



Specification

BTEC Nationals

**Pearson BTEC Level 3 Certificate, BTEC Level 3
Subsidiary Diploma, BTEC Level 3 Diploma and
BTEC Level 3 Extended Diploma in Blacksmithing
and Metalworking**

For first teaching September 2010

June 2016

Issue 2

Edexcel, BTEC and LCCI qualifications

Edexcel, BTEC and LCCI qualifications are awarded by Pearson, the UK's largest awarding body offering academic and vocational qualifications that are globally recognised and benchmarked. For further information, please visit our qualification websites at www.edexcel.com, www.btec.co.uk or www.lcci.org.uk. Alternatively, you can get in touch with us using the details on our contact us page at qualifications.pearson.com/contactus

About Pearson

Pearson is the world's leading learning company, with 40,000 employees in more than 70 countries working to help people of all ages to make measurable progress in their lives through learning. We put the learner at the centre of everything we do, because wherever learning flourishes, so do people. Find out more about how we can help you and your learners at qualifications.pearson.com

This specification is Issue 2. Key changes are sidelined. We will inform centres of any changes to this issue. The latest issue can be found on our website at qualifications.pearson.com

These qualifications were previously entitled:

Edexcel BTEC Level 3 Certificate in Blacksmithing and Metalworking (QCF)

Edexcel BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking (QCF)

Edexcel BTEC Level 3 Diploma in Blacksmithing and Metalworking (QCF)

Edexcel BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking (QCF)

The QNs remain the same.

References to third party material made in this specification are made in good faith. Pearson does not endorse, approve or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

ISBN 978 1 446 93439 5

Authorised by Roger Beard

Prepared by Matt Gregory

All the material in this publication is copyright

© Pearson Education Limited 2016

Contents

The units for the BTEC Nationals in Blacksmithing and Metal working are on the CD ROM contained within the specification pack.

BTEC National qualification titles covered by this specification	1
What are BTEC Nationals?	2
Total Qualification Time	3
Pearson BTEC Level 3 Certificate – 30 credits	3
Pearson BTEC Level 3 Subsidiary Diploma – 60 credits	3
Pearson BTEC Level 3 Diploma – 120 credits	4
Pearson BTEC Level 3 Extended Diploma – 180 credits	4
Key features of the BTEC Nationals in Blacksmithing and Metalworking	4
Rationale for the BTEC Nationals in Blacksmithing and Metalworking	5
National Occupational Standards	5
Rules of combination for Pearson BTEC Level 3 National qualifications	6
Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking	7
Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking	8
Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking	9
Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking	10
Assessment and grading	11
Grading domains	11
Calculation of the qualification grade	12
Quality assurance of centres	14
Approval	14
Programme design and delivery	15
Mode of delivery	15
Resources	16
Delivery approach	16
Meeting local needs	17

Limitations on variations from standard specifications	17
Additional and specialist learning	17
Functional Skills	17
Personal, learning and thinking skills	17
Access and recruitment	18
Restrictions on learner entry	18
Access arrangements and special considerations	18
Recognition of Prior Learning	19
Unit format	19
Unit title	19
Level	19
Credit value	19
Guided learning hours	19
Aim and purpose	20
Unit introduction	20
Learning outcomes	20
Unit content	20
Assessment and grading grid	21
Essential guidance for tutors	21
Further information	21
Useful publications	22
How to obtain National Occupational Standards	22
Annexe A	23
The Pearson BTEC qualification framework for the environmental and land-based sector	23
Annexe B	25
Grading domains: BTEC Level 3 generic grading domains	25
Annexe C	27
Personal, learning and thinking skills	27

Annexe D	33
Wider curriculum mapping	33
Annexe E	35
National Occupational Standards/mapping with NVQs	35
Annexe F	41
Unit mapping overview	41
Unit mapping in depth	42
Annexe G	45
Examples of calculation of qualification grade above pass grade	45
Points available for credits achieved at different levels and unit grades	45



BTEC National qualification titles covered by this specification

Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking

Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking

Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking

Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking

These qualifications have been accredited to the Regulated Qualifications framework and are eligible for public funding as determined by the Department for Education (DfE) under Sections 96 and 97 of the Learning and Skills Act 2000.

The qualification titles listed above feature in the funding lists published annually by the DfE and the regularly updated website. The Qualification Number should be used by centres when they wish to seek public funding for their learners. Each unit within a qualification will also have a unit reference number.

The qualification and unit reference numbers will appear on the learners' final certification documentation.

The Qualification Numbers for the qualifications in this publication are:

Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking	501/1217/X
Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking	501/1220/X
Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking	501/1219/3
Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking	501/1218/1

These qualification titles will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Pearson.

What are BTEC Nationals?

BTEC National qualifications are undertaken in further education and sixth-form colleges, schools and through other training providers, and have been since they were introduced in 1984. Their purpose, approaches to teaching, learning and assessment are established and understood by teaching professionals, employers and learners alike.

The BTEC National qualifications within this specification are:

Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking

Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking

Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking

Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking.

But for clarity and continuity they are referred to within this specification and generically as BTEC National qualifications, where appropriate. They maintain the same equivalences, benchmarks and other articulations (for example SCAAT points, UCAS Tariff points) as their predecessor qualifications. The following identifies the titling conventions and variations between the predecessor and new specifications:

Predecessor BTEC Nationals (accredited 2007)	BTEC Nationals (for delivery from September 2010)
Not applicable	Pearson BTEC Level 3 Certificate
Edexcel Level 3 BTEC National Award	Pearson BTEC Level 3 Subsidiary Diploma
Edexcel Level 3 BTEC National Certificate	Pearson BTEC Level 3 Diploma
Edexcel Level 3 BTEC National Diploma	Pearson BTEC Level 3 Extended Diploma

BTEC Nationals are designed to provide highly specialist work-related qualifications in a range of vocational sectors. They give learners the knowledge, understanding and skills that they need to prepare for employment. The qualifications also provide career development opportunities for those already in work and, through articulation to higher education, degree and professional development programmes, provide progression opportunities within the same cognate or related areas of study within universities and other institutions. BTEC Nationals accredit the achievement for courses and programmes of study for full-time or part-time learners in schools, colleges and other training provider organisations.

BTEC Nationals provide much of the underpinning knowledge and understanding for the National Occupational Standards for the sector, where these are appropriate. They are supported by the relevant Sector Skills Councils (SSCs) and/or Standards Setting Bodies (SSBs). Certain BTEC Nationals are recognised as Technical Certificates and form part of the Apprenticeship Framework. They attract UCAS points that equate to similar-sized general qualifications within education institutions within the UK.

On successful completion of a BTEC National qualification, a learner can progress to or within employment and/or continue their study in the same, or related, vocational area.

Total Qualification Time

For all regulated qualifications, Pearson specifies a total number of hours that it is expected the average learner will be required to undertake in order to complete and show achievement for the qualification: This is the Total Qualification Time (TQT).

Within this, Pearson will also identify the number of Guided Learning Hours (GLH) that we expect a centre delivering the qualification will need to provide. Guided learning means activities that directly or immediately involve tutors and assessors in teaching, supervising, and invigilating learners, such as lessons, tutorials, online instruction, supervised study giving feedback on performance.

In addition to guided learning, other required learning directed by tutors or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

These qualifications also have a credit value, which is equal to one tenth of TQT. Pearson consults with users of these qualifications in assigning TQT and credit values.

This suite of BTEC Level 3 qualifications is available in the following sizes:

- Certificate – 300 TQT (30 credits, 180 GLH)
- Subsidiary Diploma – 600 TQT (60 credits, 360 GLH)
- Diploma – 1200 TQT (120 credits, 720 GLH)
- Extended Diploma – 1800 TQT (180 credits, 1080 GLH)

Pearson BTEC Level 3 Certificate – 30 credits

The 30-credit BTEC Level 3 Certificate offers a specialist qualification that focuses on particular aspects of employment within the appropriate vocational sector. The BTEC Level 3 Certificate is a qualification which can extend a learner's programme of study and give vocational emphasis. The BTEC Level 3 Certificate is broadly equivalent to one GCE AS Level.

The BTEC Level 3 Certificate is also suitable for more mature learners, who wish to follow a vocational programme of study as part of their continued professional development or who want to move to a different area of employment.

Pearson BTEC Level 3 Subsidiary Diploma – 60 credits

The 60-credit BTEC Level 3 Subsidiary Diploma extends the specialist work-related focus from the BTEC Level 3 Certificate and covers the key knowledge and practical skills required in the appropriate vocational sector. The BTEC Level 3 Subsidiary Diploma offers greater flexibility and a choice of emphasis through the optional units. It is broadly equivalent to one GCE A Level.

The BTEC Level 3 Subsidiary Diploma offers an engaging programme for those who are clear about the area of employment that they wish to enter. These learners may wish to extend their programme through the study of general qualifications such as GCE AS Levels, additional specialist learning (for example through another BTEC qualification) or a complementary NVQ. These learning programmes can be developed to allow learners to study related and complementary qualifications without duplication of content.

For adult learners the BTEC Level 3 Subsidiary Diploma can extend their experience of work in a particular sector. It may also be a suitable qualification for those wishing to change career or move into a particular area of employment following a career break.

Pearson BTEC Level 3 Diploma – 120 credits

The 120-credit BTEC Level 3 Diploma broadens and expands the specialist work-related focus from the BTEC Level 3 Subsidiary Diploma. There is potential for the qualification to prepare learners for employment in the appropriate vocational sector and it is suitable for those who have decided that they wish to enter a particular area of work. It is broadly equivalent to two GCE A Levels.

Some learners may wish to gain the qualification in order to enter a specialist area of employment or to progress to a Level 3 programme. Other learners may want to extend the specialism they studied on the BTEC Level 3 Certificate or the BTEC Level 3 Subsidiary Diploma programme.

Pearson BTEC Level 3 Extended Diploma – 180 credits

The 180-credit BTEC Level 3 Extended Diploma extends and deepens the specialist work-related focus from the BTEC Level 3 Diploma. There is potential for the qualification to prepare learners for appropriate direct employment in the vocational sector and it is suitable for those who have decided that they clearly wish to enter a particular specialist area of work. It is broadly equivalent to three GCE A Levels.

Some learners may wish to gain the qualification in order to enter a specialist area of employment or to progress to a higher education foundation degree, HND or other professional development programme. Other learners may want to extend the specialist nature of the subjects they studied on the BTEC Level 3 Diploma or another programme of study.

