



CCEA Level 1 and 2 Qualifications in Occupational Studies

For first teaching from September 2013

For first assessment from Summer 2014
For first award in Summer 2014

occupational studies

technology and innovation

Foreword

This publication contains the specification for CCEA's Level 1 and Level 2 qualifications in Occupational Studies for first teaching from September 2013. We have designed these qualifications to meet the requirements of the following:

- the National Qualifications Framework (NQF) at Level 1 and Level 2; and
- Common Criteria for all Qualifications.

The following grades are available:

NQF	Occupational Studies Grades
Level 2	Distinction* Distinction Merit Pass
Level 1	Distinction Merit Pass
	Unclassified

For more information on the NQF, see www.ofqual.gov.uk

The specification for Occupational Studies consists of six occupational areas and their associated units:

- Business and Services;
- Construction;
- Design and Creativity;
- Engineering and Engineering Services;
- Environment and Society; and
- Technology and Innovation.

To achieve a qualification, learners must take two units from an occupational area. It is possible to obtain up to six Occupational Studies qualifications, one in each area. Each qualification enables learners to demonstrate their knowledge, understanding and skills within a context related to employability.

Each of the qualifications consists of 140 guided learning hours.

We will notify centres in writing of any major changes to this specification. We will also publish changes on our website at www.ccea.org.uk

The specification on our website is the most up-to-date version. Please note that the web version may be different from printed versions.

Level 1/2 (Business and Services)	QAN 600/8774/2
Level 1/2 (Construction)	600/8652/X
Level 1/2 (Design and Creativity)	600/8186/7
Level 1/2 (Engineering and Engineering Services)	600/8655/5
Level 1/2 (Environment and Society)	600/8653/1
Level 1/2 (Technology and Innovation)	600/8775/4
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A Introduction

This specification sets out the content and assessment details for our Level 1 and Level 2 qualifications in Occupational Studies. First teaching begins from September 2013, and we will make the first awards for this specification in summer 2014. You can view and download the latest version of the specification on our website at www.ccea.org.uk

We have designed this specification to be accessible to a wide range of learners of all abilities. It is also intended to provide coherent, flexible programmes rooted in practical and occupational contexts. Occupational Studies will appeal to learners who are better suited to developing their skills in a more practical, occupationally orientated environment.

The world of work is constantly changing. It is increasingly unlikely that a single occupation will take employees from the beginning to the end of their working lives, so transferability and adaptability are important skills. This specification is uniquely structured with this in mind. Learners have the opportunity to learn for work, through work and about work, with real outcomes that will give them skills for life.

Occupational Studies can provide a hands-on approach to learning. What makes it different is its focus on particular kinds of knowledge, understanding and skills, providing the potential for learning in important 'out-of-school' contexts.

Centres should ensure that learners will have access to any tools, equipment and materials they will need to complete the practical tasks. In offering and designing courses to support this qualification, they need to take account of the facilities and resources they have available, as well as the career planning decisions of their learners.

It is neither expected nor intended that pupils should become competent or trained in the occupational area they are studying. Competence-based training programmes are available post-16 and can offer suitable progression opportunities.

A.1 Aims and learning outcomes

Occupational Studies encourages learners to be motivated and inspired by following a broad, coherent and satisfying course of study. It gives them opportunities to sample work-related learning within coherent occupational contexts and to develop their skills in literacy, numeracy and ICT. It should also prepare learners to make informed decisions about further learning opportunities and careers.

Occupational Studies should enable learners to:

- develop the knowledge, understanding and skills they need to undertake work-based tasks;
- engage actively in work-based learning within coherent occupational contexts;
- reflect on their learning;
- develop an appreciation of the progression/career opportunities that exist through the study of Occupational Studies;
- develop an appreciation of the environmental impacts of the practical tasks they carry out within occupational contexts; and
- develop an awareness of general and specific health and safety issues arising from activities within occupational contexts.

A.2 Key features

The Occupational Studies specification:

- has an occupational and employability focus;
- enables progression to other courses, training and employment;
- helps to raise levels of achievement, since learners are likely to be more motivated to achieve success through applying their knowledge in practical, work-related situations and contexts; and
- emphasises learning by doing, which will help learners to develop the transferable skills necessary in a changing and dynamic working environment.

We have devised this specification in consultation with Sector Skills Councils, teachers in schools, teachers/lecturers in further and higher education colleges, and employers.

Learners and providers can, therefore, be confident that the specification is up to date and reflects sector priorities.

A.3 Prior attainment and progression

Learners taking a course in Occupational Studies do not need to have any previous experience in their chosen occupational area.

Occupational Studies allows progression from Key Stage 3 of the Northern Ireland Curriculum. Learners achieving a Level 2 qualification in Occupational Studies will be equipped to progress to courses at post-16 in the relevant subject areas.

A.4 Permitted unit combinations and entries

Within Occupational Studies there are six individual qualifications. Each of these relates to a general occupational area and includes a range of optional units (see Section 2 for details). To achieve a qualification, learners must complete two units from the same occupational area. The qualification will include the title from the relevant area, for example: Occupational Studies: Technology and Innovation Level 2 Pass.

Some units, shown in the table in Section 2 in bold type, are available within more than one occupational area. This flexibility is to allow learners greater choice.

However, learners cannot submit any unit towards a qualification more than once. They may not resit a unit unless they were recorded as absent the first time the unit was taken.

Learners may not enter for the same qualification more than once. Those who achieved a qualification based on a previous version of the Occupational Studies specification cannot take another qualification in the same occupational area.

Foreword

B Specification at a Glance

The table below summarises the structure of each of the six Occupational Studies qualifications.

Occupational Area	Assessment	Weighting	Availability
Business and Services (15 units available)	Internal assessment.	50% for each unit	Every January (beginning in 2015) Every Summer (beginning in 2014)
Construction (8 units available)	Learners complete two units from their chosen occupational area.		
Design and Creativity (12 units available)	They carry out tasks to gather the required assessment evidence in a portfolio for each unit.		
Engineering and Engineering Services (11 units available)	Tasks include answering questions, carrying out practical activities and evaluating their own performance.		
Environment and Society (9 units available)	The teacher/lecturer assesses the portfolio of evidence, and we carry out external moderation.		
Technology and Innovation (9 units available)			

Please check online for the most up-to-date list and versions of units. Units in bold type are available in two different occupational areas.

Business and Services	Construction	Design and Creativity	Engineering and Engineering Services	Environment and Society	Technology and Innovation
Childcare: the Play Environment Communication in an Office or Business Environment Contemporary Cuisine Creative Styling Using Blow-Drying Techniques Customer Service Facial Skincare Logistics and Transport Manicure and Nail Art Modern Office Procedures Modern Retailing Patisserie and Baking Shampooing and Conditioning Treatments The Physical Care of Babies Using Office Technology Vehicle Servicing and Valeting Operations	Bench Joinery Brick and Block Work Carpentry and Joinery Hard Landscaping Painting and Decorating Plastering Plumbing Tiling	Contemporary Cuisine Creative Hair Styling on Long Hair Creative Hair Styling Setting Techniques Creative Styling Using Blow-Drying Techniques Enterprise Crafts Graphic Design Interior Design Patisserie and Baking Specialised Crafts Textile and Fashion Design Total Beauty Website Development	Basic Fast-Fit Operations Basic Vehicle Body Components and Fitting Computer Aided Design Electronic Circuit Construction Electrical Wiring Installation Maintenance of Land-Based Machinery Manufacturing Techniques – Hand Fitting Manufacturing Techniques – Sheet Metal	Animal Care Horticulture: Caring for Plants and Flowers Horticulture: Growing Plants in a Sustainable Way Reminiscence with Individuals in a Care Environment Running a Leisure Event Sports Leadership Tour Guiding Working in a Care Environment Working in Tourism	Bench Joinery Carpentry and Joinery Computer Aided Design Digital Imaging Digital Music Manufacturing Techniques – Hand Fitting Manufacturing Techniques – Sheet Metal Sound Production TV and Film Production
15 units	8 units	12 units	11 units	9 units	9 units

C Scheme of Assessment

C.1 Assessment opportunities

This specification is available for assessment twice a year, in January and summer. See Section 2 for more details.

C.2 Assessment objectives

Below are the assessment objectives for this specification. Learners must:

- recall knowledge and understanding of the specified content (AO1);
- apply their knowledge, understanding and skills in occupational contexts through undertaking relevant tasks (AO2); and
- analyse and evaluate their work and make judgements about their performance, indicating where improvements could be made (AO3).

In the unit content you will find separate assessment criteria for each assessment objective in individual units. We have provided descriptors relating to the various levels of achievement for each of the assessment criteria.

C.3 Assessment objective weightings

The table below sets out the assessment objective weightings for each unit.

Assessment Objective	Weighting in Each Unit
AO1	20%
AO2	60%
AO3	20%

Each qualification consists of two units. Each unit is equally weighted and is worth 50 percent of the overall qualification.

The table below sets out the assessment objective weighting for the overall qualification:

Assessment Objective	Unit Weighting		Overall Qualification Weighting
	First Unit	Second Unit	
AO1	10%	10%	20%
AO2	30%	30%	60%
AO3	10%	10%	20%
Total	50%	50%	100%

C.4 Reporting and grading

Unit results

Learner performance in a unit is reported as a mark out of 100.

Overall qualification results

We award Occupational Studies qualifications at either Level 1 or Level 2 on the National Qualifications Framework. Where performance is below the requirements for Level 1, we report the results as unclassified (U).

To achieve a full qualification, learners must complete two units. We will award a final grade based on the combined scores of the two units as follows:

Level 2	Level 1
Distinction* = 180–200 marks	Distinction = 100–119 marks
Distinction = 160–179 marks	Merit = 80–99 marks
Merit = 140–159 marks	Pass = 40–79 marks
Pass = 120–139 marks	
Unclassified = 0–39 marks	

D Performance Descriptors

Within each unit, there are detailed performance descriptors relating to the specific skills and knowledge required (see unit content). Teachers/Lecturers should use these when allocating marks. They should also refer to the following table, which helps to define the performance descriptors.

Examples of learner evidence will be available at agreement trials and on the CCEA microsite for Occupational Studies at www.ccea.org.uk

Performance Descriptor	Explanation
Excellent	<p>In relation to the occupational area and where appropriate, learners can:</p> <ul style="list-style-type: none">• recall, select and communicate detailed knowledge and thorough understanding of the relevant skills and materials;• demonstrate comprehensive understanding of relevant health and safety and environmental issues;• demonstrate in-depth knowledge of related career opportunities;• demonstrate highly developed skills confidently when planning and identifying all appropriate tools, equipment and materials for a task;• carry out tasks consistently with a high degree of precision and sustained application of the required health and safety legislation and practices;• work with a high level of independence to produce a final outcome which is of a professional standard;• present thorough analysis and evaluation of their own performance in practical tasks, making fully developed and reasoned judgements; and• present highly appropriate and self-reflective statements about the learning process in the unit.
Very good	<p>In relation to the occupational area and where appropriate, learners can:</p> <ul style="list-style-type: none">• recall, select and communicate accurate knowledge and detailed understanding of the relevant skills and materials;• demonstrate detailed understanding of relevant health and safety and environmental issues;• demonstrate well developed knowledge of related career opportunities;• demonstrate effective skills when planning and identifying all appropriate tools, equipment and materials for a task;• carry out tasks accurately with a significant degree of precision and suitable application of the required health and safety legislation and practices;• work, often independently, to produce a final outcome which is of a high standard;• present a well-developed analysis and evaluation of their own performance in practical tasks, making sound judgements; and• present detailed, self-reflective statements about the learning process in the unit.

