessibility and protected characteristics.
- Equality, diversity and representation.
- Sustainability (e.g., energy consumption and carbon footprint).

Project management

- Time management (e.g., schedule, milestones, deadlines).
- Asset management.
- Resource management (e.g., financial, equipment, human).
- Contingency.

Health, safety and wellbeing

- Workspace (e.g., screen, equipment, studio, location).
- Posture and repetitive strain injury (RSI).
- Mental health (e.g., support, guidance, awareness).
- Safe working environments (e.g., discrimination, time management, bullying and harassment).
- Resilience in the creative industries (e.g., critics, self-reflection, rejection).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Audiences

- Target market (e.g., users).
- Client.
- Professionals (e.g., team, collaborators).
- Peers.
- Stakeholders (e.g., financiers, publishers).

Communication purpose

- Collaboration and teamwork.
- Pitches.
- Research.
- Feedback.
- Testing.
- Outcomes.
- Ideas and progress, e.g.:
 - prototypes and mock-ups
 - visualisations.

Presentation

- Presentation formats (e.g., written, visual, audio-visual, interactive).
- Industry-standard presentation software.
- Industry conventions.
- Hierarchy of text-based and visual information.
- Presentation timing, structure and delivery.
- Selection and editing of content.
- Presentation skills.

Characteristics of outcomes

- Visual language.
- Mood, style and atmosphere.
- Message and impact.
- Applying/subverting codes and conventions.
- References and relationship to wider culture.
- In relation to brief:
 - clarity of concept and purpose
 - consistency and accuracy
 - management of constraints
 - suitability for market
 - audience interpretation and relevance.

Module B: Professional Creative Practice

Level: 5

Guided learning hours: 480

Introduction

The web design industry offers a wide variety of careers – ranging from creative to technical, producing to management, quality assurance to marketing. Crucially, across these different career trajectories there are many crossovers; requiring knowledge of different roles in order to undertake a specific role.

Through this module, students will build on their creative, technical and contextual knowledge and skills to begin applying them to more complex and professionally oriented outcomes. In the curriculum and Assessment Units in this module, students will explore both the creative and technical aspects of their own practice and their future career intentions; developing projects and professional skills and materials that will enable them to progress to employment or continued study.

The learning and teaching for this module integrate Essential Content across two Assessment Units.

Learning Outcomes for Assessment Units

B1: Personal Professional Development (170 GLH – 45 credits)

Unit code: J/650/4808

B1.1 Develop and apply contextual knowledge to inform personal progression.

B1.2 Develop and apply professional approaches to creative problem solving to support personal progression.

B1.3 Develop and apply technical knowledge and skill to support personal progression.

B1.4 Develop and apply professional knowledge, behaviours and practices to support personal progression.

B1.5 Develop and apply professional communication skills to support personal progression.

B2: Professional Project (310 GLH – 75 credits)

Unit code: R/650/4810

B2.1 Apply contextual knowledge to inform a response to a professional brief.

B2.2 Apply creative problem-solving skills to the development of ideas, proposals and final project outcomes.

B2.3 Use technical knowledge and skills to produce professional outcomes.

B2.4 Demonstrate professional knowledge, behaviours and project management skills.

B2.5 Present project development and outcomes, demonstrating professional communication skills.

Essential Content

Students must engage with the following content before they are assessed. The content is designed to allow students to develop the knowledge and skills associated with practical vocational contexts related to the subject area.

Content may be delivered through a variety of different teaching and learning approaches that combine to provide a holistic learning journey.

Some aspects of the content are provided as generalised topics that allow teaching teams to develop detailed delivery to meet localised needs. In other cases, there are indications of the types of information that may be delivered in detail; these are indicated by (e.g., ...).

The content defined here is not intended to be exhaustive or exclusive and should be taught within the context of the focus that the centre has identified for their students within the subject area.

Contextual Knowledge

The knowledge and understanding of the underlying concepts and practices associated with the subject, based on historic and contemporary precedent.

The creative approaches of others in context

- Methods and processes of creation.
- Intentions of work at a point in time.
- The role of the practitioner.
- External influences on work.
- Influences of work on society.
- Contextual links and relationships.
- Reactions of different audiences and groups.
- What the work communicates about society at a point in history.