Key features of the BTEC Nationals in Blacksmithing and Metalworking

The BTEC Nationals in Blacksmithing and Metalworking have been developed to provide:

- education and training for those who are seeking entry into employment or are employed in a variety of types of blacksmith and metalwork, such as functional and creative forgework
- opportunities for learners to gain nationally recognised Level 3 vocationally-related qualifications to enter employment or progress to further education or training qualifications or in a similar related subject area
- the underpinning knowledge, understanding and skills required at this level in blacksmithing and metalworking industries
- information on the role of the blacksmithing and metalworking manager and the opportunities available within the industry locally and nationally
- opportunities for learners to focus on the development of personal, learning and thinking skills (PLTS) and Functional Skills
- opportunities for learners to develop a range of skills and techniques, personal qualities and attitudes essential for successful performance in working life.

Rationale for the BTEC Nationals in Blacksmithing and Metalworking

The BTEC Nationals in Blacksmithing and Metalworking have been developed to provide entry and progression to and within the blacksmithing and metalworking industries. We have included the knowledge, understanding and technical skills that employers will need from these industries learners entering in the coming years.

These qualifications are part of a wide suite of environmental and land-based qualifications that we offer, they are designed primarily for 14–19-year-old learners seeking employment and/or further learning in the sector. They are also available to other learners who may already have experience within the sector but seek a nationally recognised qualification as part of their career development. The qualifications are aimed at those interested in blacksmithing and other-rural metal craft roles. The qualifications are made up of discrete 5- and 10-credit units of learning that give learners explicit recognition of their learning in education and work.

BTEC National qualifications are free to be delivered and assessed in a range of traditional and contemporary models such as full-time, part-time and e-learning. Tutors are free to create innovative and creative assessments that fit local requirements while maintaining a national standard.

National Occupational Standards

BTEC Nationals are designed to provide much of the underpinning knowledge and understanding for the National Occupational Standards (NOS), as well as developing practical skills in preparation for work and possible achievement of NVQs in due course. NOS form the basis of National Vocational Qualifications (NVQs). BTEC Nationals do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context.

Each unit in the specification identifies links to elements of the NOS.

The Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking relate to the following NOS:

- Level 3 Fabrication and Welding
- Level 3 Farriery.

Rules of combination for Pearson BTEC Level 3 National qualifications

The rules of combination specify the:

- total credit value of the qualification
- the minimum credit to be achieved at the level, or above, of the qualification
- the mandatory unit credit
- the optional unit credit
- the maximum credit that can come from other Level 3 BTEC units in this qualification suite.

When combining units for a BTEC National qualification, it is the centre's responsibility to ensure that the following rules of combination are adhered to.

Pearson BTEC Level 3 Certificate

- 1 Qualification credit value: a minimum of 30.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 30.

Pearson BTEC Level 3 Subsidiary Diploma

- 1 Qualification credit value: a minimum of 60.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 60.
- 3 Mandatory unit credit: 20.
- 4 Optional unit credit: 40.
- 5 A maximum of 10 optional credits can come from other Level 3 BTEC units to meet local needs.

Pearson BTEC Level 3 Diploma

- 1 Qualification credit value: a minimum of 120.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 120.
- 3 Mandatory unit credit: 60.
- 4 Optional unit credit: 60.
- 5 A maximum of 10 optional credits can come from other Level 3 BTEC units to meet local needs.

Pearson BTEC Level 3 Extended Diploma

- 1 Qualification credit value: a minimum of 180.
- 2 Minimum credit to be achieved at, or above, the level of the qualification: 180.
- 3 Mandatory unit credit: 60.
- 4 Optional unit credit: 120.
- 5 A maximum of 25 optional credits can come from other Level 3 BTEC units to meet local needs.

Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking

The Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking is 30 credits and 180 guided learning hours. It consists of optional units that provide for a combined total of 30 credits (where at least 23 credits must be at Level 3 or above).

The units for the BTEC Nationals in Blacksmithing and Metalworking are on the CD ROM contained within the specification pack.

Pearson BTEC Level 3 Certificate in Blacksmithing and Metalworking			
Unit	Optional units	Credit	Level
1	Undertake Workshop Practice for Blacksmithing and Metalworking	10	3
2	Understanding and Using Forging Techniques for Blacksmithing and Metalworking	10	3
3	Undertake Drawing Practice for Blacksmithing and Metalworking	10	3
4	Business Management in the Land-based Sector	10	3
5	Undertake Introductory Welding for Blacksmithing and Metalworking	10	3
6	Undertake and Review Work Related Experience in the Land-based Industries	10	3
7	Undertake Forge Practice for Blacksmithing and Metalworking	10	3
8	Undertake Blacksmithing Processes	10	3
9	Understanding and Using Blacksmithing and Construction Skills	10	3
10	Understanding and Using Blacksmithing Installation Skills	10	3
11	Undertake Oxy-acetylene Welding for Blacksmithing and Metalworking	10	3
12	Undertake Manual Metal Arc Welding for Blacksmithing and Metalworking	10	3
13	Undertake Metal Arc Gas Shielded Welding for Blacksmithing and Metalworking	10	3
14	Undertake Fabrication Drawing for Blacksmithing and Metalworking	10	3
15	Undertake Computer Aided Design in Horticulture, Treework and Blacksmithing	10	3
16	Understanding and Using Fabrication Skills for Blacksmithing and Metalworking	10	3
17	Understanding and Using Fabrication Techniques for Blacksmithing and Metalworking	10	3
18	Understanding the History and Development of the Blacksmithing Industry	10	3
19	Undertake Horseshoe Production	10	3
20	Understanding Principles and Methods of Design for Blacksmithing and Metalworking	10	3
21	Participate in Business Planning and Improvement in the Land-based Sector	10	3
22	Undertake Professional Communication for Blacksmiths and Metalworkers	10	3
23	Undertake an Investigative Project in the Land-based Sector	10	3
24	Undertake Small Scale Design for Blacksmithing and Metalworking	10	3
25	Undertake Small Scale Working for Blacksmithing and Metalworking	10	3
26	Undertake Large Scale Design for Blacksmithing and Metalworking	10	3
27	Undertake Large Scale Working for Blacksmithing and Metalworking	10	3
28	Undertake Repoussé and Other Decorative Skills for Blacksmithing and Metalworking	10	3

Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking

The Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking is 60 credits and 360 guided learning hour that consists of two mandatory units that provide a total of 10 credits **plus** optional units that together provide for a combined total of 60 credits (where at least 45 credits must be at Level 3 or above).

The units for the BTEC Nationals in Blacksmithing and Metalworking are on the CD ROM contained within the specification pack.

Pearson BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking			
Unit	Mandatory units	Credit	Level
1	Undertake Workshop Practice for Blacksmithing and Metalworking	10	3
2	Understanding and Using Forging Techniques for Blacksmithing and Metalworking	10	3
Unit	Optional units		
3	Undertake Drawing Practice for Blacksmithing and Metalworking	10	3
4	Business Management in the Land-based Sector	10	3
5	Undertake Introductory Welding for Blacksmithing and Metalworking	10	3
6	Undertake and Review Work Related Experience in the Land-based Industries	10	3
7	Undertake Forge Practice for Blacksmithing and Metalworking	10	3
8	Undertake Blacksmithing Processes	10	3
9	Understanding and Using Blacksmithing and Construction Skills	10	3
10	Understanding and Using Blacksmithing Installation Skills	10	3
11	Undertake Oxy-acetylene Welding for Blacksmithing and Metalworking	10	3
12	Undertake Manual Metal Arc Welding for Blacksmithing and Metalworking	10	3
13	Undertake Metal Arc Gas Shielded Welding for Blacksmithing and Metalworking	10	3
14	Undertake Fabrication Drawing for Blacksmithing and Metalworking	10	3
15	Undertake Computer Aided Design in Horticulture, Treework and Blacksmithing	10	3
16	Understanding and Using Fabrication Skills for Blacksmithing and Metalworking	10	3
17	Understanding and Using Fabrication Techniques for Blacksmithing and Metalworking	10	3
18	Understanding the History and Development of the Blacksmithing Industry	10	3
19	Undertake Horseshoe Production	10	3
20	Understanding Principles and Methods of Design for Blacksmithing and Metalworking	10	3
21	Participate in Business Planning and Improvement in the Land-based Sector	10	3
22	Undertake Professional Communication for Blacksmiths and Metalworkers	10	3
23	Undertake an Investigative Project in the Land-based Sector	10	3
24	Undertake Small Scale Design for Blacksmithing and Metalworking	10	3
25	Undertake Small Scale Working for Blacksmithing and Metalworking	10	3
26	Undertake Large Scale Design for Blacksmithing and Metalworking	10	3
27	Undertake Large Scale Working for Blacksmithing and Metalworking	10	3
28	Undertake Repoussé and Other Decorative Skills for Blacksmithing and Metalworking	10	3

Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking

The Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking is 120 credits and 720 guided learning hours. It consists of six mandatory units that provide for a total of 60 credits plus optional units that provide for a combined total of 120 credits (where at least 90 credits must be at Level 3 or above).

The units for the BTEC Nationals in Blacksmithing and Metalworking are on the CD ROM contained within the specification pack.