Performance Descriptor	Explanation
Good	<p>In relation to the occupational area and where appropriate, learners can:</p> <ul style="list-style-type: none"> • recall, select and communicate clear knowledge and understanding of the relevant skills and materials; • demonstrate consistent and clear understanding of relevant health and safety and environmental issues; • demonstrate significant knowledge of related career opportunities; • demonstrate a range of appropriate skills when planning and identifying all appropriate tools, equipment and materials for a task; • carry out tasks effectively, with some precision and suitable application of the required health and safety legislation and practices; • work, sometimes independently, to produce a final outcome which is of a suitable standard; • present clear and effective analysis and evaluation of their own performance in practical tasks, making realistic judgements; and • present straightforward, self-reflective statements about the learning process in the unit.
Satisfactory	<p>In relation to the occupational area and where appropriate, learners can:</p> <ul style="list-style-type: none"> • recall, select and communicate some appropriate knowledge and understanding of the relevant skills and materials; • demonstrate satisfactory understanding of relevant health and safety and environmental issues; • demonstrate relevant knowledge of related career opportunities; • demonstrate some appropriate skills when planning and identifying all appropriate tools, equipment and materials for a task; • carry out tasks appropriately, with acceptable application of the required health and safety legislation and practices; • work, often with support, to produce a final outcome which is of an acceptable standard; • present some relevant analysis and evaluation of their own performance in practical tasks, making some appropriate judgements; and • present some appropriate self-reflective statements about the learning process in the unit.
Basic	<p>In relation to the occupational area and where appropriate, learners can:</p> <ul style="list-style-type: none"> • recall, select and communicate limited knowledge and understanding of minimal skills and materials; • demonstrate limited understanding of relevant health and safety and environmental issues; • demonstrate minimal knowledge of related career opportunities; • demonstrate limited skills to plan and identify all appropriate tools, equipment and materials for a task; • carry out tasks with a limited degree of accuracy and do not always apply the required health and safety legislation and practices;; • work, mostly with support, to produce a final outcome which is either incomplete or of a limited standard; • present minimal analysis and evaluation of their own performance in practical tasks; and • present limited self-reflective statements about the learning process in the unit.
<p>• Award [0] for work unworthy of credit.</p>	

E Guidance on Assessment

E.1 The portfolio of evidence

Teachers/Lecturers should plan practical occupational tasks to collect evidence of learning for each unit. These tasks must give learners opportunities to demonstrate the knowledge, understanding and skills described in the unit content (see Section 7). For each unit, learners must present their evidence for assessment in a portfolio.

The portfolio of evidence for each unit **must** contain the following:

- **Evidence of knowledge and understanding (AO1)**
This may take the form of written answers to questions or, where more appropriate, a record of oral responses to questions. It must cover the range of knowledge and understanding set out in the unit content.
- **Evidence of application of knowledge, understanding and skills (AO2)**
Teachers/Lecturers must assess all activities to occupational standards by observing learners' performance in practical tasks.
- **Evidence of analysis and evaluation of their work (AO3)**
Learners should carry out an evaluation for each assessment task within each unit. It should consist of self-reflective statements that analyse and evaluate their performance and indicate how they could make improvements. They should also present an end-of-unit evaluation. This should reflect their new level of knowledge and understanding in the specialist area and the impact it may have on their progression and career opportunities.
- **A diary of activities undertaken**
The diary must be signed and dated during each lesson by the learner and teacher/lecturer and record all activities the learner has carried out as part of the unit.
- **A record of all the assessment evidence**
The record indicates where each piece of assessment evidence can be found.

Evidence in learners' portfolios may be written, photographic or video recorded. Where the evidence includes photographs or videos, centres should obtain permission from parents/guardians first.

Centres should label the evidence and store it securely so that they can make it available for moderators to review later.

We will provide centres with candidate record sheets, which teachers/lecturers must use to record learners' overall marks for each unit.

See unit content for specific assessment guidance for each unit.

E.2 Stretch and challenge

Teachers/Lecturers should identify opportunities for stretch and challenge by incorporating, for example:

- a wider range of question types to address different skills, for example case studies and open-ended questions;
- practical tasks that are more challenging; and
- extended writing within evaluations, where appropriate.

E.3 Internal standardisation

Where more than one teacher/lecturer has been involved in marking for a qualification, there must be a process of internal standardisation to ensure that there is consistent application of the marking criteria.

As a result of internal standardisation, it may be necessary to adjust the marking of an individual teacher/lecturer. This is to bring assessments into line with others in the centre and to match the standards established at the agreement trial. Where adjustment is necessary, the total/final mark recorded on the candidate record sheet should be amended.

Teachers/Lecturers must use the TAC2 form available at www.ccea.org.uk to show that internal standardisation has taken place both within **and** across units.

If your centre is part of a consortium, it will be the lead centre's responsibility to ensure that the internal standardisation process includes all teachers/lecturers from all centres involved in the consortium.

E.4 External moderation

Marks awarded by the centre will be subject to external moderation, which we carry out. We issue full instructions before moderation takes place in January and May each year on:

- the details of moderation procedures;
- the nature of sampling; and
- the dates by which marks and samples have to be submitted to us.

Centres should keep all assessment materials and related documentation for 12 months after they submit marks, as this work may form part of an enquiry or appeal.

F Links, Resources and Support

F.1 Support

We provide the following resources to support this specification:

- our website at www.ccea.org.uk; and
- a subject microsite for Occupational Studies within our website.

We are expanding our range of support to include the following:

- Principal Moderator's reports;
- exemplar pieces of work;
- templates for learner diaries and records;
- agreement trials;
- a resource list;
- exemplification of standards; and
- centre support visits.

F.2 Curriculum objectives

The specification addresses and builds upon the broad objectives of the Northern Ireland Curriculum. In particular, it enables learners to:

- develop as individuals and contributors to society, the economy and the environment, by providing opportunities to explore topics such as health, media awareness and work in the local and global economy;
- develop personal skills, such as:
 - self-awareness, active listening, and time management (Personal Development);
 - mutual understanding, managing conflict, and participation (Citizenship);
 - presentation and self-marketing, target setting, and career planning (Employability);
- develop an understanding of social, economic and cultural issues, by providing opportunities to explore topics such as health and safety legislation, recycling of materials, the use of sustainable and environmentally friendly materials, the disposal of waste materials, and costing and resourcing of materials;
- develop vocational skills that will enhance employability, by providing opportunities to select and use appropriate materials, components and hand tools, and to gain an overview of the roles and responsibilities of various occupations;
- make effective use of technology, for example by providing opportunities to create computer aided drawings and source information through the internet; and
- demonstrate creativity and initiative when developing ideas and following them through.

F.3 Key skills

Occupational Studies provides learners with opportunities to develop and generate assessment evidence for the following nationally recognised key skills:

- **Application of Number** – for example by:
 - interpreting information from two different sources;
 - using information to carry out calculations; and
 - interpreting the results of calculations and presenting findings in at least two different ways;
- **Communication** – for example by:
 - taking part in a group discussion;
 - reading and summarising information from at least two documents;
 - giving a talk of at least four minutes; and
 - writing two types of document, each giving different information;
- **Information and Communication Technology** – for example by:
 - finding and selecting information based on judgements of relevance and quality;
 - entering and bringing together information using formats that help development; and
 - developing a presentation so that it is accurate, clear and presented consistently;
- **Working with Others** – for example by:
 - identifying what needs to be achieved together as a group;
 - showing confirmation of the arrangements made for working together; and
 - showing how progress was checked and advice sought from an appropriate person when needed;
- **Problem Solving** – for example by:
 - identifying a problem and accurately describing its main features;
 - planning what needs to be done and identifying which methods and resources to use; and
 - showing that they have successfully solved the problem using the methods given; and
- **Improving Own Learning and Performance** – for example by:
 - providing information to help set realistic targets for what is to be achieved;
 - identifying how to get the support needed and the arrangements for reviewing progress; and
 - identifying what has been learned and how this learning has been used in another task.

F.4 Entries and registration

Entry codes for this subject and details on how to register are available in our Qualifications Administration Handbook, which you can access at www.ccea.org.uk

Alternatively, you can telephone our Entries, Results and Certification team using the contact details provided in this section.

F.5 Equality and inclusion

We have considered the requirements of equality legislation in developing this specification.

These qualifications require the assessment of a broad range of knowledge, understanding and skills. This is because they prepare learners for a wide range of occupations and higher level courses.

During the development process, an external equality panel reviewed the specification to identify any potential barriers to equality and inclusion. Where appropriate, we have considered measures to support access and mitigate barriers.

Reasonable adjustments are made for learners with disabilities. For this reason very few learners, if any, should have difficulty accessing the assessment.

It is important to note that where access arrangements are permitted, they must not be used in any way that undermines the integrity of the assessment. You can find information on reasonable adjustments in the Joint Council for Qualifications' document Access Arrangements, Reasonable Adjustments and Special Consideration: General and Vocational Qualifications, available at www.jcq.org.uk

F.6 Health and safety

As with all work-related programmes, centres must ensure compliance with all relevant health and safety legislation with regard to facilities, equipment and staff training, as well as current legislation under the Children (Northern Ireland) Order 1995. Schools' level of insurance and available resources may restrict the choice of units that they are able to offer.

Please note that learners under the age of 16 are not permitted to work with external clients in hairdressing and beauty units, nor are they permitted to work with children. Teachers/Lecturers must supervise learners when they are using specialist tools, equipment and materials.

F.7 Contact details

The following list provides contact details for relevant staff members and departments:

- Specification Support Officer: Nuala Braniff
(telephone: (028) 9026 1200, extension 2292, email: nbraniff@ccea.org.uk)
- Officer with Subject Responsibility: Moya Reynolds
(telephone: (028) 9026 1200, email: mreynolds@ccea.org.uk)
- Entries, Results and Certification
(telephone: (028) 9026 1262, email: entriesandresults@ccea.org.uk)
- Distribution (support materials)
(telephone: (028) 9026 1242, email: cceadistribution@ccea.org.uk)
- Support Events Administration
(telephone: (028) 9026 1401, email: events@ccea.org.uk)
- Information Section (including Freedom of Information requests)
(telephone: (028) 9026 1200, email: info@ccea.org.uk)
- Moderation
(telephone: (028) 9026 1200, extension 2236, email: aatmoderation@ccea.org.uk)

Appendix 1

Glossary of terms

Term	Definition
Centres	Centres are organisations accountable to an awarding body (such as CCEA) for the organisation of assessment arrangements leading to a unit or qualification.
Essential Skills	Nationally accredited adult qualifications available throughout Northern Ireland in Entry Level Literacy, Entry Level Numeracy, Level 1 and 2 Communication, and Level 1 and 2 Application of Number. Essential Skills are designed to help individuals improve their performance in a variety of contexts.
External moderators	External moderators are appointed, trained and monitored by CCEA and are responsible for monitoring and sampling learners' evidence to ensure that internal assessment decisions are valid, reliable, fair and consistent with national standards.
Internal assessment	The process by which teachers/lecturers in a centre assess learners' achievement of the learning outcomes of the unit(s) making up a qualification.
Internal standardisation	Where more than one teacher/lecturer has been involved in marking units in an occupational area (for example Business and Services), the centre must review samples assessed by each marker within and across units to ensure that they have applied the performance descriptors consistently to learners' work and make adjustments to marks if necessary.
Key Skills	<p>Key Skills underpin our ability to carry out successfully a wide range of tasks in education, employment and whenever and wherever we continue to learn. The six Key Skills are Communication, Application of Number, Information and Communication Technology, Working with Others, Improving Own Learning and Performance, and Problem Solving.</p> <p>All CCEA qualifications provide opportunities for generating evidence towards achievement of some, or all, of the Key Skills.</p>

Term	Definition
National Occupational Standards	These set out what a person needs to know, understand and do in relation to identified skills and competences required for the relevant industrial sector. They form the basis of National Vocational Qualifications (NVQs) and vocationally-related qualifications.
National Qualifications Framework (NQF)	A framework of levels and categories of qualifications, which have been accredited by the Regulatory Authorities and which enable recognition of achievement and facilitate career progression.
Qualifications Administration Handbook	An online document produced by CCEA that contains all the information a centre requires regarding the procedures and policies necessary for the smooth administration of CCEA's qualifications.
Register of Regulated Qualifications	An online database of units and qualifications that have been accredited by the Regulatory Authorities.
Unit/Learning Outcome	Each qualification is made up of a number of units. Each unit consists of a number of sections which outline its learning outcomes. Learning outcomes consist of the knowledge, skills and understanding a learner must successfully demonstrate and evaluate in order to achieve the qualification.