Cultural and critical concepts

- Philosophy (e.g., structuralism, post-structuralism).
- Political theories (e.g., colonialism/post-colonialism, Marxism/communism, situationism, neoliberalism).
- Psychology (e.g., psychoanalysis, humanistic, behavioural).
- Gender and identity (e.g., race, colonialism/post-colonialism, feminism, Queer theory, LGBTQ+, fluid identities).
- Media theories (e.g., direct effect model, media and culture (McLuhan), uses and gratification theory, spiral of silence, cultivation analysis).
- Technology/communication theories (e.g., social presence, media richness, social identity model of deindividuation side effects (SIDE)).

Web economies

- Drivers for production and commercial needs.
- Technology and infrastructure.
- Developments:
 - from website to web app
 - digital sales – physical goods, digital goods, services
 - zero marginal cost intangible goods
 - the rise of social media
 - open-source economics
 - free vs open source
 - support as a product
 - monetising free content
 - paywalls

- subscription and membership
- advertising as content:
 - the rise of the 'influencer'
 - clickbait.
- Challenges:
 - proliferation of design technology and emerging new practice.
 - security.
 - the value of user data ('If you are not paying for the product, you are the product.').
 - design automation (e.g., platforms that allow anyone to design, design templates).
 - sustainability (e.g., social, cultural, economic, environmental).
 - artificial intelligence (AI).
 - low profit margins.

Critical contextualising of own work

- Reception by different audiences.
- How work sits within own practice.
- How work relates to current and historic practice.
- Unique selling point (USP).
- Potential impacts of work on wider contexts.

Ideas Generation and Development

The development of propositions based on research and analysis. The ability to evaluate solutions based on research and analysis.

Developing a brief/proposal

- Client and stakeholder requirements/needs:
 - market position
 - return on investment (ROI)
 - tie-ins (e.g., merchandising, add-ons, other media).
- Consultation.
- Obligations and deliverables.
- Service level agreements.
- Key performance indicators.
- Defining roles and responsibilities (e.g., design, technical, support, content creation).
- Legal and ethical constraints.
- Feasibility.
- Strategy:
 - content – published, reactive, proactive
 - platform
 - longevity (e.g., lifespan, maintenance, releases, updates, future uses)
 - how audiences are engaged.

Ideas development

- Research:
 - research objectives
 - primary research (e.g., player experiences, field, documentary, observation, action, comparative)
 - secondary (e.g., literature review, case study, market data)
 - data collection (e.g., survey, focus groups, oral history, interview).
- Problem solving, e.g.:
 - GROW – goal, reality, obstacles, options, way forward
 - lateral thinking – idea generation, provocation, movement, challenge, concept formation, disproving, fractionation
 - 5 'W's and how – who, what, when, where, why, how
 - problem-based thinking and solution-based thinking
 - means-ends analysis
 - analogical reasoning.

- Approaches to the design process, e.g.:
 - design thinking – discovery, interpretation, ideation, experimentation, evolution
 - four-stage design – exploration, generation, evaluation, communication
 - design sprint – understand, diverge, converge, prototype, test
 - Double Diamond
 - design methods phases: definition, creative, analysis and selection, presentation.

Critical reflection

- Ongoing reflection.
- Reflective models (e.g., Gibbs, Kolb, Schön, Brookfield).
- In relation to personal intentions:
 - refinement of ideas
 - personal development goals (e.g., knowledge, practice)
 - creative intentions
 - aesthetic strategy
 - how new learning shapes response to the brief.
- In relation to the brief:
 - development and progress
 - fulfilment of purpose and function
 - technical execution (e.g., techniques and processes)
 - comparisons with market
 - diversity, equality and inclusion
 - sustainability.
- Goal setting.

Technical Knowledge and Skill

The use of existing, and development of new skills, that enable the production of creative outcomes. The ability to determine the appropriate skills to complete creative work.