Pearson BTEC Level 3 Diploma in Blacksmithing and Metalworking			
Unit	Mandatory units	Credit	Level
1	Undertake Workshop Practice for Blacksmithing and Metalworking	10	3
2	Understanding and Using Forging Techniques for Blacksmithing and Metalworking	10	3
3	Undertake Drawing Practice for Blacksmithing and Metalworking	10	3
4	Business Management in the Land-based Sector	10	3
5	Undertake Introductory Welding for Blacksmithing and Metalworking	10	3
6	Undertake and Review Work Related Experience in the Land-based Industries	10	3
Unit	Optional units		
7	Undertake Forge Practice for Blacksmithing and Metalworking	10	3
8	Undertake Blacksmithing Processes	10	3
9	Understanding and Using Blacksmithing and Construction Skills	10	3
10	Understanding and Using Blacksmithing Installation Skills	10	3
11	Undertake Oxy-acetylene Welding for Blacksmithing and Metalworking	10	3
12	Undertake Manual Metal Arc Welding for Blacksmithing and Metalworking	10	3
13	Undertake Metal Arc Gas Shielded Welding for Blacksmithing and Metalworking	10	3
14	Undertake Fabrication Drawing for Blacksmithing and Metalworking	10	3
15	Undertake Computer Aided Design in Horticulture, Treework and Blacksmithing	10	3
16	Understanding and Using Fabrication Skills for Blacksmithing and Metalworking	10	3
17	Understanding and Using Fabrication Techniques for Blacksmithing and Metalworking	10	3
18	Understanding the History and Development of the Blacksmithing Industry	10	3
19	Undertake Horseshoe Production	10	3
20	Understanding Principles and Methods of Design for Blacksmithing and Metalworking	10	3
21	Participate in Business Planning and Improvement in the Land-based Sector	10	3
22	Undertake Professional Communication for Blacksmiths and Metalworkers	10	3
23	Undertake an Investigative Project in the Land-based Sector	10	3
24	Undertake Small Scale Design for Blacksmithing and Metalworking	10	3
25	Undertake Small Scale Working for Blacksmithing and Metalworking	10	3
26	Undertake Large Scale Design for Blacksmithing and Metalworking	10	3
27	Undertake Large Scale Working for Blacksmithing and Metalworking	10	3
28	Undertake Repoussé and Other Decorative Skills for Blacksmithing and Metalworking	10	3

Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking

The Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking is 180 credits and 1080 guided learning hours. It consists of six mandatory units that provide a total of 60 credits **plus** optional units that provide for a combined total of 180 credits (where at least 135 credits must be at Level 3 or above).

The units for the BTEC Nationals in Blacksmithing and Metalworking are on the CD ROM contained within the specification pack.

Pearson BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking			
Unit	Mandatory units	Credit	Level
1	Undertake Workshop Practice for Blacksmithing and Metalworking	10	3
2	Understanding and Using Forging Techniques for Blacksmithing and Metalworking	10	3
3	Undertake Drawing Practice for Blacksmithing and Metalworking	10	3
4	Business Management in the Land-based Sector	10	
5	Undertake Introductory Welding for Blacksmithing and Metalworking	10	3
6	Undertake and Review Work Related Experience in the Land-based Industries	10	3
Unit	Optional units		
7	Undertake Forge Practice for Blacksmithing and Metalworking	10	3
8	Undertake Blacksmithing Processes	10	3
9	Understanding and Using Blacksmithing and Construction Skills	10	3
10	Understanding and Using Blacksmithing Installation Skills	10	3
11	Undertake Oxy-acetylene Welding for Blacksmithing and Metalworking	10	3
12	Undertake Manual Metal Arc Welding for Blacksmithing and Metalworking	10	3
13	Undertake Metal Arc Gas Shielded Welding for Blacksmithing and Metalworking	10	3
14	Undertake Fabrication Drawing for Blacksmithing and Metalworking	10	3
15	Undertake Computer Aided Design in Horticulture, Treework and Blacksmithing	10	3
16	Understanding and Using Fabrication Skills for Blacksmithing and Metalworking	10	3
17	Understanding and Using Fabrication Techniques for Blacksmithing and Metalworking	10	3
18	Understanding the History and Development of the Blacksmithing Industry	10	3
19	Undertake Horseshoe Production	10	3
20	Understanding Principles and Methods of Design for Blacksmithing and Metalworking	10	3
21	Participate in Business Planning and Improvement in the Land-based Sector	10	3
22	Undertake Professional Communication for Blacksmiths and Metalworkers	10	3
23	Undertake an Investigative Project in the Land-based Sector	10	3
24	Undertake Small Scale Design for Blacksmithing and Metalworking	10	3
25	Undertake Small Scale Working for Blacksmithing and Metalworking	10	3
26	Undertake Large Scale Design for Blacksmithing and Metalworking	10	3
27	Undertake Large Scale Working for Blacksmithing and Metalworking	10	3
28	Undertake Repoussé and Other Decorative Skills for Blacksmithing and Metalworking	10	3

Assessment and grading

In BTEC Nationals all units are internally assessed.

All assessment for BTEC Nationals is criterion referenced, based on the achievement of specified learning outcomes. Each unit within the qualification has specified assessment and grading criteria which are to be used for grading purposes. A summative unit grade can be awarded at pass, merit or distinction:

- to achieve a 'pass' a learner must have satisfied **all** the pass assessment criteria
- to achieve a 'merit' a learner must additionally have satisfied **all** the merit grading criteria
- to achieve a 'distinction' a learner must additionally have satisfied **all** the distinction grading criteria.

Learners who complete the unit but who do not meet all the pass criteria are graded 'unclassified'.

Grading domains

The grading criteria are developed in relation to grading domains which are exemplified by a number of indicative characteristics at the level of the qualification.

There are four BTEC National grading domains:

- application of knowledge and understanding
- development of practical and technical skills
- personal development for occupational roles
- application of generic skills.

Please refer to *Annexe B* which shows the merit and distinction indicative characteristics.

Guidance

The purpose of assessment is to ensure that effective learning has taken place to give learners the opportunity to:

- meet the assessment and grading criteria and
- achieve the learning outcomes within the units.

All the assignments created by centres should be reliable and fit for purpose, and should build on the assessment and grading criteria. Assessment tasks and activities should enable learners to produce valid, sufficient and reliable evidence that relates directly to the specified criteria. Centres should enable learners to produce evidence in a variety of different forms and including, written reports, graphs and posters, along with projects, performance observation and time-constrained assessments.

Centres are encouraged to emphasise the practical application of the assessment and grading criteria, providing a realistic scenario for learners to adopt, and making maximum use of practical activities and work experience. The creation of assignments that are fit for purpose is vital to achievement and their importance cannot be over-emphasised.

The assessment and grading criteria must be indicated clearly in fit-for-purpose assignments. This gives learners focus and helps with internal verification and standardisation processes. It will also help to ensure that learner feedback is specific to the assessment and grading criteria.

When looking at the assessment and grading grids and designing assignments, centres are encouraged to identify common topics and themes.

The units include guidance on appropriate assessment methodology. A central feature of vocational assessment is that it allows for assessment to be:

- current ie to reflect the most recent developments and issues
- local ie to reflect the employment context of the delivering centre
- flexible to reflect learner needs ie at a time and in a way that matches the learner's requirements so that they can demonstrate achievement.

Calculation of the qualification grade

Pass qualification grade

Learners who achieve the minimum eligible credit value specified by the rule of combination will achieve the qualification at pass grade (see *Rules of combination for Pearson BTEC Level 3 National qualifications*).

Qualification grades above pass grade

Learners will be awarded a merit or distinction or distinction* qualification grade (or combination of these grades appropriate to the qualification) by the aggregation of points gained through the successful achievement of individual units. The number of points available is dependent on the unit level and grade achieved, and the credit size of the unit (as shown in the 'points available for credits achieved at different levels and unit grades' below).

Points available for credits achieved at different levels and unit grades

The table below shows the **number of points scored per credit** at the unit level and grade.

Unit level	Points per credit		
	Pass	Merit	Distinction
Level 2	5	6	7
Level 3	7	8	9
Level 4	9	10	11

Learners who achieve the correct number of points within the ranges shown in the 'qualification grade' table will achieve the qualification merit or distinction or distinction* grade (or combinations of these grades appropriate to the qualification).

Qualification grade

BTEC Level 3 Certificate

Points range above pass grade	Grade	
230-249	Merit	M
250-259	Distinction	D
260 and above	Distinction*	D*

BTEC Level 3 Subsidiary Diploma

Points range above pass grade	Grade	
460-499	Merit	M
500-519	Distinction	D
520 and above	Distinction*	D*

BTEC Level 3 Diploma

Points range above pass grade	Grade
880-919	MP
920-959	MM
960-999	DM
1000-1029	DD
1030-1059	DD*
1060 and above	D*D*

BTEC Level 3 Extended Diploma

Points range above pass grade	Grade
1300-1339	MPP
1340-1379	MMP
1380-1419	MMM
1420-1459	DMM
1460-1499	DDM
1500-1529	DDD
1530-1559	DDD*
1560-1589	DD*D*
1590 and above	D*D*D*

Please refer to *Annexe G* for examples of calculation of qualification grade above pass grade.

Quality assurance of centres

Pearson's qualification specifications set out the standard to be achieved by each learner in order to be awarded the qualification. This is covered in the statement of learning outcomes, and assessment and grading criteria in each unit. Further guidance on delivery and assessment is given in the *Essential guidance for tutors* section in each unit. This section is designed to provide additional guidance and amplification related to the unit to support tutors, deliverers and assessors and to provide for a coherence of understanding and a consistency of delivery and assessment.

Approval

Centres that have not previously offered BTEC qualifications will first need to apply for, and be granted, centre approval before they can apply for approval to offer the programme.

When a centre applies for approval to offer a BTEC qualification they are required to enter into an approvals agreement.

The approvals agreement is a formal commitment by the head or principal of a centre to meet all the requirements of the specification and any linked codes or regulations. Sanctions and tariffs may be applied if centres do not comply with the agreement. Ultimately, this could result in the suspension of certification or withdrawal of approval.

Centres will be allowed 'accelerated approval' for a new programme where the centre already has approval for a programme that is being replaced by the new programme.

The key principles of quality assurance are that:

- a centre delivering BTEC programmes must be an approved centre and must have approval for programmes or groups of programmes that it is operating
- the centre agrees as part of gaining approval to abide by specific terms and conditions around the effective delivery and quality assurance of assessment; it must abide by these conditions throughout the period of delivery
- Pearson makes available to approved centres a range of materials and opportunities intended to exemplify the processes required for effective assessment and examples of effective standards. Approved centres must use the materials and services to ensure that all staff delivering BTEC qualifications keep up to date with the guidance on assessment
- an approved centre must follow agreed protocols for standardisation of assessors and verifiers; planning, monitoring and recording of assessment processes; and for dealing with special circumstances, appeals and malpractice.

The approach of quality assured assessment is made through a partnership between an approved centre and Pearson. Pearson is committed to ensuring that it follows best practice and employs appropriate technology to support quality assurance processes where practicable. Therefore, the specific arrangements for working with centres will vary. Pearson seeks to ensure that the quality assurance processes that it uses do not place undue bureaucratic processes on centres and works to support centres in providing robust quality assurance processes.