This unit is designed to provide increased vocational skills in bench joinery and associated activities.

This unit includes:

- consideration of health and safety issues with respect to workshop activities in bench joinery;
- consideration of career opportunities related to working with wood in the construction industry;
- an appreciation of environmental issues relating to timber;
- the appropriate use of bench joinery hand tools, and basic hand-held power tools;
- techniques of cutting, jointing, boring and planing to produce construction related components;
- construction of a range of bench joinery models; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Health and Safety, Basic Hand Tools and Safety of Hand-Held Power Tools

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- select appropriate Personal Protective Equipment (PPE) for example, safety boots or goggles;
- demonstrate safe use of basic tools, particularly those which are sharp;
- demonstrate safety with respect to hand-held power tools including 110 volt power supply;
- leave the workshop tidy and safely dispose of waste in an appropriate manner;
- identify hazards likely to affect operatives on a construction site;
- follow correct accident procedures should an incident occur in the workshop;
- select timber and manufactured board from sustainable resources;
- describe three career opportunities available within carpentry and joinery;
- identify and name the parts of the following basic hand tools:
 - tenon saw;
 - panel saw;
 - chisel;
 - wooden mallet;
 - screwdriver;
 - bradawl;
 - boring and drilling tools;
 - cramping;
 - securing and holding equipment;
 - smoothing plane;
 - battery-operated hand-held drill;
 - orbital sander; and
 - battery-operated screwdriver; and
- evaluate their own performance in practical tasks.

Section 2 Craft Techniques

Learners should be able to:

- interpret drawings and set out dimensions on timber;
- create an accurate cutting list of materials required;
- cut timber to length;
- cut sheet material to size;
- plane timber to size;
- use chisels for paring;
- use battery-operated hand-held tools;
- manufacture secure joints;
- use screws and a screwdriver;
- keep tools in good working order and store in a safe manner;
- change drill bits and screwdriver heads in power tools; and
- evaluate their own performance in practical tasks.

Section 3 Manufacture of Joinery Components Using Basic Joints

Learners should be able to:

- manufacture a carpentry or joinery item incorporating:
 - solid timber and manufactured board, minimising waste;
 - a halving joint;
 - a housing joint;
 - a bridle joint;
 - a mortise and tenon joint;
 - adhesives; and
 - appropriate metal fasteners;
- tidy up work area and dispose of waste cuttings in an environmentally friendly way;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

The importance of a safe working environment and a clean and tidy work area should be emphasised. Careful use of all tools, particularly sharp tools, should be taken into consideration.

Special attention should be given to the safe use of hand-held power tools.

Learners should be encouraged to clean, maintain and correctly store all tools they use in the workshop.

Practical occupational tasks selected should reflect the breadth of opportunity, which will allow learners to be stretched and challenged when demonstrating their skills in line with this specification.

Practical occupational tasks selected should reflect the breadth of learning opportunity which will allow learners to demonstrate their skills when set against the specification.

For the mortise and tenon joint an element of machine work may be carried out by the teacher/lecturer/technician, such as cutting the mortise.

Appropriate tasks for assessment evidence include the construction of either a coffee table, a book shelf or a chair. Only one item is required to be made.

Exemplar Assessment

The following example is for a coffee table.

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- interpret drawing and prepare a cutting list;
- prepare the workshop and select tools;
- mark out all materials;
- cut timber for legs to length with a minimum of waste;
- mark out mortise and tenon joints;
- cut joints;
- assemble legs;
- cut centre rail to length;
- assemble base of table with dry timber wedges;
- assemble completed table using adhesive, screws and wooden wedges;
- sand completed model;
- tidy up work area;
- return tools and maintain in the appropriate manner;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

Performance Descriptors: Bench Joinery

A learner whose achievement falls below the criteria shown in the Basic Performance Descriptor will be awarded 0 marks.

AO1

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO1	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none"> • Demonstrate excellent understanding of safe working practices and the potential hazards that can exist when using hand and power tools • Demonstrate excellent awareness of the importance of leaving the workshop tidy and disposing of waste safely and in an environmentally friendly manner • Demonstrate excellent understanding of career opportunities in bench joinery • Provide an excellent explanation of the different types and uses of manufactured boards and solid timber • Learners should explain in an excellent manner why they chose a particular type of board • Demonstrate an excellent knowledge of how to store materials 	<ul style="list-style-type: none"> • Demonstrate very good understanding of safe working practices and the potential hazards that can exist when using hand and power tools • Demonstrate very good awareness of the importance of leaving the workshop tidy and disposing of waste safely and in an environmentally friendly manner • Demonstrate very good understanding of career opportunities in bench joinery • Provide a very good explanation of the different types and uses of manufactured boards and solid timber • Learners should explain in a very good manner why they chose a particular type of board • Demonstrate a very good knowledge of how to store materials 	<ul style="list-style-type: none"> • Demonstrate good understanding of safe working practices and the potential hazards that can exist when using hand and power tools • Demonstrate good awareness of the importance of leaving the workshop tidy and disposing of waste safely and in an environmentally friendly manner • Demonstrate good understanding of career opportunities in bench joinery • Provide a good explanation of the different types and uses of manufactured boards and solid timber • Learners should explain in a good manner why they chose a particular type of board • Demonstrate a good knowledge of how to store materials

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Resources</p> <p>Drawings and cuttings list</p> <p>Mark out practical activity</p> <p>Cut out joints</p> <p>Accuracy of assembly</p> <p>End product</p>	<ul style="list-style-type: none"> Show evidence of making excellent use of resources with a minimum of waste Interpret the drawing provided showing an excellent level of understanding Produce a cutting list to an excellent level of accuracy Mark out work in an excellent manner Cut joints to an excellent standard and fix securely to within a 1 mm tolerance Ensure all work is planed and sanded to give an excellent standard of finish Produce an end product that is of an excellent standard and fit for purpose 	<ul style="list-style-type: none"> Show evidence of making very good use of resources with a minimum of waste Interpret the drawing provided showing a very good level of understanding Produce a cutting list to a very good level of accuracy Mark out work in a very good manner Cut joints to a very good standard and fix securely to within a 2 mm tolerance Ensure all work is planed and sanded to give a very good standard of finish Produce an end product that is of a very good standard and fit for purpose 	<ul style="list-style-type: none"> Show evidence of making good use of resources with a minimum of waste Interpret the drawing provided showing a good level of understanding Produce a cutting list to a good level of accuracy Mark out work in a good manner Cut joints to a good standard and fix securely to within a 3 mm tolerance Ensure all work is planed and sanded to give a good standard of finish Produce an end product that is of a good standard and fit for purpose

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Resources</p> <p>Drawings and cuttings list</p> <p>Mark out practical activity</p> <p>Cut out joints</p> <p>Accuracy of assembly</p> <p>End product</p>	<ul style="list-style-type: none"> • Show evidence of making a satisfactory use of resources with a minimum of waste • Interpret the drawing provided showing a satisfactory level of understanding • Produce a cutting list to a satisfactory level of accuracy • Mark out work in a satisfactory manner • Cut joints to a satisfactory standard and fix securely to within a 4 mm tolerance • Ensure all work is planed and sanded to give a satisfactory standard of finish • Produce an end product that is of a satisfactory standard and fit for purpose 	<ul style="list-style-type: none"> • Show evidence of making a basic use of resources with a minimum of waste • Interpret the drawing provided showing a basic level of understanding • Produce a cutting list to a basic level of accuracy • Mark out work in a basic manner • Cut joints to an excellent standard and fix securely to within a 5 mm tolerance • Ensure all work is planed and sanded to give a basic standard of finish • Produce an end product that is of a basic standard and fit for purpose

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
A01						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
A02						
Resources						
Drawings and cuttings list						
Mark out practical activity						
Cut out joints						
Accuracy of assembly						
End product						
A03						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 in the Specification.

This unit is designed to provide vocational skills in carpentry and joinery.

This unit includes:

- consideration of health and safety issues with respect to activities in carpentry and joinery;
- consideration of career opportunities related to working with wood in the construction industry;
- an appreciation of environmental issues relating to timber;
- the appropriate use of basic carpentry and joinery hand tools and hand-held power tools;
- construction of a range of carpentry and joinery models relating to site-based activities, incorporating a wide range of joints and jointing methods; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Health and Safety, Basic Hand Tools and Safety of Hand-Held Power Tools

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- wear appropriate Personal Protective Equipment (PPE), for example safety boots and goggles;
- identify and name the parts of the following basic hand tools:
 - ruler;
 - steel measuring tape;
 - square;
 - marking gauge;
 - wooden mallet hammer;
 - nail punch;
 - panel saw;
 - smoothing plane;
 - tenon saw;
 - chisel;
 - screwdriver;
 - bradawl;
 - boring and drilling tools;
 - cramping devices;
 - battery-operated hand-held drill; and
 - battery-operated screwdriver;
- demonstrate the safe use and maintenance of basic tools;
- follow correct accident procedures should an incident occur;
- describe three career opportunities within carpentry and joinery;
- select timber and manufactured board from suppliers who are committed to sustainable resources; and
- evaluate their own performance in practical tasks.

Section 2 Craft Techniques

Learners should be able to:

- interpret drawings;
- create a cutting list of materials required including solid timber and manufactured board;
- measure, mark and set out dimensions from drawings provided;
- cut timber to length;
- cut sheet material to size;
- use chisels for paring;
- use a smoothing plane as necessary;
- bore holes with drill bits;
- manufacture secure joints;
- use screws and a screwdriver or a battery screwdriver;
- keep tools in good working order and store in a safe manner;
- understand the reason why sharp edges must be covered;
- understand the methods used to sharpen chisels and plane irons including grinding and sharpening angles; and
- evaluate their own performance in practical tasks.

Section 3 Manufacture of Joinery Components Using Basic Joints

Learners should be able to:

- manufacture a carpentry or joinery item incorporating:
 - solid timber and manufactured board, minimising waste;
 - halving joints;
 - housing joints;
 - mitre joints;
 - butt joints;
 - screws;
 - adhesives; and
 - appropriate manufactured fixings;
- tidy up work area and dispose of waste cuttings in an environmentally friendly way;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

The importance of a safe working environment and a clean and tidy work area should be emphasised. Careful use of sharp tools should be stressed at all times.

Learners should be encouraged to clean, maintain and correctly store all tools that they have used.

Practical occupational tasks selected should reflect the breadth of opportunity for learners to be stretched and challenged when demonstrating their skills in line with the specification.