Development using professional processes and workflows

- Architecture:
 - site scoping
 - site mapping
 - user journeys.
- Prototyping:
 - prototyping software
 - user interface (UI) tools
 - wireframing
 - interface mock-ups
 - interactions
 - design iteration.
- Content creation:
 - templates
 - images/graphics
 - media (e.g., audio, video)
 - fonts
 - patterns
 - copywriting and copyediting
 - search engine optimisation (SEO)
 - licensing
 - synthesis of software
 - professional tools
 - automation and processing
 - optimisation
 - maximising opportunities.
- Testing:
 - proofing tools
 - unit testing
 - link checking
 - user-experience (UX) testing
 - web development languages
 - HTML
 - XML
 - scripting languages
 - PHP

- Python
- JavaScript
- Ruby.

Web development frameworks

- Model-View-Controller (MVC) architecture.
- Event-driven architecture.
- JavaScript frameworks (e.g., React, Vue, Angular).
- PHP frameworks (e.g., Laravel, CodeIgniter, Symfony).
- Python frameworks (e.g., Django, Flask, Bottle).
- Ruby frameworks (e.g., Rails, Sinatra, Hanami).
- Others.

CSS/CSS frameworks

- CSS grid systems.
- CSS flexbox systems.
- CSS pre-processing (e.g., SASS, LESS).
- CSS media queries.
- CSS frameworks (e.g., Bootstrap, Tailwind, Material).

Server hardware and software

- Web servers:
 - Apache
 - Nginx
 - LightTPD
 - reverse proxy servers
 - others.
- Database servers:
 - SQL
 - NoSQL
 - flat file.

Quality assurance

- Frameworks for quality assurance (e.g., ongoing, periodic, milestones, ranges of outcomes).
- Testing methodologies (e.g., mock-up, tree-testing, A/B testing, third-party checks).
- Interim outputs.

- Parameters for testing:
 - error checking (e.g., missing links, copyediting, proofreading)
 - user/client testing/feedback (e.g., observation, focus group, interview, survey)
 - accessibility and legibility
 - cross platform/device functionality
 - comparisons with market
 - analytics
 - technical execution
 - purpose/function
 - sustainability.

Professional Practice

Awareness of contemporary professional practice in the subject and the behaviours appropriate for employment in the sector.

Working with stakeholders and collaborators

- Stakeholder types (e.g., client, funding, users, collaborators).
- Relationships within the project (e.g., contractual, financial, user, audience).
- Capabilities of stakeholders.
- Non-disclosure agreements.
- Stakeholder analysis (e.g., establishing stakeholder commitment, negotiating aims and objectives, communication with stakeholders).
- Teams:
 - collaborative practice (e.g., roles and responsibilities)
 - collaborative workflows (e.g., studio, remote, outsourcing)
 - performance review (e.g., goals, individual, team).

Project planning processes

- Process: initiation, planning, execution, monitoring, controlling, closing.
- Management methods (e.g., Waterfall, Agile, Critical Chain, Spiral, Kanban).
- Situation analysis and risk analysis.
- Analysing resource requirements: physical resources, human resources (duties and responsibilities).
- Monitoring and evaluation framework (e.g., project performance, individual performance, group performance, goals).
- Contingency.

Project management tools

- Paper-based.
- Digital systems (e.g., spreadsheets, Microsoft Project).
- Cloud-based systems (e.g., Basecamp, Microsoft Planner, Asana, Trello).
- Raid Log (Risks-Actions-Issues-Decisions).
- Project visualisations:
 - Gantt charts
 - Program Evaluation and Review Technique (PERT) diagrams
 - Kanban boards
 - Critical Path Analysis (CPA) diagrams.

Career development

- Continuing professional development:
 - maintaining skills and knowledge currency
 - developing new skills and knowledge
 - critical appraisal (e.g., SWOT, 360° appraisal, peer, self-appraisal, self-testing, collecting feedback)
 - training and professional certification
 - career aspirations/options
 - mapping own skills to specific job roles
 - career trends.
- Professional networking:
 - business/social networks
 - meet ups
 - marketing material.
- Obtaining creative work:
 - building a personal brand
 - letters of application and personal statements
 - CV
 - portfolio (e.g., showreel, breakdowns, work examples, website, social media)
 - work shadowing or placement
 - finding clients (e.g., pitch, tender, competitions, promotion).
- Setting fees, e.g.:
 - cost-plus
 - market rate
 - value-based pricing.
- Creative professional bodies:
 - membership
 - grants
 - residencies/internships
 - research funding.