Pearson monitors and supports centres in the effective operation of assessment and quality assurance. The methods which it uses to do this for these BTEC First and National programmes include:

- ensuring that all centres have completed appropriate declarations at the time of approval undertaking approval visits to centres where necessary
- requiring all centres to appoint a Lead Internal Verifier for designated groups of programmes and to ensure that this person is trained and supported in carrying out that role
- requiring that the Lead Internal Verifier completes compulsory online standardisation related to assessment and verification decisions for the designated programme
- assessment sampling and verification, through requested samples of assessments, completed assessed learner work and associated documentation
- overarching review and assessment of a centre's strategy for assessing and quality assuring its BTEC programmes.

Edexcel Quality Assurance Handbook

Centres should refer to the *Handbook for Quality Assurance for BTEC Qualifications*, issued annually, for detailed guidance.

An approved centre must make certification claims only when authorised by Pearson and strictly in accordance with requirements for reporting.

Centres that do not fully address and maintain rigorous approaches to quality assurance will be prevented from seeking certification for individual programmes or for all BTEC First and National programmes. Centres that do not comply with remedial action plans may have their approval to deliver qualifications removed.

Programme design and delivery

BTEC National qualifications consist of mandatory and optional units. Optional units are designed to provide a focus to the qualification and give more specialist opportunities in the sector.

In BTEC Nationals each unit has a number of *guided learning hours* and centres are advised to take this into account when planning the programme of study associated with this specification.

Mode of delivery

Pearson does not define the mode of study for BTEC Nationals. Centres are free to offer the qualifications using any mode of delivery (such as full time, part time, evening only, distance learning) that meets their learners' needs. Whichever mode of delivery is used, centres must ensure that learners have appropriate access to the resources identified in the specification and to the subject specialists delivering the units. This is particularly important for learners studying for the qualification through open or distance learning.

Learners studying for the qualification on a part-time basis bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors. The use of assessment evidence drawn from learners' work environments should be encouraged. Those planning the programme should aim to enhance the vocational nature of the qualification by:

- liaising with employers to ensure a course relevant to learners' specific needs
- accessing and using non-confidential data and documents from learners' workplaces

- including sponsoring employers in the delivery of the programme and, where appropriate, in the assessment
- linking with company-based/workplace training programmes
- making full use of the variety of experience of work and life that learners bring to the programme.

Resources

BTEC Nationals are designed to prepare learners for employment in specific occupational sectors. Physical resources need to support the delivery of the programme and the proper assessment of the learning outcomes and should, therefore, normally be of industry standard. Staff delivering programmes and conducting the assessments should be familiar with current practice and standards in the sector concerned. Centres will need to meet any specific resource requirements to gain approval from Pearson.

Where specific resources are required these have been indicated in individual units in the *Essential resources for tutors* sections.

Delivery approach

It is important that centres develop an approach to teaching and learning that supports the specialist vocational nature of BTEC National qualifications and the mode of delivery. Specifications give a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors and assessors need to ensure that appropriate links are made between theory and practical application and that the knowledge base is applied to the sector. This requires the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activity within the sector. Maximum use should be made of the learner's experience.

An outline learning plan is included in every unit as guidance which demonstrates one way to plan the delivery and assessment of the unit. The outline learning plan can be used in conjunction with the programme of suggested assignments.

Where the qualification has been designated and approved as a Technical Certificate and forms part of an Apprenticeship scheme, particular care needs to be taken to build strong links between the learning and assessment for the BTEC National qualification and the related NVQs and Functional Skills that also contribute to the scheme.

Meeting local needs

Centres should note that the qualifications set out in this specification have been developed in consultation with centres and employers and the Sector Skills Councils or the Standards Setting Bodies for the relevant sector. Centres should make maximum use of the choice available to them within the optional units to meet the needs of their learners, and local skills and training needs.

In certain circumstances, units in this specification might not allow centres to meet a local need. In this situation, Pearson will ensure that the rules of combination allows centres to make use of units from other BTEC specifications in this suite. Centres are required to ensure that the coherence and purpose of the qualification is retained and to ensure that the vocational focus is not diluted.

Limitations on variations from standard specifications

The flexibility to import standard units from other BTEC Nationals is limited to a total of 25 per cent of the qualification credit value (see *Rules of combination for Pearson BTEC Level 3 National qualifications*).

These units cannot be used at the expense of the mandatory units in any qualification.

Additional and specialist learning

Additional and specialist learning (ASL) consists of accredited qualifications at the same level as, or one level above, the Diploma course of study. The ASL may include BTEC qualifications which are also available to learners not following a Diploma course of study.

Qualifications for ASL must be selected from the ASL catalogue through 'The Diploma Validator'. Further units may be added to qualifications within the ASL catalogue and centres undertaking, or preparing to undertake ASL, should refer regularly to the Diploma Validator for information regarding additions. To access the catalogue go to diplomavalidator.qcda.gov.uk.

Functional Skills

BTEC Nationals give learners opportunities to develop and apply Functional Skills.

Functional Skills are offered as stand-alone qualifications at Level 2. See individual units for opportunities to cover ICT, Mathematics and English Functional Skills.

Personal, learning and thinking skills

Opportunities are available to develop personal, learning and thinking skills (PLTS) within a sector-related context. PLTS are identified in brackets after the unit pass criteria to which they are associated and they are also mapped in *Annexe C*. Further opportunities for learners to demonstrate these skills may also be apparent as learners progress throughout their learning.

Access and recruitment

Edexcel's policy regarding access to its qualifications is that:

- they should be available to everyone who is capable of reaching the required standards
- they should be free from any barriers that restrict access and progression
- there should be equal opportunities for all wishing to access the qualifications.

Centres are required to recruit learners to BTEC qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about the qualification and that the qualification will meet their needs. Centres should take appropriate steps to assess each applicant's potential and make a professional judgement about their ability to complete the programme of study successfully and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Pearson's policy on learners with particular requirements.

Centres will need to review the entry profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to a Level 3 qualification. For learners who have recently been in education, the profile is likely to include one of the following:

- a BTEC Level 2 qualification in blacksmithing and metalworking or a related vocational area
- a standard of literacy and numeracy supported by a general education equivalent to four GCSEs at grade A*–C
- other related Level 2 qualifications
- related work experience.

More mature learners may present a more varied profile of achievement that is likely to include experience of paid and/or unpaid employment.

Restrictions on learner entry

Most BTEC National qualifications are for learners aged 16 years and over.

In particular sectors the restrictions on learner entry might also relate to any physical or legal barriers, for example people working in health, care or education are likely to be subject to police checks.

Pearson BTEC Level 3 Nationals are listed on the DfE funding lists under Section 96 and Section 97 of the Learning and Skills Act 2000.

Access arrangements and special considerations

Edexcel's policy on access arrangements and special considerations for BTEC and Edexcel NVQ qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 1995 Disability Discrimination Act and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence.

Further details are given in the policy *Access Arrangements and Special Considerations for BTEC and Edexcel NVQ Qualifications*, which can be found on the Pearson website. This policy replaces the previous Edexcel policy (*Assessment of Vocationally Related Qualification: Regulations and Guidance Relating to Learners with Special Requirements, 2002*) concerning learners with particular requirements.

● **Recognition of Prior Learning**

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Pearson encourages centres to recognise learners' previous achievements and experiences whether at work, home or at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be valid and reliable.

Unit format

All units in Pearson BTEC Level 3 National qualifications have a standard format. The unit format is designed to give guidance on the requirements of the qualification for learners, tutors, assessors and those responsible for monitoring national standards.

Each unit has the following sections.

● **Unit title**

The unit title will appear on the learner's Notification of Performance (NOP).

● **Level**

All units and qualifications have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry Level to Level 8. The level of the unit has been informed by the level descriptors and, where appropriate, the National Occupational Standards (NOS) and/or other sector/professional benchmarks.

● **Credit value**

Each unit in BTEC National qualifications has a credit value; learners will be awarded credits for the successful completion of whole units.

A credit value specifies the number of credits that will be awarded to a learner who has achieved all the learning outcomes of the unit.

● **Guided learning hours**

Guided learning hours for the unit as defined on page 3.

Aim and purpose

The aim provides a clear summary of the purpose of the unit and is a succinct statement that summarises the learning outcomes of the unit.

Unit introduction

The unit introduction gives the reader an appreciation of the unit in the vocational setting of the qualification, as well as highlighting the focus of the unit. It gives the reader a snapshot of the unit and the key knowledge, skills and understanding gained while studying the unit. The unit introduction also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

Learning outcomes

Learning outcomes state exactly what a learner should 'know, understand or be able to do' as a result of completing the unit.

Unit content

The unit content identifies the breadth of knowledge, skills and understanding needed to design and deliver a programme of learning to achieve each of the learning outcomes. This is informed by the underpinning knowledge and understanding requirements of the related NOS. The content provides the range of subject material for the programme of learning and specifies the skills, knowledge and understanding required for achievement of the pass, merit and distinction grading criteria.

Each learning outcome is stated in full and then the key phrases or concepts related to that learning outcome are listed in italics followed by the subsequent range of related topics.

Relationship between content and assessment criteria

The learner must have the opportunity within delivery of the unit to cover all the unit content.

It is not a requirement of the unit specification that all of the content is assessed. However, the indicative content will need to be covered in a programme of learning in order for learners to be able to meet the standard determined in the assessment and grading criteria. The merit and distinction grading criteria enable the learner to achieve higher levels of performance in acquisition of knowledge, understanding and skills.

Content structure and terminology

The information below shows how the unit content is structured and gives the terminology used to explain the different components within the content.

- Learning outcome: this is given and in bold at the beginning of each section of content.
- Italicised sub-heading: it contains a key phrase or concept. This is content which must be covered in the delivery of the unit. Colons mark the end of an italicised sub-heading.
- Elements of content: the elements are in plain text and amplify the sub-heading. The elements must also be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of elements of content which must be covered in the delivery of the unit.
- 'eg' is a list of examples used for indicative amplification of an element (that is, the content specified in this amplification that could be covered or that could be replaced by other, similar material).

Assessment and grading grid

Each grading grid gives the assessment and grading criteria used to determine the evidence that each learner must produce in order to receive a pass, merit or distinction grade. It is important to note that the merit and distinction grading criteria require a qualitative improvement in a learner's evidence and not simply the production of more evidence at the same level.