Exemplar Assessment

The following example is for a timber house, birdhouse, dolls' house or other model house.

Learners:

- read a drawing and prepare a cutting list;
- prepare materials and select tools;
- mark out all materials;
- make cross halving joints to form base of house;
- cut out door and window openings from manufactured board or solid timber;
- cut out housing in gable ends for purlins;
- fix purlins and roof structure;
- sheet roof and fix ridge capping;
- cut to length and secure bargeboards and fascia boards;
- mitre architrave round door opening;
- mitre lip (skirting) round base of house;
- tidy up work area;
- return tools and maintain in the appropriate manner;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Resources</p> <p>Drawings and cuttings list</p> <p>Mark out practical activity</p> <p>Cut out joints</p> <p>Accuracy of assembly</p> <p>End product</p>	<ul style="list-style-type: none"> Show evidence of making excellent use of resources with a minimum of waste Interpret the drawing provided showing an excellent level of understanding Produce a cutting list to an excellent level of accuracy Mark out work in an excellent manner Cut joints to an excellent standard and fix securely to within a 1 mm tolerance Ensure all work is planed and sanded to give an excellent standard of finish Produce an end product that is of an excellent standard and fit for purpose 	<ul style="list-style-type: none"> Show evidence of making very good use of resources with a minimum of waste Interpret the drawing provided showing a very good level of understanding Produce a cutting list to a very good level of accuracy Mark out work in a very good manner Cut joints to a very good standard and fix securely to within a 2 mm tolerance Ensure all work is planed and sanded to give a very good standard of finish Produce an end product that is of a very good standard and fit for purpose 	<ul style="list-style-type: none"> Show evidence of making good use of resources with a minimum of waste Interpret the drawing provided showing a good level of understanding Produce a cutting list to a good level of accuracy Mark out work in a good manner Cut joints to a good standard and fix securely to within a 3 mm tolerance Ensure all work is planed and sanded to give a good standard of finish Produce an end product that is of a good standard and fit for purpose

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Resources</p> <p>Drawings and cuttings list</p> <p>Mark out practical activity</p> <p>Cut out joints</p> <p>Accuracy of assembly</p> <p>End product</p>	<ul style="list-style-type: none"> • Show evidence of making satisfactory use of resources with a minimum of waste • Interpret the drawing provided showing a satisfactory level of understanding • Produce a cutting list to a satisfactory level of accuracy • Mark out work in an satisfactory manner • Cut joints to a satisfactory standard and fix securely to within a 4 mm tolerance • Ensure all work is planed and sanded to give a satisfactory standard of finish • Produce an end product that is of a satisfactory standard and fit for purpose 	<ul style="list-style-type: none"> • Show evidence of making basic use of resources with a minimum of waste • Interpret the drawing provided showing a basic level of understanding • Produce a cutting list to a basic level of accuracy • Mark out work in a basic manner • Cut joints to a basic standard and fix securely to within a 5 mm tolerance • Ensure all work is planed and sanded to give a basic standard of finish • Produce an end product that is of a basic standard and fit for purpose

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
A01						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
A02						
Resources						
Drawings and cuttings list						
Mark out practical activity						
Cut out joints						
Accuracy of assembly						
End product						
A03						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 in the Specification.

This unit introduces learners to basic skills in the use of an industry standard Computer Aided Design (CAD) drafting package.

Learners will also have the option of creating drawings in the disciplines of:

- engineering (manufacturing);
- engineering (electronic layout drawings);
- construction (architecture);
- construction (joinery component manufacture);
- construction (electrical layout drawings); or
- any other relevant discipline.

This unit includes:

- consideration of health and safety issues in CAD;
- consideration of career opportunities in CAD;
- routine drafting techniques in CAD;
- creating component drawings in CAD;
- consideration of environmental issues in CAD; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Safety Checks, Careers, the Environment and Routine Drafting Techniques

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- position monitor and seating in accordance with British Standards Institute (BSI) requirements;
- identify energy efficient computer equipment and end-of-life recycling methods;
- use at least five of these drawing commands: line, circle, arc, ellipse, polyline, hatch and rectangle;
- use these modification commands: trim, stretch, break, extend and scale;
- draw a range of basic components from a relevant discipline;
- demonstrate a knowledge and understanding of how to retrieve and plot a scale drawing;
- describe three career opportunities in related industries;
- use a paper-free environment except for the final drawing to reduce environmental impact; and
- evaluate their own performance in practical tasks.

Section 2 Creating Components (Blocks)

Learners should be able to:

- understand the basic principles of technical drawing;
- have a knowledge of the layout required for drawings such as position of plans and end and front elevations;
- use the skills developed in section one to create at least two component drawings for a library of symbols, to which they may add from components supplied by the teaching centre;
- use their CAD skills to generate a title block template, including text;
- set up a model space environment;
- set up a paper space environment for printing to a recognised scale; and
- evaluate their own performance in practical tasks.

Section 3 Working Drawing and Graphic Presentation

Learners should be able to:

- draw a plan view and a front view or make a range of drawings from either an engineering or a construction discipline, using the components created in Section 2;
- add dimensions to their drawing;
- create a completed working drawing from their selected discipline;
- plot hard copies of their working drawing and associated components;
- create a file storage area with an appropriate name and location;
- save files in this storage area for future use;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

Learners should carry out practical drafting activities associated with their chosen discipline.

Learners will be assessed on the quality of their final drawing, including the accuracy of lines joining at corners and the components drawn.

Learner should take approximately thirty hours to complete the final assessment drawing.

Learners must show evidence of having evaluated their own work.

Teaching centres are expected to use an industry standard drafting package with an individual drafting station for each learner.

Learners should have access to an individual computer and the software used should be capable of producing high quality 2D drawings.

Learners should have access to a printer capable of printing drawings to the specified scale. All drawings presented for moderation must be A3 size to show the detail in the drawings.

To enhance the learners' experience, teachers/lecturers may wish to deliver this unit in parallel with a construction craft unit or an engineering unit. Where learners are manufacturing a tool box from folded sheet metal, there could be partnerships with engineering. Learners could prepare the drawings for the tool box using a CAD system prior to manufacture. Where learners prepare the drawings for a piece of furniture or a construction component, there could be partnerships in the Carpentry and Joinery unit.

One assessment task should be carried out.

Exemplar Assessment

Drawing of a toolbox to be manufactured from sheet metal.

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- open an A3 template file;
- insert name, date, scale, drawing title and number;
- set up a drawing environment, including drawing limits, and viewpoints as necessary;
- produce a working drawing of a sheet metal toolbox using a CAD package;
- add dimensions to drawing;
- add appropriate annotation;
- plot the drawing to scale;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Symbols library</p> <p>Create template file</p> <p>Model space plan view</p> <p>Model space front view</p> <p>Working drawing</p> <p>Hard/Printed copies</p>	<ul style="list-style-type: none"> • Demonstrate excellent skills when using drawing and modification commands to create at least two components for a drawing symbols library • Create a template file to produce an excellent paper space title block to a standard sheet size • Create a drawing environment to an excellent standard that allows for a plan view of a suitably complex engineering or construction drawing • Create a drawing environment to an excellent standard that allows for a front view of a suitably complex engineering or construction drawing • Create a complete working drawing to an excellent standard, including principal dimensions • Create final drawings of excellent general appearance that are fit for purpose and at an industry recognised scale 	<ul style="list-style-type: none"> • Demonstrate very good skills when using drawing and modification commands to create at least two components for a drawing symbols library • Create a template file to produce a very good paper space title block to a standard sheet size • Create a drawing environment to a very good standard that allows for a plan view of a suitably complex engineering or construction drawing • Create a drawing environment to a very good standard that allows for a front view of a suitably complex engineering or construction drawing • Create a complete working drawing to a very good standard, including principal dimensions • Create final drawings of very good general appearance that are fit for purpose and at an industry recognised scale 	<ul style="list-style-type: none"> • Demonstrate good skills when using drawing and modification commands to create at least two components for a drawing symbols library • Create a template file to produce a good paper space title block to a standard sheet size • Create a drawing environment to a good standard that allows for a plan view of a suitably complex engineering or construction drawing • Create a drawing environment to a good standard that allows for a front view of a suitably complex engineering or construction drawing • Create a complete working drawing to a good standard, including principal dimensions • Create final drawings of good general appearance that are fit for purpose and at an industry recognised scale

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Symbols library</p> <p>Create template file</p> <p>Model space plan view</p> <p>Model space front view</p> <p>Working drawing</p> <p>Hard/Printed copies</p>	<ul style="list-style-type: none"> • Demonstrate satisfactory skills when using drawing and modification commands to create at least two components for a drawing symbols library • Create a template file to produce a satisfactory paper space title block to a standard sheet size • Create a drawing environment to a satisfactory standard that allows for a plan view of a suitably complex engineering or construction drawing • Create a drawing environment to a satisfactory standard that allows for a front view of a suitably complex engineering or construction drawing • Create a complete working drawing to a satisfactory standard, including principal dimensions • Create final drawings of satisfactory general appearance that are fit for purpose and at an industry recognised scale 	<ul style="list-style-type: none"> • Demonstrate basic skills when using drawing and modification commands to create at least two components for a drawing symbols library • Create a template file to produce a basic paper space title block to a standard sheet size • Create a drawing environment to a basic standard that allows for a plan view of a suitably complex engineering or construction drawing • Create a drawing environment to a basic standard that allows for a front view of a suitably complex engineering or construction drawing • Create a complete working drawing to a basic standard, including principal dimensions • Create final drawings of basic general appearance that are fit for purpose and at an industry recognised scale

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Symbols library						
Create template file						
Model space plan view						
Model space front view						
Working drawing						
Hard/Printed copies						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

Learners will develop skills in creating digital images using a variety of applications. They will learn the functions of a digital camera and understand the different styles and genres associated with photography. They will edit photographs and produce digital designs for print, screen and the internet. These are industry standard skills in photography and digital design. Learners should demonstrate a clear understanding of the career opportunities available in digital imagery. Health and safety, and environmental issues will also be considered.

This unit includes:

- using a selection of equipment for digital photography and creative imaging;
- capturing images in different styles and genres;
- manipulating images in a software package, for example Photoshop;
- presenting a photography project to an audience;
- consideration of career opportunities in the digital imaging industry;
- consideration of health and safety issues in the digital imaging industry;
- consideration of environmental issues in the digital imaging industry; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Introduction to Photographic Equipment

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974;
- work safely with computers, complying with the Health and Safety Regulations (Display Screen Equipment) 1992;
- identify different equipment associated with digital photography and creative imaging such as types of camera, tripods, memory cards, lighting, printers, photographic paper and editing software;
- identify the different styles and genres of photographs such as fashion, landscape, portrait, black and white, and macro;
- show evidence of basic camera skills by taking a collection of images and saving these into a folder on a computer;
- understand image properties and the associated terminology, for example pixels, resolution, file types and formats;
- understand the importance of copyright regulations;
- understand the importance of environmental issues when working with computers;
- describe three career opportunities in the digital imaging industry; and
- evaluate their own performance in practical tasks.

Section 2 Explore Photographic Techniques

Learners should be able to:

- capture a collection of images in different styles and genres;
- import the captured image to an appropriate software package;
- show an understanding of basic photographic manipulation and alteration skills;
- discuss and critique their own work;
- apply health and safety procedures when using equipment;
- understand the importance of recycling, minimising waste, energy efficiency and correct waste disposal methods; and
- evaluate their own performance in practical tasks.

Section 3 Present a Photography Project

Learners should be able to:

- show evidence of research, planning and time management relating to a photography project;
- record the progress of the project;
- show evidence of advanced editing skills;
- present a final project for an audience in a professional manner;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

This unit has been specifically written for use with industry standard digital image manipulation software.