Company types

- Partnerships: limited liability partnerships.
- Limited companies: public limited companies, private limited companies.
- Unlimited companies.
- Sole trader.

Legislation/regulation/taxation

- Legislation: company/corporate, employment.
- Regulation: company/corporate, individual.
- Taxation: company/corporate tax, employment tax, income tax, local/national tax.
- Insurance.

Business planning

- Business plan:
 - mission statement
 - market approach
 - strategy (e.g., business to business, business to consumer)
 - unique selling point (USP)
 - cashflow forecast.
- Operating costs:
 - rent (e.g., workspace, home, studio)
 - utilities
 - salaries
 - materials, equipment and software licences
 - promotion
 - insurance (e.g., public liability, professional indemnity).
- Tax liabilities:
 - Value Added Tax (VAT)/sales tax
 - National Insurance
 - business rates.
- Legalities:
 - company registration process
 - record keeping
 - annual returns
 - contracts
 - intellectual property (e.g., copyright and licensing).

Communication

The ability to share ideas and processes accurately and reliably to diverse audiences, and recognising the appropriate forms of output to address different audiences.

Communication ethics

- Codes of conduct.
- Cultural awareness.
- Accessibility.
- Representation.
- Listening and responding to feedback.

Applying communication techniques

- Professional standards and formats.
- Consideration of context.
- Communication channels and presentation opportunities.
- Audience reactions.
- Consistency.
- Coherence.
- Relationship to existing identity.
- Personal intentions.
- Client intentions.
- Purpose of work (e.g., function, concept, message, results).
- Constraints.
- Limitations of media.

Engaging target markets and audiences

- Differentiation from existing markets.
- Reach (e.g., primary and secondary audiences).
- Supportive media (e.g., instructions, guides, maps).
- Consistency.
- Marketing:
 - publicity
 - press
 - marketing channels
 - launch
 - product placement
 - follow-up communications.

Communication with clients, collaborators and stakeholders

- Pitches and presentations.
- Consultation.
- Briefing.
- Progress update and tracking.
- Feedback and guidance.
- Negotiation and conflict resolution.
- Platforms for collaboration.
- Documents (e.g., proposal, plans, specification, agenda, budget, schedule).
- Visualisations.
- Logistical communication (e.g., booking, schedules, quotes).
- Networks:
 - social networking
 - making contacts (e.g., sharing expertise, guidance)
 - opportunities for communication (e.g., guest speaking, demonstration).

Communication for progression

- Employer/academic progression.
- Interview:
 - preparing for interview
 - interview skills
 - getting interview feedback.
- Personal communication for progression:
 - personal identity
 - portfolio/showreel
 - print/business media
 - online presence
 - modes of distribution
 - maintenance (e.g., updates, blogging).

Essential Information for Assessment

Each assessment unit requires a unique set of evidence.

Assessment Unit B1: Personal Professional Development (170 GLH – 45 credits)

Recommended Evidence

Assessment evidence for *Personal Professional Development* should be based on a diverse range of outputs that combine to show the student's awareness of their own professional development, through both creative and technical processes, and their ability to produce detailed plans and materials for continued professional development.

Types of evidence may include:

- written work (e.g., reports, case studies)
- planning documents (e.g., personal development plan, skills audit)
- reflective journal evidencing the ability to evaluate own development and plan for the future
- videos of mock-interviews and presentations.
- portfolio/demo reel.

Assessment Unit B2: Professional Project (310 GLH – 75 credits)

Recommended Evidence

Assessment evidence for the *Professional Project* should include a diverse range of professionally relevant creative and technical outcomes, based on the student's response to a professional brief. Evidence should include work that shows the ability to plan and manage a professional project through different stages and arrive at professional quality outcomes that are presented using industry standard methods.

Types of evidence may include:

- portfolio/demo reel of development work, showing a coherent development process
- project management plans and logs
- finished outcome(s) that meet the requirements of a professional brief
- communication material for presenting process and outcomes in a professional context.

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