Essential guidance for tutors

This section gives tutors additional guidance and amplification to aid understanding and a consistent level of delivery and assessment. It is divided into the following sections.

- **Delivery** – explains the content's relationship with the learning outcomes and offers guidance about possible approaches to delivery. This section is based on the more usual delivery modes but is not intended to rule out alternative approaches.
- **Outline learning plan** – the outline learning plan has been included in every unit as guidance and demonstrates one way to plan the delivery and assessment of a unit. The outline learning plan can be used in conjunction with the programme of suggested assignments.
- **Assessment** – amplify the nature and type of evidence that learners need to produce in order to pass the unit or achieve the higher grades. This section should be read in conjunction with the grading criteria.
- **Suggested programme of assignments** – the table shows how the suggested assignments match and cover the assessment grading criteria.
- **Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications** – sets out links with other units within the qualification. These links can be used to ensure that learners make connections between units, resulting in a coherent programme of learning. The links show opportunities for integration of learning, delivery and assessment.
- **Essential resources** – identifies any specialist resources needed to allow learners to generate the evidence required for each unit. The centre will be asked to ensure that any requirements are in place when it seeks approval from Pearson to offer the qualification.
- **Employer engagement and vocational contexts** – provides a short list of agencies, networks and other useful contacts for employer engagement and for sources of vocational contexts.
- **Indicative reading for learners** – gives a short list of learner resource material that benchmarks the level of study.

Further information

For further information please call Customer Services on 020 7010 2188 (calls may be recorded for training purposes) or email TeachingLandBasedStudies@pearson.com.

Useful publications

Further copies of this document and related publications can be obtained from:

Telephone: 0845 172 0205

Email: publication.orders@pearson.com

Related information and publications include:

- Functional Skills publications – specifications, tutor support materials and question papers
- the current publications catalogue and update catalogue.

Pearson publications concerning the Quality Assurance System and the internal and external verification of vocationally related programmes can be found on the Pearson website and in the Edexcel publications catalogue.

NB: Most of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

● **How to obtain National Occupational Standards**

National Occupational Standards relevant to these qualifications can be obtained online from www.ukstandards.org.uk.

Annexe A

The Pearson BTEC qualification framework for the environmental and land-based sector

Progression opportunities within the framework.

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC Short Courses	NVQ/occupational
5		Pearson BTEC Level 5 HND Diplomas in Animal Management, Environmental Conservation, Horse Management, Horticulture		
4		Pearson BTEC Level 4 HNC Diplomas in Animal Management, Environmental Conservation, Horse Management, Horticulture		
3	Edexcel Level 3 Diploma in Environmental and Land-based Studies	Pearson BTEC Level 3 Certificates, Subsidiary Diplomas, Diplomas and Extended Diplomas in Agriculture, Animal Management, Blacksmithing and Metalworking, Countryside Management, Fish Management, Floristry, Forestry and Arboriculture, Horse Management, Horticulture, Land-based Technology		Diploma in Work Based Environmental Conservation
2	Edexcel Level 2 Diploma in Environmental and Land-based Studies	Pearson BTEC Level 2 Certificates, Extended Certificates and Diplomas in Agriculture, Animal Care, Blacksmithing and Metalworking, Countryside and Environment, Fish Husbandry, Floristry, Horse Care, Horticulture, Land-based Technology		Diploma in Work Based Environmental Conservation
1	Edexcel Level 1 Diploma in Environmental and Land-based Studies	BTEC Foundation Learning in Land-based Studies		
Entry		BTEC Foundation Learning in Land-based Studies		

Annexe B

Grading domains: BTEC Level 3 generic grading domains

Grading domain 1	Indicative characteristics – merit	Indicative characteristics – distinction
<p>Application of knowledge and understanding</p> <p>(Learning outcome stem <i>understand</i> or <i>know</i>)</p>	<ul style="list-style-type: none"> Shows depth of knowledge and development of understanding in familiar and unfamiliar situations (for example explain why, makes judgements based on analysis). Applies and/or selects concepts showing comprehension of often complex theories. Applies knowledge in often familiar and unfamiliar contexts. Applies knowledge to non-routine contexts (eg assessor selection). Makes reasoned analytical judgements. Shows relationships between pass criteria. 	<ul style="list-style-type: none"> Synthesises knowledge and understanding across pass/merit criteria. Evaluates complex concepts/ideas/actions and makes reasoned and confident judgements. Uses analysis, research and evaluation to make recommendations and influence proposals. Analyses implications of application of knowledge/understanding. Accesses and evaluates knowledge and understanding to advance complex activities/contextes. Shows relationships with p/m criteria. Responds positively to evaluation.
Grading domain 2	Indicative characteristics – merit	Indicative characteristics – distinction
<p>Development of practical and technical skills</p> <p>(Learning outcome stem <i>be able to</i>)</p>	<ul style="list-style-type: none"> Deploys appropriate advanced techniques/processes/skills. Applies technical skill to advance non-routine activities. Advances practical activities within resource constraints. Produces varied solutions (including non-routine). Modifies techniques/processes to situations. Shows relationship between p criteria. 	<ul style="list-style-type: none"> Demonstrates creativity/originality/own ideas. Applies skill(s) to achieve higher order outcome. Selects and uses successfully from a range of advanced techniques/processes/skills. Reflects on skill acquisition and application. Justifies application of skills/methods. Makes judgements about risks and limitations of techniques/processes. Innovates or generates new techniques/processes for new situations. Shows relationship with p and m criteria.

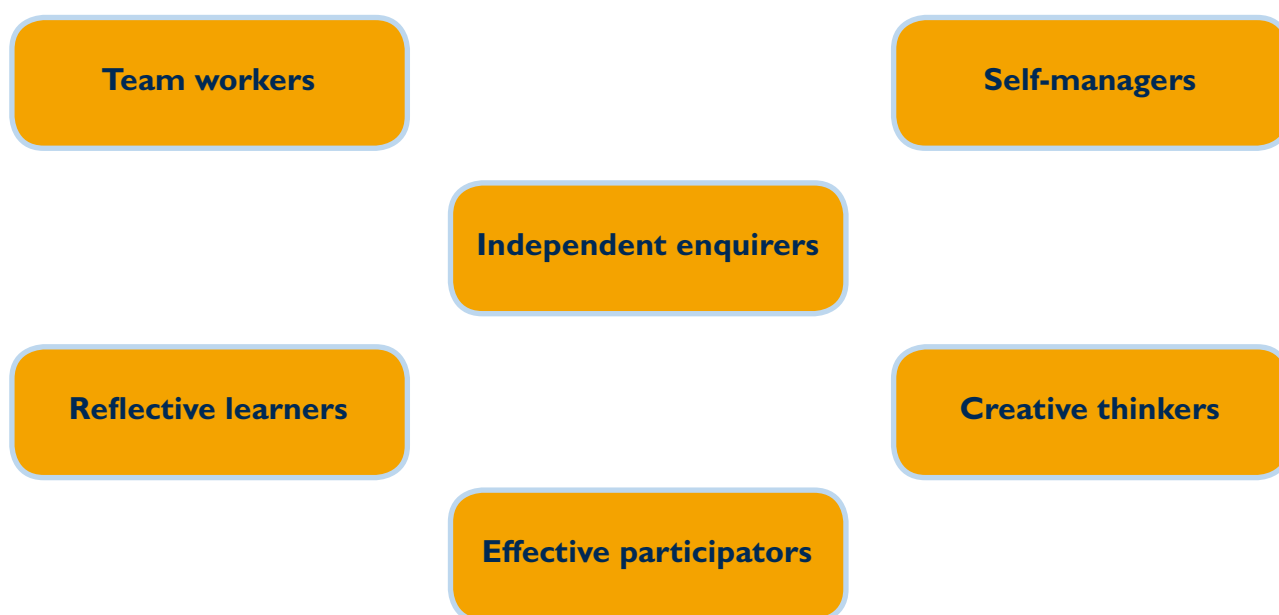
Grading domain 3	Indicative characteristics – merit	Indicative characteristics – distinction
<p>Personal development for occupational roles</p> <p>(Any learning outcome stem)</p>	<ul style="list-style-type: none"> • Takes responsibility in planning and undertaking activities. • Reviews own development needs. • Finds and uses relevant information sources. • Acts within a given work-related context showing understanding of responsibilities. • Identifies responsibilities of employers to the community and the environment. • Applies qualities related to the vocational sector. • Internalises skills/attributes (creating confidence). 	<ul style="list-style-type: none"> • Manages self to achieve outcomes successfully. • Plans for own learning and development through the activities. • Analyses and manipulates information to draw conclusions. • Applies initiative appropriately. • Assesses how different work-related contexts or constraints would change performance. • Reacts positively to changing work-related contexts • Operates ethically in work-related environments. • Takes decisions related to work contexts. • Applies divergent and lateral thinking in work-related contexts. • Understands interdependence.
Grading domain 4	Indicative characteristics – merit	Indicative characteristics – distinction
<p>Application of generic skills</p> <p>(Any learning outcome stem)</p>	<ul style="list-style-type: none"> • Communicates effectively using appropriate behavioural and language registers. • Communicates with clarity and influence. • Makes judgements in contexts with explanations. • Explains how to contribute within a team. • Demonstrates positive contribution to team(s). • Makes adjustments to meet the needs/expectations of others (negotiation skills). • Selects and justifies solutions for specified problems. 	<ul style="list-style-type: none"> • Presents self and communicates information to meet the needs of a variety of audience. • Identifies strategies for communication. • Shows innovative approaches to dealing with individuals and groups. • Takes decisions in contexts with justifications. • Produces outputs subject to time/resource constraints. • Reflects on own contribution to working within a team. • Generates new or alternative solutions to specified problems. • Explores entrepreneurial attributes.

Annexe C

Personal, learning and thinking skills

A FRAMEWORK OF PERSONAL, LEARNING AND THINKING SKILLS 11–19 IN ENGLAND

The framework comprises six groups of skills that, together with the Functional Skills of English, mathematics and ICT, are essential to success in learning, life and work. In essence the framework captures the essential skills of: managing self; managing relationships with others; and managing own learning, performance and work. It is these skills that will enable young people to enter work and adult life confident and capable.



The titles of the six groups of skills are set out below.