The unit will be project-based. Learners will be required to produce a final image or images printed as hard copy or saved on a CD/memory stick/hard drive. It is recommended that the assessment of underpinning knowledge, practical application/product evidence and the learner's evaluation may be in the form of oral questioning, a class test, video or saved files.

Candidates will be expected to demonstrate increasing levels of knowledge, skills and understanding. In order to achieve at the higher levels, learners must progressively demonstrate skills in the use of editing software.

These skills include:

- working with layers;
- using adjustments and curves;
- dealing with underexposed and overexposed images;
- using advanced layer options (adjustment layers, blending modes, layer masks);
- using a minimum of three selection tools;
- adjusting colour levels (colour, hue, saturation);
- applying a minimum of three filters to an image;
- creating a composition using images and text;
- adjusting resolution and colour mode (RGB, CMYK, greyscale) for the required output;
- using software, such as Photoshop, to:
 - change the colour of an image;
 - use the paintbrush tool;
 - apply the paint bucket tool;
 - apply a gradient;
 - apply the blur and sharpen tools;
 - change brightness and contrast;
 - adjust levels;
 - adjust hue and saturation; and
 - save the image as a Photoshop document.

Exemplar Assessment

Learners should be able to:

- answer questions to demonstrate the knowledge and understanding requirements;
- use a digital camera and photographic equipment to capture a collection of images in different styles and genres;
- use a software package, such as Photoshop, to manipulate and alter the images;
- research, plan and carry out a final photography project;
- present detailed printed screenshots to show work in progress;
- present a final project as a montage or fine art display;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

A01

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
A01	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none"> • Demonstrate a satisfactory understanding of health and safety issues when working with computers • Demonstrate a satisfactory awareness of energy efficiency and waste reduction measures when working with computers • Demonstrate satisfactory knowledge of employment opportunities in the digital imaging industry • Demonstrate a satisfactory appreciation of the relevance of copyright regulations • Demonstrate a satisfactory understanding of different types of photographic equipment and photography styles 	<ul style="list-style-type: none"> • Demonstrate a basic understanding of health and safety issues when working with computers • Demonstrate a basic awareness of energy efficiency and waste reduction measures when working with computers • Demonstrate basic knowledge of employment opportunities in the digital imaging industry • Demonstrate a basic appreciation of the relevance of copyright regulations • Demonstrate a basic understanding of different types of photographic equipment and photography styles

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Using a digital camera</p> <p>Research, planning and time management</p> <p>Different styles of photography</p> <p>Editing software</p> <p>Montage/Fine art display</p> <p>End product</p>	<ul style="list-style-type: none"> • Demonstrate excellent ability to use a digital camera and photographic equipment • Demonstrate excellent skills in research, planning and time management • Demonstrate excellent use of the different styles of photography • Demonstrate excellent manipulation skills in editing software • Creatively present work as a montage or fine art display to an excellent standard • Produce an end product that is of an excellent standard 	<ul style="list-style-type: none"> • Demonstrate very good ability to use a digital camera and photographic equipment • Demonstrate very good skills in research, planning and time management • Demonstrate very good use of the different styles of photography • Demonstrate very good manipulation skills in editing software • Creatively present work as a montage or fine art display to a very good standard • Produce an end product that is of a very good standard 	<ul style="list-style-type: none"> • Demonstrate good ability to use a digital camera and photographic equipment • Demonstrate good skills in research, planning and time management • Demonstrate good use of the different styles of photography • Demonstrate good manipulation skills in editing software • Creatively present work as a montage or fine art display to a good standard • Produce an end product that is of a good standard

AO2

	Assessment Criteria	Performance Descriptor Basic 2-1	Performance Descriptor Basic 2-1
AO2	<p>Using a digital camera</p> <p>Research, planning and time management</p> <p>Different styles of photography</p> <p>Editing software</p> <p>Montage/Fine art display</p> <p>End product</p>	<ul style="list-style-type: none"> • Demonstrate satisfactory ability to use a digital camera and photographic equipment • Demonstrate satisfactory skills in research, planning and time management • Demonstrate satisfactory use of the different styles of photography • Demonstrate satisfactory manipulation skills in editing software • Creatively present work as a montage or fine art display to a satisfactory standard • Produce an end product that is of a satisfactory standard 	<ul style="list-style-type: none"> • Demonstrate basic ability to use a digital camera and photographic equipment • Demonstrate basic skills in research, planning and time management • Demonstrate basic use of the different styles of photography • Demonstrate basic manipulation skills in editing software • Creatively present work as a montage or fine art display to a basic standard • Produce an end product that is of a basic standard

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Using a digital camera						
Research, planning and time management						
Different styles of photography						
Editing software						
Montage/Fine art display						
End product						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

Learners will develop skills in how to use appropriate software to create, record, edit, arrange and mix audio. Software may include Audacity, Dance eJay, Music Maker, GarageBand, Sony ACID and Cubase. Learners should gain the confidence to create their own complete musical track. At the end of the unit, learners will be able to save their music track(s) in the appropriate formats to play on a CD, mobile phone, MP3 player, games console, or other digital audio devices. Health and safety, and environmental issues will also be considered.

This unit includes:

- identifying different music genres and structures;
- developing skills in the use of software for producing digital music;
- understanding copyright regulations;
- reviewing other people's music;
- consideration of health and safety procedures when working with computers;
- production of a final mastered track;
- consideration of career opportunities in the digital music industry;
- consideration of environmental issues in the digital music industry; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Introduction to Music Styles and Genres

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- work safely with computers, complying with the Health and Safety (Display Screen Equipment) Regulations 1992;
- show an understanding of music genres;
- show an understanding of music structure;
- identify hardware and software associated with digital music;
- describe three employment opportunities associated with the digital music industry;
- understand the importance of environmental issues such as reduction of waste when printing, use of scrap paper for drafts and using electrical equipment in energy saving mode; and
- evaluate their own performance in practical tasks.

Section 2 Experiment with Digital Music Software, Mixing and Sampling

Learners should be able to:

- explain the copyright regulations associated with digital music;
- identify appropriate audio formats (WAV/AIFF, MP3/WMA) on various media players, for example CD, MP3 player, mobile phone or the web;
- experiment with suitable software to record, edit, arrange and mix music;
- discuss and critique their own work; and
- evaluate their own performance in practical tasks.

Section 3 Produce a Music Track

Learners should be able to:

- develop ideas for a music track;
- identify a target audience for their music track;
- show evidence of planning for their music track, using printed screenshots;
- develop audio files;
- create and edit MIDI files and understand the differences between these and audio files;
- create a final mastered track;
- output their final music track on CD or memory stick/hard drive;
- constructively review others' music and describe its structure;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

Presentation of completed work with additional supporting materials is the preferred means of assessment. The unit will be project based and learners will be required to produce a master music track.

It is recommended that the assessment of underpinning knowledge, practical application/product evidence and the learner's evaluation may be in the form of a variety of oral questioning, a class test, a video or saved files.

The final music track should be saved on a CD or memory stick/hard drive. Work in progress should be evidenced by printed screenshots.

Evaluation activities could be recorded in writing, produced as a sound file or captured on video. Learners could include individual workshop tutorials.

Exemplar Assessment

Introduction to the digital music studio

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- apply health and safety procedures when using electrical equipment to create digital music, for example PC, Mac, microphones, headset or electronic keyboards;
- identify the software applications, showing confidence in navigating the interface;
- use music software to create a new mix from scratch showing a clear planning process, identifying the target audience and definite outcome;
- create and edit audio and MIDI files;
- recognise the differences between audio and MIDI;
- document all work with illustrative language and visuals;
- save work in multiple file formats, showing good organisational skills;
- constructively review others' music;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

Performance Descriptors: Digital Music

A learner whose achievement falls below the criteria shown in the Basic Performance Descriptor will be awarded 0 marks.

AO1

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO1	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none">• Demonstrate excellent understanding of the potential health and safety hazards in the music studio• Demonstrate excellent understanding of the energy efficiency and waste reduction procedures in the music studio• Describe in an excellent manner employment opportunities in the area of digital music• Identify in an excellent manner different genres of music	<ul style="list-style-type: none">• Demonstrate very good understanding of the potential health and safety hazards in the music studio• Demonstrate very good understanding of the energy efficiency and waste reduction procedures in the music studio• Describe in a very good manner employment opportunities in the area of digital music• Identify in a very good manner different genres of music	<ul style="list-style-type: none">• Demonstrate good understanding of the potential health and safety hazards in the music studio• Demonstrate good understanding of the energy efficiency and waste reduction procedures in the music studio• Describe in a good manner employment opportunities in the area of digital music• Identify in a good manner different genres of music

AO1

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO1	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none"> • Demonstrate satisfactory understanding of the potential health and safety hazards in the music studio • Demonstrate satisfactory understanding of the energy efficiency and waste reduction procedures in the music studio • Describe in a satisfactory manner employment opportunities in the area of digital music • Identify in a satisfactory manner different genres of music 	<ul style="list-style-type: none"> • Demonstrate basic understanding of the potential health and safety hazards in the music studio • Demonstrate basic understanding of the energy efficiency and waste reduction procedures in the music studio • Describe in a basic manner employment opportunities in the area of digital music • Identify in a basic manner different genres of music

A02

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
A02	<p>Copyright laws</p> <p>Using music software</p> <p>Music composition</p> <p>Editing audio files</p> <p>Producing digital music</p> <p>Music evaluation</p>	<ul style="list-style-type: none"> • Demonstrate an excellent understanding of copyright regulations in digital music • Demonstrate excellent use of music creation software to build tracks using samples and loops • Demonstrate music composition and arrangement skills to an excellent standard • Demonstrate excellent use of different music styles • Demonstrate to an excellent standard the development of audio files • Show an excellent understanding of the differences between audio and MIDI files • Create and edit MIDI files to an excellent standard • Create a final mastered track to an excellent standard • Constructively review others' music, analyse the strengths and weaknesses and describe its structure to an excellent standard 	<ul style="list-style-type: none"> • Demonstrate a very good understanding of copyright regulations in digital music • Demonstrate very good use of music creation software to build tracks using samples and loops • Demonstrate music composition and arrangement skills to a very good standard • Demonstrate very good use of different music styles • Demonstrate to a very good standard the development of audio files • Show a very good understanding of the differences between audio and MIDI files • Create and edit MIDI files to a very good standard • Create a final mastered track to a very good standard • Constructively review others' music, analyse the strengths and weaknesses and describe its structure to a very good standard 	<ul style="list-style-type: none"> • Demonstrate a good understanding of copyright regulations in digital music • Demonstrate good use of music creation software to build tracks using samples and loops • Demonstrate music composition and arrangement skills to a good standard • Demonstrate good use of different music styles • Demonstrate to a good standard the development of audio files • Show a good understanding of the differences between audio and MIDI files • Create and edit MIDI files to a good standard • Create a final mastered track to a good standard • Constructively review others' music, analyse the strengths and weaknesses and describe its structure to a good standard

A02

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
A02	<p>Copyright laws</p> <p>Using music software</p> <p>Music composition</p> <p>Editing audio files</p> <p>Producing digital music</p> <p>Music evaluation</p>	<ul style="list-style-type: none"> • Demonstrate a satisfactory understanding of copyright regulations in digital music • Demonstrate satisfactory use of music creation software to build tracks using samples and loops • Demonstrate music composition and arrangement skills to a satisfactory standard • Demonstrate satisfactory use of different music styles • Demonstrate to a satisfactory standard the development of audio files • Show a satisfactory understanding of the differences between audio and MIDI files • Create and edit MIDI files to a satisfactory standard • Create a final mastered track to a satisfactory standard • Constructively review others' music, analyse the strengths and weaknesses and describe the structure of their music to a satisfactory standard 	<ul style="list-style-type: none"> • Demonstrate a basic understanding of copyright regulations in digital music • Demonstrate basic use of music creation software to build tracks using samples and loops • Demonstrate music composition and arrangement skills to a basic standard • Demonstrate basic use of different music styles • Demonstrate to a basic standard the development of audio files • Show a basic understanding of the differences between audio and MIDI files • Create and edit MIDI files to a basic standard • Create a final mastered track to a basic standard • Constructively review others' music, analyse the strengths and weaknesses and describe the structure of their music to a basic standard

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Copyright laws						
Using music software						
Music composition						
Editing audio files						
Producing digital music						
Music evaluation						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

Manufacturing Techniques

– Hand Fitting

UNIT
61

This unit is designed to give the learner a basic understanding of the practical skills and basic knowledge required in the production of assembled components manufactured from metal.

This unit includes:

- consideration of health and safety issues within the unit;
- consideration of career opportunities available within engineering and/or manufacturing;
- consideration of environmental issues relating to the sourcing of raw materials, manufacture and recycling within the unit;
- selection and use of appropriate hand tools and measuring equipment;
- development of the techniques of measuring, cutting, filing, drilling and threading component parts;
- the use of equipment, for example scribe, punch, dividers and odd-legs to mark out component profiles;
- the manufacture of various parts for assembly to make a finished component;
- the use of measuring equipment, for example ruler, vernier calipers or micrometer, to check sizes of parts;
- joining parts together using rivets and screw threads; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Health and Safety Procedures, Careers, the Environment and Good Housekeeping

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- understand workshop procedures in the event of a fire or accident;
- identify and use appropriate Personal Protective Equipment (PPE) for example safety boots, safety glasses and boiler suit or apron;
- describe three career opportunities within engineering and/or manufacturing;
- demonstrate an understanding of environmental issues relating to the sourcing of raw materials, resources used in manufacture and recycling;
- apply safe working practices in the workshop in the use of sharp and pointed tools;
- select and inspect tools and equipment ensuring they are safe and fit for use;
- store tools and materials safely and ensure a safe and tidy work area; and
- evaluate their own performance in practical tasks.

Section 2 Selection of Tools and Equipment

Learners should be able to:

- wear appropriate PPE and observe all health and safety procedures in the workshop;
- read and interpret simple engineering drawings;
- show an understanding of the sequence in which the manufacturing operations are carried out;
- ensure the workshop area is clear of any obstacles, surplus materials or potential hazards;
- select the correct materials and tools from instructions/information given;
- inspect tools and equipment for wear or damage and report any faults to supervisor;
- mark out lined detail on metal components using marking out and measuring equipment (for example ruler, square and scribe);
- mark out drilled hole positions, centre lines and centre punch;
- follow demonstrations/instructions on setting up and using drilling machine;
- drill holes of correct diameter according to a pattern or drawing;
- tap holes to provide internal threads;
- cut accurately on waste side of line and file to profile/shape;
- check finished components for accuracy using rulers, squares or protectors;
- check own work and agree remedial action with supervisor if issues arise at assembly stage;
- reinstate the work area on completion of task and dispose of waste materials appropriately; and
- evaluate their own performance in practical tasks.

Learning Outcomes (cont.)

Section 3 Manufacture, Assemble, Test and Inspect Assembled Tasks

Learners should be able to:

- read and understand simple engineering drawings and interpret the dimensional information relating to shapes such as square edges, angular detail, internal and external radii, drilled and tapped holes, reaming and counterboring;
- use the necessary instrument to mark out accurately the features of the component being manufactured;
- use the necessary hand tools to cut out the profiles of the component;
- use pedestal drilling machine by adjusting table height, securing work piece, selecting and securing cutting tool (drill, reamer, countersink and counterbore) selecting speed and setting guard to drill specific hole sizes;
- drill through holes and blind holes to specific depths and ream to fit;
- assemble component and inspect for accuracy;
- agree any changes with supervisor and carry out any alterations or remedial action required to correct and complete the task;
- produce the components with the necessary range of profiles that allow the assembly of the mating parts to fit together with the correct orientation and matching holes for screws, bolts, dowels and rivets to complete the assembly;
- check the quality and accuracy of the manufactured components at various stages using a range of measuring and checking tools;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

Teachers/Lecturers should explain the importance of a safe working environment and a clean and tidy work area.

Learners should demonstrate a working knowledge of the various stages in the production of assembled components manufactured from metal.

Practical occupational tasks selected should reflect the breadth of opportunity for learners to be stretched and challenged when demonstrating their skills in line with this unit.

Centres delivering this unit should be suitably resourced with multiple hand tools, consumable metal of appropriate section, drilling, cutting and finishing equipment and appropriate tools for cutting threads where necessary.

The following assessment task could provide evidence for the unit requirements.

Exemplar Assessment

Manufacture an engineer's cramp.

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- select suitable workshop area and identify and select tools as necessary;
- interpret drawings;
- identify materials required for assembly, measure material size;
- produce datums and file to correct dimensions;
- mark out profiles as per drawing;
- manufacture according to drawings including drilling, filing and cutting, as necessary;
- tap threads, drill, counterbore and ream designated holes as required;
- test operation of assembled parts and adjust/modify as necessary;
- check completed component against specification;
- tidy work area, return all tools and equipment and dispose of surplus materials in an environmentally friendly manner;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

Manufacturing Techniques

– Hand Fitting

UNIT
61

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Drawings and marking out</p> <p>Cutting and preparation</p> <p>Assemble components</p> <p>Use of hand tools</p> <p>Use of machine tools</p> <p>Measure and check accuracy</p>	<ul style="list-style-type: none"> • Demonstrate excellent ability to read and understand drawings and diagrammatic guidelines • Demonstrate excellent ability to mark out features of the components • Demonstrate excellent ability to cut and prepare material for individual parts/components as per drawing/diagrams • Demonstrate excellent ability to manufacture individual parts for complete assembly • Demonstrate excellent ability to use hand tools to carry out a range of tasks, for example sawing, filing, chiselling, scribing, centre-punching, riveting, and thread-tapping • Demonstrate excellent ability to use machine tools to carry out a range of tasks, for example drilling, reaming, counterboring and countersinking • Demonstrate excellent ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate excellent ability to make any necessary adjustments to correct errors 	<ul style="list-style-type: none"> • Demonstrate very good ability to read and understand drawings and diagrammatic guidelines • Demonstrate very good ability to mark out features of the component • Demonstrate very good ability to cut and prepare material for individual parts/components as per drawing/diagrams • Demonstrate very good ability to manufacture individual parts for complete assembly • Demonstrate very good ability to use hand tools to carry out a range of tasks, for example sawing, filing, chiselling, scribing, centre-punching, riveting, and thread-tapping • Demonstrate very good ability to use machine tools to carry out a range of tasks, for example drilling, reaming, counterboring and countersinking • Demonstrate very good ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate very good ability to make any necessary adjustments to correct errors 	<ul style="list-style-type: none"> • Demonstrate good ability to read and understand drawings and diagrammatic guidelines • Demonstrate good ability to mark out features of the components • Demonstrate good ability to cut and prepare material for individual parts/components as per drawing/diagrams • Demonstrate good ability to manufacture individual parts for complete assembly • Demonstrate good ability to use hand tools to carry out a range of tasks, for example sawing, filing, chiselling, scribing, centre-punching, riveting, and thread-tapping • Demonstrate good ability to use machine tools to carry out a range of tasks, for example drilling, reaming, counterboring and countersinking • Demonstrate good ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate good ability to make any necessary adjustments to correct errors

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Drawings and marking out</p> <p>Cutting and preparation</p> <p>Assemble components</p> <p>Use of hand tools</p> <p>Use of machine tools</p> <p>Measure and check accuracy</p>	<ul style="list-style-type: none"> • Demonstrate satisfactory ability to read and understand drawings and diagrammatic guidelines • Demonstrate satisfactory ability to mark out features of the components • Demonstrate satisfactory ability to cut and prepare material for individual parts/components as per drawing/diagrams • Demonstrate satisfactory ability to manufacture individual parts for complete assembly • Demonstrate satisfactory ability to use hand tools to carry out a range of tasks, for example sawing, filing, chiselling, scribing, centre-punching, riveting, and thread-tapping • Demonstrate satisfactory ability to use machine tools to carry out a range of tasks, for example drilling, reaming, counterboring and countersinking • Demonstrate satisfactory ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate satisfactory ability to make any necessary adjustments to correct errors 	<ul style="list-style-type: none"> • Demonstrate basic ability to read and understand drawings and diagrammatic guidelines • Demonstrate basic ability to mark out features of the components • Demonstrate basic ability to cut and prepare material for individual parts/components as per drawing/diagrams • Demonstrate basic ability to manufacture individual parts for complete assembly • Demonstrate basic ability to use hand tools to carry out a range of tasks, for example sawing, filing, chiselling, scribing, centre-punching, riveting, and thread-tapping • Demonstrate basic ability to use machine tools to carry out a range of tasks, for example drilling, reaming, counterboring and countersinking • Demonstrate basic ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate basic ability to make any necessary adjustments to correct errors

Manufacturing Techniques

– Hand Fitting

UNIT
61

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Drawings and marking out						
Cutting and preparation						
Assemble components						
Use of hand tools						
Use of machine tools						
Measure and check accuracy						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

Manufacturing Techniques – Sheet Metal

UNIT
62

This unit is designed to give the learner a basic understanding of the practical skills and basic knowledge required in the fabrication of assembled components manufactured from sheet metal. The learner will gain experience and an opportunity to demonstrate the ability to cut, form and join sheet metal to fabricate simple items.

This unit includes:

- consideration of health and safety issues within the unit;
- consideration of the career opportunities available within engineering fabrication;
- consideration of environmental issues relating to the sourcing of raw materials, manufacture and recycling within the unit;
- selection and use of appropriate marking out equipment and hand tools;
- development of the techniques of measuring, marking out, cutting, folding and joining together component parts to produce an assembled item;
- the use of equipment, for example scribe, punch, divider or calipers, to mark out component profiles;
- assembly of various parts to make a finished component;
- joining parts together using rivets, hinges and welding; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Health and Safety Procedures, Careers and Good Housekeeping

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- understand workshop procedures in the event of a fire or accident;
- identify and use appropriate Personal Protective Equipment (PPE), for example safety boots, gloves, safety glasses and boiler suit or apron;
- apply safe working practice in the handling of sheet metal sections;
- apply safe working practices in the workshop in the use of sharp and pointed tools, for example scribes, dividers, or off-legs;
- describe three career opportunities available within engineering fabrication;
- select and inspect tools and equipment ensuring they are safe and fit for use;
- store tools and materials safely and ensure a safe and tidy work area;
- demonstrate an understanding of environmental issues relating to the sourcing of raw materials and resources used in manufacture and recycling; and
- evaluate their own performance in practical tasks.