For each group there is a focus statement that sums up the range of skills. This is followed by a set of outcome statements that are indicative of the skills, behaviours and personal qualities associated with each group.

Each group is distinctive and coherent. The groups are also inter-connected. Young people are likely to encounter skills from several groups in any one learning experience. For example an independent enquirer would set goals for their research with clear success criteria (reflective learner) and organise and manage their time and resources effectively to achieve these (self-manager). In order to acquire and develop fundamental concepts such as organising oneself, managing change, taking responsibility and perseverance, learners will need to apply skills from all six groups in a wide range of learning contexts 11–19

The Skills

Independent enquirers

Focus:

Young people process and evaluate information in their investigations, planning what to do and how to go about it. They take informed and well-reasoned decisions, recognising that others have different beliefs and attitudes.

Young people:

- identify questions to answer and problems to resolve
- plan and carry out research, appreciating the consequences of decisions
- explore issues, events or problems from different perspectives
- analyse and evaluate information, judging its relevance and value
- consider the influence of circumstances, beliefs and feelings on decisions and events
- support conclusions, using reasoned arguments and evidence.

Creative thinkers

Focus:

Young people think creatively by generating and exploring ideas, making original connections. They try different ways to tackle a problem, working with others to find imaginative solutions and outcomes that are of value.

Young people:

- generate ideas and explore possibilities
- ask questions to extend their thinking
- connect their own and others' ideas and experiences in inventive ways
- question their own and others' assumptions
- try out alternatives or new solutions and follow ideas through
- adapt ideas as circumstances change.

Reflective learners

Focus:

Young people evaluate their strengths and limitations, setting themselves realistic goals with criteria for success. They monitor their own performance and progress, inviting feedback from others and making changes to further their learning.

Young people:

- assess themselves and others, identifying opportunities and achievements
- set goals with success criteria for their development and work
- review progress, acting on the outcomes
- invite feedback and deal positively with praise, setbacks and criticism
- evaluate experiences and learning to inform future progress
- communicate their learning in relevant ways for different audiences.

Team workers

Focus:

Young people work confidently with others, adapting to different contexts and taking responsibility for their own part. They listen to and take account of different views. They form collaborative relationships, resolving issues to reach agreed outcomes.

Young people:

- collaborate with others to work towards common goals
- reach agreements, managing discussions to achieve results
- adapt behaviour to suit different roles and situations, including leadership role
- show fairness and consideration to others
- take responsibility, showing confidence in themselves and their contribution
- provide constructive support and feedback to others.

Self-managers

Focus:

Young people organise themselves, showing personal responsibility, initiative, creativity and enterprise with a commitment to learning and self-improvement. They actively embrace change, responding positively to new priorities, coping with challenges and looking for opportunities.

Young people:

- seek out challenges or new responsibilities and show flexibility when priorities change
- work towards goals, showing initiative, commitment and perseverance
- organise time and resources, prioritising actions
- anticipate, take and manage risks
- deal with competing pressures, including personal and work-related demands
- respond positively to change, seeking advice and support when needed
- manage their emotions, and build and maintain relationships.

Effective participators

Focus:

Young people actively engage with issues that affect them and those around them. They play a full part in the life of their school, college, workplace or wider community by taking responsible action to bring improvements for others as well as themselves.

Young people:

- discuss issues of concern, seeking resolution where needed
- present a persuasive case for action
- propose practical ways forward, breaking these down into manageable steps
- identify improvements that would benefit others as well as themselves
- try to influence others, negotiating and balancing diverse views to reach workable solutions
- act as an advocate for views and beliefs that may differ from their own.

PLTS performance indicator (suggested recording sheet)

Name:	Date:				
	Level of success 1 = low, 5 = high				
Independent enquirers					
Identify questions to answer and problems to resolve	1	2	3	4	5
Plan and carry out research, appreciating the consequences of decisions	1	2	3	4	5
Explore issues, events or problems from different perspectives	1	2	3	4	5
Analyse and evaluate information, judging its relevance and value	1	2	3	4	5
Consider the influence of circumstances, beliefs and feelings on decisions and events	1	2	3	4	5
Support conclusions, using reasoned arguments and evidence	1	2	3	4	5
Creative thinkers					
Generate ideas and explore possibilities	1	2	3	4	5
Ask questions to extend their thinking	1	2	3	4	5
Connect their own and others' ideas and experiences in inventive ways	1	2	3	4	5
Question their own and others' assumptions	1	2	3	4	5
Try out alternatives or new solutions and follow ideas through	1	2	3	4	5
Adapt ideas as circumstances change	1	2	3	4	5
Reflective learners					
Assess themselves and others, identifying opportunities and achievements	1	2	3	4	5
Set goals with success criteria for their development and work	1	2	3	4	5
Review progress, acting on the outcomes	1	2	3	4	5
Invite feedback and deal positively with praise, setbacks and criticism	1	2	3	4	5
Evaluate experiences and learning to inform future progress	1	2	3	4	5
Communicate their learning in relevant ways for different audiences	1	2	3	4	5

Team workers					
Collaborate with others to work towards common goals	1	2	3	4	5
Reach agreements, managing discussions to achieve results	1	2	3	4	5
Adapt behaviour to suit different roles and situations, including leadership roles	1	2	3	4	5
Show fairness and consideration to others	1	2	3	4	5
Take responsibility, showing confidence in themselves and their contribution	1	2	3	4	5
Provide constructive support and feedback to others	1	2	3	4	5
Self-managers					
Seek out challenges or new responsibilities and show flexibility when priorities change	1	2	3	4	5
Work towards goals, showing initiative, commitment and perseverance	1	2	3	4	5
Organise time and resources, prioritising actions	1	2	3	4	5
Anticipate, take and manage risks	1	2	3	4	5
Deal with competing pressures, including personal and work-related demands	1	2	3	4	5
Respond positively to change, seeking advice and support when needed	1	2	3	4	5
Manage their emotions, and build and maintain relationships.	1	2	3	4	5
Effective participators					
Discuss issues of concern, seeking resolution where needed	1	2	3	4	5
Present a persuasive case for action	1	2	3	4	5
Propose practical ways forward, breaking these down into manageable steps	1	2	3	4	5
Identify improvements that would benefit others as well as themselves	1	2	3	4	5
Try to influence others, negotiating and balancing diverse views to reach workable solutions	1	2	3	4	5
Act as an advocate for views and beliefs that may differ from their own	1	2	3	4	5

Note to learner: The circled number represents an indication of your PLTS performance so far.

Note to tutor: Indicate the level of success by circling the appropriate number during your feedback with the learner.

Summary of the PLTS coverage throughout the programme

Personal, learning and thinking skills	Unit						
	1	2	3	4	5	6	7
Independent enquirers	✓		✓	✓			✓
Creative thinkers			✓				
Reflective learners			✓	✓	✓	✓	
Team workers	✓	✓					✓
Self-managers	✓	✓	✓	✓	✓	✓	✓
Effective participators		✓					
✓ – opportunities for development							

Personal, learning and thinking skills	Unit						
	8	9	10	11	12	13	14
Independent enquirers	✓		✓	✓	✓	✓	✓
Creative thinkers		✓	✓	✓	✓	✓	
Reflective learners	✓			✓	✓	✓	✓
Team workers	✓	✓	✓				
Self-managers	✓	✓	✓	✓	✓	✓	✓
Effective participators		✓	✓	✓	✓	✓	
✓ – opportunities for development							

Personal, learning and thinking skills	Unit						
	15	16	17	18	19	20	21
Independent enquirers	✓			✓	✓	✓	✓
Creative thinkers	✓		✓		✓	✓	✓
Reflective learners	✓	✓	✓	✓	✓	✓	
Team workers				✓			
Self-managers	✓	✓	✓	✓	✓	✓	✓
Effective participators	✓	✓	✓		✓		
✓ – opportunities for development–							

Personal, learning and thinking skills	Unit						
	22	23	24	25	26	27	28
Independent enquirers	✓	✓	✓			✓	✓
Creative thinkers	✓	✓	✓	✓	✓	✓	✓
Reflective learners	✓	✓	✓	✓	✓	✓	
Team workers	✓		✓	✓	✓	✓	
Self-managers	✓	✓	✓	✓	✓	✓	✓
Effective participators	✓			✓	✓	✓	✓
✓ – opportunities for development							

Annexe D

Wider curriculum mapping

Study of the Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking gives learners opportunities to develop an understanding of spiritual, moral, ethical, social and cultural issues as well as an awareness of citizenship and environmental issues, European developments, health and safety considerations and equal opportunities issues.

The Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking make a positive contribution to wider curricular areas as appropriate.

Spiritual, moral, ethical, social and cultural issues

The qualification contributes to an understanding of social and cultural issues, such as issues around the use of metals in society, for example ornamental metal design.

Citizenship issues

Learners undertaking the Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking will have the opportunity to develop their understanding of citizenship issues, for example public and private involvement in metal and rural crafts.

Environmental issues

Learners undertaking the Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking will have the opportunity to develop their understanding of environmental issues throughout the units.

European developments

Much of the content of the Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking applies throughout Europe even though delivery is in a UK context.

Health and safety considerations

The Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking are practically based and health and safety issues are encountered throughout the units.

Equal opportunities issues

Equal opportunities issues are implicit throughout the Pearson BTEC Level 3 Nationals in Blacksmithing and Metalworking.