Section 2 The Use of Basic Tools and Equipment

Learners should be able to:

- wear appropriate PPE and observe all health and safety procedures in the workshop;
- read and interpret simple engineering drawings;
- show an understanding of the sequence in which the manufacturing operations are carried out;
- select the correct materials and tools from instruction/information given;
- inspect tools and equipment for wear or damage and report any faults to supervisor;
- mark out lined detail on metal components using marking out and measuring equipment (for example ruler, square, scribe, calipers and dividers);
- mark out positions for drilling holes using centre lines and centre punch;
- follow demonstrations/instructions on setting up and using hole punch and drilling machine;
- drill/punch holes of correct diameter according to engineering drawings;
- recycle all cuttings;
- cut accurately to line and file/de-burr to profile/shape;
- check finished components for accuracy using rules and gauges;
- check own work and agree remedial action with supervisor if issues arise at assembly stage;
- ensure the workshop area is clear of any obstacles, surplus materials or potential hazards;
- reinstate the work area on completion of task and dispose of waste materials appropriately; and
- evaluate their own performance in practical tasks.

Section 3 Manufacture, Measure and Inspect Assembled Tasks

Learners should be able to:

- read and understand simple engineering drawings and interpret the dimensional information relating to shapes such as square edges, angular detail, internal and external radii, safe edges and drilled holes;
- use the necessary instruments to mark out accurately the features of the component being manufactured;
- use the necessary hand tools to cut out the profiles of the component;
- use pedestal drilling machine by adjusting table height, securing work piece, selecting and securing cutting tool, selecting speed and setting guard to drill a hole;
- form sheet metal using hand and machine tools in accordance with approved procedures;
- assemble the components with the necessary range of profiles that allow the mating parts to fit together with the correct orientation and matching holes for rivets;
- inspect for accuracy and agree any remedial action with supervisor;
- carry out any alterations or remedial action required to correct and complete the task;
- check the quality and accuracy of the manufactured components at various stages using measuring and checking tools;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

Teachers/Lecturers should explain the importance of a safe working environment and a clean and tidy work area.

Learners should demonstrate a working knowledge of the various stages in the production of assembled components manufactured from metal.

Practical occupational tasks selected should reflect the breadth of opportunity for learners to be stretched and challenged when demonstrating their skills in line with this unit.

Centres delivering this unit should be suitably resourced with multiple hand tools, consumable sheet metal, and cutting, folding, riveting, welding and drilling equipment.

The following assessment task could provide evidence for the unit requirements.

Exemplar Assessment

Manufacture a tool box or post box.

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- select suitable workshop area and identify and select tools as necessary;
- interpret drawings;
- identify materials required for development and measure and cut to size;
- manufacture assessment task;
- assemble and secure parts;
- test operation of assembled parts and adjust/modify as necessary;
- check completed item against specification;
- tidy work area and return all tools and equipment and dispose of surplus material;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

Performance Descriptors: Manufacturing Techniques – Sheet Metal

A learner whose achievement falls below the criteria shown in the Basic Performance Descriptor will be awarded 0 marks.

AO1

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO1	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none"> • Demonstrate excellent understanding of the requirements of health and safety procedures when using tools and equipment • Demonstrate excellent ability to comply with workshop rules in the event of fire or accident • Demonstrate excellent understanding of the importance of leaving the workshop tidy and safe, and by recycling waste or disposing of it in an environmentally friendly way • Provide an excellent description of three career opportunities • Demonstrate excellent ability to identify and select materials, tools and components for the tasks • Demonstrate excellent evidence of identifying and selecting measuring equipment to check accuracy 	<ul style="list-style-type: none"> • Demonstrate very good understanding of the requirements of health and safety procedures when using tools and equipment • Demonstrate very good ability to comply with workshop rules in the event of fire or accident • Demonstrate very good understanding of the importance of leaving the workshop tidy and safe, and by recycling waste or disposing of it in an environmentally friendly way • Provide a very good description of three career opportunities • Demonstrate very good ability to identify and select materials, tools and components for the tasks • Demonstrate very good evidence of identifying and selecting measuring equipment to check accuracy 	<ul style="list-style-type: none"> • Demonstrate good understanding of the requirements of health and safety procedures when using tools and equipment • Demonstrate good ability to comply with workshop rules in the event of fire or accident • Demonstrate good understanding of the importance of leaving the workshop tidy and safe, and by recycling waste or disposing of it in an environmentally friendly way • Provide a good description of three career opportunities • Demonstrate good ability to identify and select materials, tools and components for the tasks • Demonstrate very good evidence of identifying and selecting measuring equipment to check accuracy

AO1

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO1	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none"> • Demonstrate satisfactory understanding of the requirements of health and safety procedures when using tools and equipment • Demonstrate satisfactory ability to comply with workshop rules in the event of fire or accident • Demonstrate satisfactory understanding of the importance of leaving the workshop tidy and safe, and by recycling waste or disposing of it in an environmentally friendly way • Provide a satisfactory description of three career opportunities • Demonstrate satisfactory ability to identify and select materials, tools and components for the tasks • Demonstrate satisfactory evidence of identifying and selecting measuring equipment to check accuracy 	<ul style="list-style-type: none"> • Demonstrate basic understanding of the requirements of health and safety procedures when using tools and equipment • Demonstrate basic ability to comply with workshop rules in the event of fire or accident • Demonstrate basic understanding of the importance of leaving the workshop tidy and safe, and by recycling waste or disposing of it in an environmentally friendly way • Provide a basic description of three career opportunities • Demonstrate basic ability to identify and select materials, tools and components for the tasks • Demonstrate basic evidence of identifying and selecting measuring equipment to check accuracy

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Drawings and marking out</p> <p>Cutting and preparation</p> <p>Assemble components</p> <p>Use of hand tools</p> <p>Use of machine tools</p> <p>Measure and check accuracy</p>	<ul style="list-style-type: none"> • Demonstrate an excellent ability to read and understand drawings and diagrammatic guidelines • Demonstrate an excellent ability to mark out details on components • Demonstrate an excellent ability to cut and prepare material for individual parts/components as per drawing/diagram • Demonstrate an excellent ability to manufacture individual parts for complete assembly • Demonstrate an excellent ability to use hand tools, for example guillotine, hacksaw, file, chisel, scribe, centre-punch and drill • Demonstrate an excellent ability to use machine tools to carry out a range of tasks, for example drilling and countersinking • Demonstrate an excellent ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate an excellent ability to make any necessary adjustments to correct errors 	<ul style="list-style-type: none"> • Demonstrate a very good ability to read and understand drawings and diagrammatic guidelines • Demonstrate a very good ability to mark out details on components • Demonstrate a very good ability to cut and prepare material for individual parts/components as per drawing/diagram • Demonstrate a very good ability to manufacture individual parts for complete assembly • Demonstrate a very good ability to use hand tools, for example guillotine, hacksaw, file, chisel, scribe, centre-punch and drill • Demonstrate a very good ability to use machine tools to carry out a range of tasks, for example drilling and countersinking • Demonstrate a very good ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate a very good ability to make any necessary adjustments to correct errors 	<ul style="list-style-type: none"> • Demonstrate a good ability to read and understand drawings and diagrammatic guidelines • Demonstrate a good ability to mark out details on components • Demonstrate a good ability to cut and prepare material for individual parts/components as per drawing/diagram • Demonstrate a good ability to manufacture individual parts for complete assembly • Demonstrate a good ability to use hand tools, for example guillotine, hacksaw, file, chisel, scribe, centre-punch and drill • Demonstrate a good ability to use machine tools to carry out a range of tasks, for example drilling and countersinking • Demonstrate a good ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate a good ability to make any necessary adjustments to correct errors

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Drawings and marking out</p> <p>Cutting and preparation</p> <p>Assemble components</p> <p>Use of hand tools</p> <p>Use of machine tools</p> <p>Measure and check accuracy</p>	<ul style="list-style-type: none"> • Demonstrate a satisfactory ability to read and understand drawings and diagrammatic guidelines • Demonstrate a satisfactory ability to mark out details on components • Demonstrate a satisfactory ability to cut and prepare material for individual parts/components as per drawing/diagram • Demonstrate a satisfactory ability to manufacture individual parts for complete assembly • Demonstrate a satisfactory ability to use hand tools, for example guillotine, hacksaw, file, chisel, scribe, centre-punch and drill • Demonstrate a satisfactory ability to use machine tools to carry out a range of tasks, for example drilling and countersinking • Demonstrate a satisfactory ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate a satisfactory ability to make any necessary adjustments to correct errors 	<ul style="list-style-type: none"> • Demonstrate a basic ability to read and understand drawings and diagrammatic guidelines • Demonstrate a basic ability to mark out details on components • Demonstrate a basic ability to cut and prepare material for individual parts/components as per drawing/diagram • Demonstrate a basic ability to manufacture individual parts for complete assembly • Demonstrate a basic ability to use hand tools, for example guillotine, hacksaw, file, chisel, scribe, centre-punch and drill • Demonstrate a basic ability to use machine tools to carry out a range of tasks, for example drilling and countersinking • Demonstrate a basic ability to use measuring equipment to check accuracy of individual and assembled parts • Demonstrate a basic ability to make any necessary adjustments to correct errors

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	<p>Task evaluation</p> <p>Final evaluation</p>	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Drawings and marking out						
Cutting and preparation						
Assemble components						
Use of hand tools						
Use of machine tools						
Measure and check accuracy						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

This unit aims to take learners' personal interests in music and present them in an educational learning environment. Learners will have the opportunity to learn about the components of their favourite musical styles and artists, as well as presentational skills in modern DJing. They will have the opportunity to record their own work, mix their own music, or make compilations of their favourite music or artists. The skills in this unit will enable learners to understand how the music industry has become more accessible using digital technology. Learners should demonstrate a clear understanding of career opportunities available in sound production.

This unit includes:

- studying styles and characteristics of music used by the modern DJ;
- studying equipment used for sound production;
- completing a demo CD;
- a live DJ performance;
- consideration of health and safety issues in the sound production industry;
- consideration of environmental issues in the sound production industry;
- consideration of career opportunities in the sound production industry; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Learning about Musical Styles

Learners should be able to:

- identify different styles of music;
- identify the different instruments involved in different musical styles;
- demonstrate an understanding of the different roles in musical groups, for example guitarist or drummer, and their importance to that musical genre;
- demonstrate an understanding of how the rhythm of a song can be linked to the lyrics, for example happy words with a lively rhythm or sad songs with a slow rhythm;
- describe three career opportunities in sound production; and
- evaluate their own performance in practical tasks.

Section 2 Learning to be a DJ

Learners should be able to:

- identify styles/structures of different DJs in Northern Ireland and analyse the content of their shows, for example dance or radio shows;
- understand which types of DJs different audiences prefer;
- identify the type of equipment a DJ would use during a live performance;
- understand health and safety issues, potential hazards and risk assessment, and safe working practices associated with either a live or pre-recorded DJ performance;
- demonstrate an awareness of environmental issues relating to working practices during a live production;
- produce evidence of preparation and planning for the performance;
- present their playlist/programme to a live audience by either a live performance or using pre-recorded material;
- obtain feedback on the performance from the target audience, for example questionnaires, question and answer sessions or interviews with fellow learners; and
- evaluate their own performance in practical tasks.

Learning Outcomes (cont.)

Section 3 Sound Production

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- identify the equipment and instruments used in the recording studio;
- produce evidence of preparation and planning of the sound product;
- demonstrate the skills of mixing audio in order to produce a demo CD;
- identify suitable venues for the playback of live and recorded products;
- demonstrate awareness of the methods for gaining constructive feedback from the target audience through questionnaires, question and answer sessions and interviews with fellow learners;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

Learners should work individually or in small teams to produce a music show of their own choice that can be played to an audience of friends, relatives, staff, or fellow learners in the school assembly hall, common room or canteen. Individually, the learners keep a personal diary of their roles in the production. This will give them the opportunity to act as DJs, develop their personal presentational skills, and enhance their self-confidence, as well as providing an opportunity for showcasing their talents. Learners' individual portfolios should contain their playlists and running order as well as a simple analysis of feedback from the audience.

Evidence of learning may be collected from well-planned practical assignments that provide the opportunity to produce and test the range of skills as described in the unit content, for example completion of a demo CD and practise performing.

Learners should have access to music and equipment, such as DJ decks, to perform a live music show. Learners could record their material and play this to a live audience. This practical unit encourages learners to combine their interest in music and their ability to work in teams. They could also have the opportunity to record their material and have it played as part of the performance.

Learners must be made aware of the environmental and health and safety issues involved in making a sound production. They should be encouraged to understand the health and safety issues regarding use of sound equipment, for example safe sound levels or the correct posture for lifting equipment.

Exemplar Assessment

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- analyse individual DJ styles and explain preferences for different target audiences;
- prepare and plan a music show to be presented to peers, producing playlists and a running order;
- present the playlist to a live audience;
- obtain feedback from the audience;
- produce a demo CD;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO2	<p>Analysis of working DJs</p> <p>Preparation and planning</p> <p>Use of DJ and recording equipment</p> <p>Live performance</p> <p>Audience feedback</p> <p>Demo CD</p>	<ul style="list-style-type: none"> • Produce to an excellent standard research and analysis of individual DJ styles and identify target audiences' preferences • Demonstrate evidence of excellent preparation and planning for performance • Demonstrate excellent use of DJ and recording equipment • Present a playlist or programme to a live audience in an excellent manner • Demonstrate excellent use of audience surveys and questionnaires to gain assessment feedback • Produce a demo CD to an excellent standard 	<ul style="list-style-type: none"> • Produce to a very good standard research and analysis of individual DJ styles and identify target audiences' preferences • Demonstrate evidence of very good preparation and planning for performance • Demonstrate very good use of DJ and recording equipment • Present a playlist or programme to a live audience in a very good manner • Demonstrate very good use of audience surveys and questionnaires to gain assessment feedback • Produce a demo CD to a very good standard 	<ul style="list-style-type: none"> • Produce to a good standard research and analysis of individual DJ styles and identify target audiences' preferences • Demonstrate evidence of good preparation and planning for performance • Demonstrate good use of DJ and recording equipment • Present a playlist or programme to a live audience in a good manner • Demonstrate good use of audience surveys and questionnaires to gain assessment feedback • Produce a demo CD to a good standard

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Analysis of working DJs</p> <p>Preparation and planning</p> <p>Use of DJ and recording equipment</p> <p>Live performance</p> <p>Audience feedback</p> <p>Demo CD</p>	<ul style="list-style-type: none"> • Produce to a satisfactory standard research and analysis of individual DJ styles and identify target audiences' preferences • Demonstrate evidence of satisfactory preparation and planning for performance • Demonstrate satisfactory use of DJ and recording equipment • Present a playlist or programme to a live audience in a satisfactory manner • Demonstrate satisfactory use of audience surveys and questionnaires to gain assessment feedback • Produce a demo CD to a satisfactory standard 	<ul style="list-style-type: none"> • Produce to a basic standard research and analysis of individual DJ styles and identify target audiences' preferences • Demonstrate evidence of basic preparation and planning for performance • Demonstrate basic use of DJ and recording equipment • Present a playlist or programme to a live audience in a basic manner • Demonstrate basic use of audience surveys and questionnaires to gain assessment feedback • Produce a demo CD to a basic standard

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Analysis of working DJs						
Preparation and planning						
Use of DJ and recording equipment						
Live performance						
Audience feedback						
Demo CD						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

This unit is about helping to gain a clear and practical hands-on experience of how to identify various types of film genres. This unit will help the learner to understand the various stages and processes which are required to make a short movie and screen it to an audience of friends and/or relations. It is also important that the learners have the opportunity to gain constructive feedback from the target audience. Learners will have the opportunity of taking their own interests in film and translating them into an actual movie. Given the flexibility of editing packages in relation to moving images, the learners will be able to experience the problems and progress associated with film making.

By focusing on moving image production techniques, the learners will be working in a media environment which is occupationally relevant to modern film making.

This unit includes:

- consideration of health and safety issues within the TV and film production industry;
- consideration of potential career opportunities within the TV and film production industry;
- the movie production process;
- editing and screening a movie;
- consideration of environmental issues within the TV and film production industry; and
- a review and evaluation of performance.

Learning Outcomes

Section 1 Preparing to Make Movies

Learners should be able to:

- understand the implications of the Health and Safety at Work Act (HASAWA) 1974 in relation to this occupational area;
- identify health and safety issues when working with computers;
- understand energy efficiency and waste reduction when working with computers;
- follow accident procedures should an incident occur;
- describe three career opportunities within the TV and film industry;
- explain different genres associated with films;
- explain different plots associated with films; and
- evaluate their own performance in practical tasks.

Section 2 Making Movies

Learners should be able to:

- interpret a client brief;
- create a proposal for a film production;
- create a storyboard for a film production;
- identify roles and responsibilities for a film production;
- identify suitable locations for a film production;
- create a production schedule for a film production;
- produce a risk assessment report highlighting potential hazards in a film production;
- identify any potential environmental issues concerning a film production; and
- evaluate their own performance in practical tasks.

During the production process learners will be able to fully complete their film using the material from the preproduction.

Section 3 Editing and Screening Movies

During the postproduction process learners should be able to:

- use editing equipment to complete a film production;
- export final film for disc and the web;
- screen to a live audience and gain feedback;
- evaluate their own performance in practical tasks; and
- carry out an end-of-unit evaluation.

Assessment Guidance

Learners will be expected to interpret a client brief and are required to produce a short movie for screening to a live audience, for example peers or family.

Learners should have access to appropriate software and hardware, with internet access. Utilise all resources in all departments to add to the learning experience and assessment, for example digital cameras, flip cameras or minidisk audio recorders.

Learners must also be given the opportunity to explore job roles within this industry and a visiting speaker or visit to industry related area(s) should be considered. Likewise, learners should be aware of the health and safety issues involved when working in a production studio and using computer equipment.

Exemplar Assessment

Learners:

- answer questions to demonstrate knowledge and understanding requirements;
- interpret a client brief and create a proposal for a short film production;
- create a storyboard for the film production;
- present a production schedule for the film production;
- produce the final film and edit appropriately;
- export film to CD-ROM or DVD and for web;
- screen film to live audience;
- produce a questionnaire for feedback from audience;
- obtain feedback from audience;
- evaluate their own performance in the practical activity; and
- carry out an end-of-unit evaluation.

AO1

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO1	<p>Health and safety, environment, and related careers</p> <p>Materials and related skills and knowledge</p>	<ul style="list-style-type: none"> • Demonstrate a satisfactory understanding of the potential health and safety hazards that can exist in the production studio • Demonstrate a satisfactory understanding of the energy efficiency and waste reduction that can exist in the production studio • Demonstrate a satisfactory understanding of employment opportunities related to the area of TV and film production • Demonstrate a satisfactory understanding of different genres and plots associated with films 	<ul style="list-style-type: none"> • Demonstrate a basic understanding of the potential health and safety hazards that can exist in the production studio • Demonstrate a basic understanding of the energy efficiency and waste reduction that can exist in the production studio • Demonstrate a basic understanding of employment opportunities related to the area of TV and Film Production • Demonstrate a basic understanding of different genres and plots associated with films

AO2

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO1	<p>Interpret client brief</p> <p>Storyboard</p> <p>Production schedule</p> <p>Production process</p> <p>Postproduction process</p> <p>Live preview and feedback questionnaire</p>	<ul style="list-style-type: none"> • Interpret a client brief, showing an excellent ability to undertake the preproduction process • Demonstrate the ability to create an excellent storyboard for a film production • Create to an excellent standard a production schedule for a film production • Show an excellent ability in completing their final film – based on the material from their preproduction • Ensure all video footage is edited to an excellent standard and exported for the web and DVD or CD-ROM • Show evidence of an excellent ability to produce a questionnaire to gain feedback when they screen their film to live audience 	<ul style="list-style-type: none"> • Interpret a client brief, showing a very good ability to undertake the preproduction process • Demonstrate the ability to create a very good storyboard for a film production • Create to a very good standard a production schedule for a film production • Show a very good ability in completing their final film – based on the material from their preproduction • Ensure all video footage is edited to a very good standard and exported for the web and DVD or CD-ROM • Show evidence of a very good ability to produce a questionnaire to gain feedback when they screen their film to a live audience 	<ul style="list-style-type: none"> • Interpret a client brief, showing a good ability to undertake the preproduction process • Demonstrate the ability to create a good storyboard for a film production • Create to a good standard a production schedule for a film production • Show a good ability in completing their final film – based on the material from their preproduction • Ensure all video footage is edited to a good standard and exported for the web and DVD or CD-ROM • Show evidence of a good ability to produce a questionnaire to gain feedback when they screen their film to a live audience

AO2

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO2	<p>Interpret client brief</p> <p>Storyboard</p> <p>Production schedule</p> <p>Production process</p> <p>Postproduction process</p> <p>Live preview and feedback questionnaire</p>	<ul style="list-style-type: none"> • Interpret a client brief, showing a satisfactory ability to undertake the preproduction process • Demonstrate the ability to create a satisfactory storyboard for a film production • Create to a satisfactory standard a production schedule for a film production • Show a satisfactory ability in completing their final film – based on the material from their preproduction • Ensure all video footage is edited to a satisfactory standard and exported for the web and DVD or CD-ROM • Show evidence of a satisfactory ability to produce a questionnaire to gain feedback when they screen their film to a live audience 	<ul style="list-style-type: none"> • Interpret a client brief, showing a basic ability to undertake the preproduction process • Demonstrate the ability to create a basic storyboard for a film production • Create to a basic standard a production schedule for a film production • Show a basic ability in completing their final film – based on the material from their preproduction • Ensure all video footage is edited to a basic standard and exported for the web and DVD or CD-ROM • Show evidence of a basic ability to produce a questionnaire to gain feedback when they screen their film to a live audience

AO3

	Assessment Criteria	Performance Descriptor Excellent 10–9	Performance Descriptor Very Good 8–7	Performance Descriptor Good 6–5
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of an excellent evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a very good evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a good evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce excellent self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce very good self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce good self-reflective statements about the learning process in this unit

AO3

	Assessment Criteria	Performance Descriptor Satisfactory 4–3	Performance Descriptor Basic 2–1
AO3	Task evaluation	<ul style="list-style-type: none"> Show evidence of a satisfactory evaluation for each practical assessment task 	<ul style="list-style-type: none"> Show evidence of a basic evaluation for each practical assessment task
	Final evaluation	<ul style="list-style-type: none"> Produce satisfactory self-reflective statements about the learning process in this unit 	<ul style="list-style-type: none"> Produce basic self-reflective statements about the learning process in this unit

Learner Unit Tracking Grid

Please record the total marks from all assessments for each learner outcome.

Learner Outcome	Excellent	Very Good	Good	Satisfactory	Basic	Unworthy of Credit
	10–9	8–7	6–5	4–3	2–1	0
AO1						
Health and safety, environment, and related careers						
Materials and related skills and knowledge						
AO2						
Interpret client brief						
Storyboard						
Production schedule						
Production process						
Postproduction process						
Live preview and feedback questionnaire						
AO3						
Task evaluation						
Final evaluation						
Total score per column						
Total score for unit (max 100)						
My Diary completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		
My Record completed	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>		

The final award will be based on the combined scores of **two units**, as shown in Section 3.4 of the Specification.