Wider curriculum mapping

Level 3

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14
Spiritual														
Moral and ethical	✓	✓			✓	✓	✓				✓		✓	✓
Social and cultural	✓	✓			✓	✓	✓	✓	✓	✓			✓	✓
Citizenship issues	✓	✓												
Environmental issues	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
European developments														
Health and safety considerations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Equal opportunities issues		✓			✓									

	Unit 15	Unit 16	Unit 17	Unit 18	Unit 19	Unit 20	Unit 21	Unit 22	Unit 23	Unit 24	Unit 25	Unit 26	Unit 27	Unit 28
Spiritual														
Moral and ethical	✓		✓		✓	✓					✓			✓
Social and cultural	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓
Citizenship issues														
Environmental issues	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
European developments														
Health and safety considerations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Equal opportunities issues														

Annexe E

National Occupational Standards/mapping with NVQs

The grid below maps the knowledge covered in the Pearson BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma in Blacksmithing and Metalworking against the underpinning knowledge of the Level 3 NVQ in Farriery and the Level 3 NVQ in Fabrication and Welding

KEY

- ✓ indicates that the BTEC National covers all of the underpinning knowledge of the NVQ unit
- # indicates partial coverage of the NVQ unit
- a blank space indicates no coverage of the underpinning knowledge

NVQs	Units														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Level 3 NVQ in Farriery															
Far1 Monitor and maintain health and safety	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
Far2 Prepare, light and maintain the forge fire															
Far3 Make shoemaking tools															
Far4 Handle and control equines															
Far5 Assess the overall condition and footwear requirements of the equine															
Far6 Determine the footwear plan for the equine															
Far7 Remove horseshoes and assess wear															
Far8 Trim and dress hooves															
Far9 Make horseshoes															
Far 10 Fit horseshoes															
Far 11 Attach horseshoes and finish the shoeing process															
Far 12 Prepare and check electric welding equipment for use															
Far 13 Fabricate horseshoes and tools							#	#							

NVQs	Units													
	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Level 3 NVQ in Farriery														
Far1 Monitor and maintain health and safety	#	#	#	#	#									
Far2 Prepare, light and maintain the forge fire														
Far3 Make shoemaking tools														
Far4 Handle and control equines														
Far5 Assess the overall condition and footcare requirements of the equine														
Far6 Determine the footcare plan for the equine				#										
Far7 Remove horseshoes and assess wear														
Far8 Trim and dress hooves				#										
Far9 Make horseshoes				#										
Far 10 Fit horseshoes														
Far 11 Attach horseshoes and finish the shoeing process														
Far 12 Prepare and check electric welding equipment for use														
Far 13 Fabricate horseshoes and tools				#										

NVQs	Units														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Level 3 NVQ in Fabrication and Welding															
Unit 1: Complying with Statutory Regulations and Organisational Safety Requirements	#	#		#	#	#	#	#	#	#	#	#	#	#	#
Unit 2: Using and Interpreting Engineering Drawings and Documents		#	#		#		#	#	#	#	#	#	#	#	#
Unit 3: Working Efficiently and Effectively in Engineering	#	#	#		#		#	#	#	#	#	#	#	#	#
Unit 4: Welding Materials by the Manual Metal Arc Process	#	#			#				#	#			#		
Unit 5: Welding Materials by the Manual MIG/MAG and other Continuous Wire Processes	#	#			#				#	#			#		
Unit 7: Welding Materials by the Manual Gas Welding Process	#	#			#				#	#			#		
Unit 8: Welding Pipe/Tube using Multiple Manual Arc Welding Processes	#	#			#				#	#		#			
Unit 9: Welding Plate using Multiple Manual Arc Welding Processes	#	#			#				#	#		#			
Unit 10: Preparing Mechanised Arc Welding Equipment for Production	#	#			#				#	#		#			
Unit 11: Preparing Resistance Spot, Seam and Projection Welding Machines for Production	#	#			#				#	#		#			
Unit 15: Preparing Brazing Machines for Production	#	#			#			#	#	#		#			
Unit 16: Welding Materials with Mechanised Arc Welding Equipment	#	#			#				#	#		#			
Unit 17: Welding Materials using Resistance Spot, Seam and Projection Welding Machines	#	#			#				#	#		#			
Unit 21: Joining Materials using Brazing Machines	#	#			#			#	#	#		#			
Unit 22: Marking Out Components for Metalwork	#	#			#			#	#	#		#		#	
Unit 23: Cutting Sheetmetal to Shape using Hand and Machine Tools	#	#			#		#	#	#	#		#		#	
Unit 24: Forming Sheetmetal using Hand and Machine Tools	#	#			#		#	#	#	#		#		#	
Unit 25: Producing Sheetmetal Assemblies	#	#			#		#	#	#	#		#		#	
Unit 26: Heat Treating Materials for Fabrication Activities	#	#			#		#	#	#	#		#		#	
Unit 27: Developing and Marking Out Templates for Metalwork	#	#			#		#	#	#	#		#		#	
Unit 28: Joining Fabricated Components using Mechanical Fasteners	#	#			#		#	#	#	#		#		#	
Unit 29: Bonding Engineering Materials using Adhesives	#	#			#		#	#	#	#		#		#	
Unit 30: Joining Materials by Resistance Spot Welding	#	#			#		#	#	#	#		#		#	

NVQs	Units														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Level 3 NVQ in Fabrication and Welding															
Unit 31: Producing Fillet Welded Joints using a Manual Welding Process	#	#			#				#	#	#	#	#		
Unit 32: Cutting Plate and Sections using Shearing Machines	#	#				#		#	#	#					
Unit 33: Cutting and Shaping Materials using Portable Thermal Cutting Equipment	#	#						#	#	#	#	#	#		
Unit 34: Cutting Materials using Saws and Abrasive Discs	#	#				#		#	#	#					
Unit 35: Bending and Forming Plate using Press Brakes or Bending Machines	#	#						#	#	#					
Unit 37: Producing and Finishing Holes using Drilling Machines	#	#						#	#	#					
Unit 38: Producing Platework Assemblies	#	#						#	#	#					
Unit 39: Sliding, Lifting and Moving Materials and Components	#	#						#	#	#	#	#	#		
Unit 40: Forming Structural sections using Machines	#	#							#	#					
Unit 41: Producing Structural Steel Ancillary Components	#	#							#	#					

NVQs	Units													
	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Level 3 NVQ in Fabrication and Welding														
Unit 1: Complying with Statutory Regulations and Organisational Safety Requirements	#	#		#	#	#				#	#	#	#	#
Unit 2: Using and Interpreting Engineering Drawings and Documents	#	#		#	#					#	#	#	#	#
Unit 3: Working Efficiently and Effectively in Engineering	#	#		#										
Unit 4: Welding Materials by the Manual Metal Arc Process														
Unit 5: Welding Materials by the Manual MIG/MAG and other Continuous Wire Processes														
Unit 7: Welding Materials by the Manual Gas Welding Process														
Unit 8: Welding Pipe/Tube using Multiple Manual Arc Welding Processes														
Unit 9: Welding Plate using Multiple Manual Arc Welding Processes														
Unit 10: Preparing Mechanised Arc Welding Equipment for Production														
Unit 11: Preparing Resistance Spot, Seam and Projection Welding Machines for Production	#	#												
Unit 15: Preparing Brazing Machines for Production														
Unit 16: Welding Materials with Mechanised Arc Welding Equipment														
Unit 17: Welding Materials using Resistance Spot, Seam and Projection Welding Machines				#										
Unit 21: Joining Materials using Brazing Machines														
Unit 22: Marking Out Components for Metalwork	#	#												
Unit 23: Cutting Sheetmetal to Shape using Hand and Machine Tools	#	#												
Unit 24: Forming Sheetmetal using Hand and Machine Tools	#	#												
Unit 25: Producing Sheetmetal Assemblies	#	#												
Unit 26: Heat Treating Materials for Fabrication Activities	#	#												
Unit 27: Developing and Marking Out Templates for Metalwork	#	#												
Unit 28: Joining Fabricated Components using Mechanical Fasteners	#	#												
Unit 29: Bonding Engineering Materials using Adhesives	#	#												
Unit 30: Joining Materials by Resistance Spot Welding	#	#												

NVQs	Units													
	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Level 3 NVQ in Fabrication and Welding														
Unit 31: Producing Fillet Welded Joints using a Manual Welding Process														
Unit 32: Cutting Plate and Sections using Shearing Machines	#	#												
Unit 33: Cutting and Shaping Materials using Portable Thermal Cutting Equipment	#	#												
Unit 34: Cutting Materials using Saws and Abrasive Discs														
Unit 35: Bending and Forming Plate using Press Brakes or Bending Machines	#	#												
Unit 37: Producing and Finishing Holes using Drilling Machines	#	#												
Unit 38: Producing Platemwork Assemblies	#	#												
Unit 39: Slings, Lifting and Moving Materials and Components	#	#												
Unit 40: Forming Structural sections using Machines	#	#												
Unit 41: Producing Structural Steel/Ancillary Components	#	#												

Annexe F

Unit mapping overview

BTEC Nationals in Blacksmithing and Metalworking legacy (specification end date 31/08/2010)/new versions of the BTEC National qualifications in Blacksmithing and Metalworking (specification start date 01/09/2010) – the BTEC Level 3 Certificate in Blacksmithing and Metalworking, BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking, BTEC Level 3 Diploma in Blacksmithing and Metalworking and the BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking.

Old units \ New units	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Unit 13	Unit 14	Unit 15	Unit 16	Unit 17	Unit 18
Unit 1	F																	
Unit 2		F																
Unit 3			F															
Unit 4				F														
Unit 5					F													
Unit 6						F												
Unit 7							F											
Unit 8								F										
Unit 9									F									
Unit 10										F								
Unit 11											F							
Unit 12												F						
Unit 13													F					
Unit 14														F				
Unit 15															F			
Unit 16																F		
Unit 17																	F	
Unit 18																		F

KEY

P – Partial mapping (some topics from the old unit appear in the new unit)

F – Full mapping (topics in old unit match new unit exactly or almost exactly)

X – Full mapping + new (all the topics from the old unit appear in the new unit, but new unit also contains new topic(s))

Unit mapping in depth

BTEC National in Blacksmithing and Metalworking legacy (specification end date 31/08/2010)/new versions of the BTEC National qualifications in Blacksmithing and Metalworking (specification start date 01/09/2010) – the BTEC Level 3 Certificate in Blacksmithing and Metalworking, BTEC Level 3 Subsidiary Diploma in Blacksmithing and Metalworking, BTEC Level 3 Diploma in Blacksmithing and Metalworking and the BTEC Level 3 Extended Diploma in Blacksmithing and Metalworking.

New units		Old units		Mapping/comments (new topics in italics)
Unit number	Name	Unit number	Name	
1	Undertake Workshop Practice for Blacksmithing and Metalworking	1	Workshop Practice for Blacksmithing and Metalworking	N/A
2	Understanding and Using Forging Techniques for Blacksmithing and Metalworking	2	Forging Techniques for Blacksmithing and Metalworking	N/A
3	Undertake Drawing Practice for Blacksmithing and Metalworking	3	Drawing Practice for Blacksmithing and Metalworking	N/A
4	Business Management in the Land-based Sector	4	Business Management for Land-based Industries	Understand the business marketplace. Know the breadth and importance of an industry in the environmental and land-based sector.
5	Undertake Introductory Welding for Blacksmithing and Metalworking	5	Introductory Welding for Blacksmithing and Metalworking	N/A
6	Undertake and Review Work Related Experience in the Land-based Industries	6	Work Related Experience in the Blacksmithing and Metalworking Sectors	Focus on undertaking and documenting work experience in land based industries. Purpose and structure of a business organisation removed from unit.
7	Undertake Forge Practice for Blacksmithing and Metalworking	7	Forge Practice for Blacksmithing and Metalworking	N/A
8	Undertake Blacksmithing Processes	8	Blacksmithing Processes	N/A
9	Understanding and Using Blacksmithing and Construction Skills	9	Blacksmithing and Construction Skills	N/A

New units		Old units		Mapping/comments (new topics in italics)
Unit number	Name	Unit number	Name	
10	Understanding Blacksmithing Installation Skills	10	Blacksmithing Installation Skills	N/A
11	Undertaking Oxy-acetylene Welding for Blacksmithing and Metalworking	11	Oxy-acetylene Welding for Blacksmithing and Metalworking	N/A
12	Undertake Manual Metal Arc Welding for Blacksmithing and Metalworking	12	Manual Metal Arc Welding for Blacksmithing and Metalworking	N/A
13	Undertake Metal Arc Gas Shielded Welding for Blacksmithing and Metalworking	13	Metal Arc Gas Shielded Welding for Blacksmithing and Metalworking	N/A
14	Undertake Fabrication Drawing for Blacksmithing and Metalworking	14	Fabrication Drawing for Blacksmithing and Metalworking	N/A
15	Undertake Computer Aided Design in Horticulture, Treework and Blacksmithing	15	Computer Aided Design for Blacksmithing and Metalworking	Be able to produce two-dimensional drawings using a Computer Aided Design package. Be able to edit and modify two-dimensional drawings using a Computer Aided Design package. Understand the production and modification of two-dimensional drawing using a Computer Aided Design package. Understand the usefulness of Computer Aided Design packages in land-based industries.
16	Understanding and Using Fabrication Skills for Blacksmithing and Metalworking	16	Fabrication Skills for Blacksmithing and Metalworking	N/A
17	Understanding and Using Fabrication Techniques for Blacksmithing and Metalworking	17	Fabrication Techniques for Blacksmithing and Metalworking	N/A
18	Understanding the History and Development of the Blacksmithing Industry	18	The History and Development of the Blacksmithing Industry	N/A

New units		Old units		Mapping/comments (new topics in italics)
Unit number	Name	Unit number	Name	
19	Undertake Horseshoe Production	19	Horseshoe Production	N/A
20	Understanding Principles and Methods of Design for Blacksmithing and Metalworking	20	Principles and Methods of Design for Blacksmithing and Metalworking	N/A
21	Participate in Business Planning and Improvement in the Land-based Sector	21	Business Planning	Understand business improvement in land-based industries. Be able to identify and plan opportunities for practical business improvement.
22	Undertake Professional Communication for Blacksmiths and Metalworkers	22	Professional Communication for Blacksmiths and Metalworkers	N/A
23	Undertake an Investigative Project in the Land-based Sector	23	Investigative Project in the Blacksmithing and Metalworking Sectors	N/A
24	Undertake Small Scale Design for Blacksmithing and Metalworking	24	Small Scale Design for Blacksmithing and Metalworking	N/A
25	Undertake Small Scale Working for Blacksmithing and Metalworking	25	Small Scale Working for Blacksmithing and Metalworking	N/A
26	Undertake Large Scale Design for Blacksmithing and Metalworking	26	Large Scale Design for Blacksmithing and Metalworking	N/A
27	Undertake Large Scale Working for Blacksmithing and Metalworking	27	Large Scale Working for Blacksmithing and Metalworking	N/A
28	Undertake Repoussé and Other Decorative Skills for Blacksmithing and Metalworking	28	Repoussé and Other Decorative Skills for Blacksmithing and Metalworking	N/A

Annexe G

Examples of calculation of qualification grade above pass grade

Edexcel will automatically calculate the qualification grade for your learners when your learner unit grades are submitted.

The generic examples below demonstrate how the qualification grade above pass is calculated using the following two tables which are also shown in the section earlier on in the specification *Calculation of the qualification grades above pass grade*.

Points available for credits achieved at different levels and unit grades

The table below shows the **number of points scored per credit** at the unit level and grade.

Unit level	Points per credit		
	Pass	Merit	Distinction
Level 2	5	6	7
Level 3	7	8	9
Level 4	9	10	11

Learners who achieve the correct number of points within the ranges shown in the 'qualification grade' table below will achieve the qualification merit, distinction or distinction* grades (or combinations of these grades appropriate to the qualification).

Qualification grade

BTEC Level 3 Certificate

Points range above pass grade	Grade	
230-249	Merit	M
250-259	Distinction	D
260 and above	Distinction*	D*

BTEC Level 3 Subsidiary Diploma

Points range above pass grade	Grade	
460-499	Merit	M
500-519	Distinction	D
520 and above	Distinction*	D*

BTEC Level 3 Diploma

Points range above pass grade	Grade
880-919	MP
920-959	MM
960-999	DM
1000-1029	DD
1030-1059	DD*
1060 and above	D*D*

BTEC Level 3 Extended Diploma

Points range above pass grade	Grade
1300-1339	MPP
1340-1379	MMP
1380-1419	MMM
1420-1459	DMM
1460-1499	DDM
1500-1529	DDD
1530-1559	DDD*
1560-1589	DD*D*
1590 and above	D*D*D*

Example 1

Achievement of pass qualification grade

A learner completing a 30-credit Pearson BTEC Level 3 Certificate **does not** achieve the points required to gain a merit qualification grade.

	Level	Credit	Grade	Grade points	Points per unit = credit x grade
Unit 1	3	10	Pass	7	$10 \times 7 = 70$
Unit 2	3	10	Pass	7	$10 \times 7 = 70$
Unit 3	3	10	Merit	8	$10 \times 8 = 80$
Qualification grade totals		30	Pass		220

Example 2

Achievement of merit qualification grade

A learner completing a 30-credit Pearson BTEC Level 3 Certificate achieves the points required to gain a merit qualification grade.

	Level	Credit	Grade	Grade points	Points per unit = credit x grade
Unit 1	3	10	Pass	7	$10 \times 7 = 70$
Unit 2	3	10	Merit	8	$10 \times 8 = 80$
Unit 3	3	10	Merit	8	$10 \times 8 = 80$
Qualification grade totals			Merit		230

Example 3

Achievement of distinction qualification grade

A learner completing a 60-credit Pearson BTEC Level 3 Subsidiary Diploma achieves the points required to gain a distinction qualification grade.

	Level	Credit	Grade	Grade points	Points per unit = credit x grade
Unit 1	3	10	Merit	8	$10 \times 8 = 80$
Unit 2	3	10	Distinction	9	$10 \times 9 = 90$
Unit 3	3	10	Distinction	9	$10 \times 9 = 90$
Unit 5	3	10	Merit	8	$10 \times 8 = 80$
Unit 6	2	10	Distinction	7	$10 \times 7 = 70$
Unit 11	3	10	Distinction	9	$10 \times 9 = 90$
Qualification grade totals		60	Distinction		500

Example 4

Achievement of distinction merit qualification grade

A learner completing a 120-credit Pearson BTEC Level 3 Diploma achieves the points required to gain a distinction merit qualification grade.

	Level	Credit	Grade	Grade points	Points per unit = credit x grade
Unit 1	3	10	Merit	8	$10 \times 8 = 80$
Unit 2	3	10	Distinction	9	$10 \times 9 = 90$
Unit 3	3	10	Distinction	9	$10 \times 9 = 90$
Unit 4	3	10	Merit	8	$10 \times 8 = 80$
Unit 5	3	10	Merit	8	$10 \times 8 = 80$
Unit 6	2	10	Distinction	7	$10 \times 7 = 70$
Unit 11	3	10	Distinction	9	$10 \times 9 = 90$
Unit 15	4	10	Merit	10	$10 \times 10 = 100$
Unit 17	3	10	Pass	7	$10 \times 7 = 70$
Unit 18	3	10	Pass	7	$10 \times 7 = 70$
Unit 25	3	20	Merit	8	$20 \times 8 = 160$
Qualification grade totals		120	Distinction Merit		980

Example 5

Achievement of merit merit merit qualification grade

A learner completing a 180-credit Pearson BTEC Level 3 Extended Diploma achieves the points required to gain a merit merit merit qualification grade.

	Level	Credit	Grade	Grade points	Points per unit = credit x grade
Unit 1	3	10	Merit	8	$10 \times 8 = 80$
Unit 2	3	10	Pass	7	$10 \times 7 = 70$
Unit 3	3	10	Distinction	9	$10 \times 9 = 90$
Unit 4	3	10	Merit	8	$10 \times 8 = 80$
Unit 5	3	10	Pass	7	$10 \times 7 = 70$
Unit 6	2	10	Distinction	7	$10 \times 7 = 70$
Unit 11	3	10	Distinction	9	$10 \times 9 = 90$
Unit 12	3	10	Merit	8	$10 \times 8 = 80$
Unit 15	4	10	Pass	9	$10 \times 9 = 90$
Unit 17	3	10	Pass	7	$10 \times 7 = 70$
Unit 18	3	10	Pass	7	$10 \times 7 = 70$
Unit 20	3	10	Pass	7	$10 \times 7 = 70$
Unit 22	3	10	Merit	8	$10 \times 8 = 80$
Unit 25	3	20	Pass	7	$20 \times 7 = 140$
Unit 35	3	10	Distinction	9	$10 \times 9 = 90$
Unit 36	3	10	Merit	8	$10 \times 8 = 80$
Unit 38	3	10	Distinction	9	$10 \times 9 = 90$
Qualification grade totals		180	Merit Merit Merit		1410

June 2016

For information about Edexcel, BTEC or LCCI qualifications visit qualifications.pearson.com

BTEC is a registered trademark of Pearson Education Limited

**Pearson Education Limited. Registered in England and Wales No. 872828
Registered Office: 80 Strand, London WC2R 0RL.**

VAT Reg No GB 278 537121