QUALIFICATION SPECIFICATION

ECITB Diploma in Supporting Engineering Construction Activities at SCQF Level 5

Welding pathway

Qualifications Scotland Accreditation group award number R829 04

Release Version 2-3

To be used from 01/11/2026

Issue

We will inform Approved Centres of any changes to this issue. The latest issue can be found on our website.

Changes to this document

The table below sets out all revisions made to this document since it was first issued, and the dates from which the revisions were effective.

New Issue number	Summary of changes made between the previous issue and this current issue	Page number	Date of revision
RV2-0	Changes have been made to the learning outcomes, assessment criteria and assessment requirements for the following units: ECITBCO-S1 Contribute to effective working relationships in engineering construction		20/10/2025
	ECITBCO-S2 Work safely and minimise risk in engineering construction		
	ECITBCO-S4 Work with environmental sustainability in mind		
	ECITBCO-S5 Interpret and follow documentation and procedures		
	ECITBCO-S6 Use digital technology and information effectively and securely		
RV2-1	Section 1 – Amendment from Department for Education to Department for Work and Pensions	3	01/02/2026
	Replace SQA Accreditation with Qualifications Scotland Accreditation	Throughout document	
RV2-2	Title page added, RV issue and date updated (including footnote), minor amendments and formatting improvements made.	Throughout document	01/09/2026
	The words Qualifications Scotland Accreditation removed from the final sentence in the Assessment Requirements box	All units	
RV2-3	Text replaced under Section 1.4 – Language	5	01/11/2026

Accessibility

This document is available in a larger font upon request.

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1. Introduction

1.1 Objective and overview

The Engineering Construction Industry Training Board (ECITB) is the employer-led skills, standards, and qualifications body for the development of the engineering construction workforce of Great Britain. An arms-length body of the UK Government, the ECITB reports to the Department for Work and Pensions.

The ECITB awarding body for accredited engineering construction qualifications is part of the industry training board. Our qualifications certify knowledge and competence across craft and technical disciplines. They improve quality and standards for the industry, helping engineering construction companies to stay competitive.

This document is for use by Approved Centres and their candidates. It's used by the ECITB's External Quality Assurers and may be of interest to employers and training providers.

This qualification is a knowledge and competence qualification. It is a work-based qualification based on the National Occupational Standards (NOS) for the Engineering Construction industry.

National Occupational Standards are developed by employers and professional bodies in conjunction with the ECITB Standard Setting Organisation and describe what employers mean by occupational competence within a particular job role.

The objective of this qualification is to:

- Prepare candidates for employment in supporting engineering construction activities in the engineering construction industry.
- Support candidates working in the role.
- Enable candidates to progress to higher levels providing opportunities to possible supervisory and managerial roles.

1.2 Engineering Construction Operatives

Engineering construction industries require the support of operatives to construct, commission, maintain, overhaul and decommission a wide range of capital infrastructure, plant and systems. These activities assist in maintaining the safety, integrity and effective operation of plant and equipment in a wide range of industries of national importance including power generation, infrastructure (water, road, rail), petrochemical, oil and gas, steel, and food and drink processing.

Operatives work under the direct supervision of a crafts person, charge hand or supervisor to shape, assemble, position, install and dismantle a wide range of engineering construction components and materials; pipefitters and platers also carry out simple welding tasks.

They assist in the assembly, installation, maintenance and repair of a wide range engineering construction plant and associated components. They are able to interpret specifications, engineering drawings and diagrams and understand the on-site hazards and health, safety and environmental requirements of plant and systems.

Under direct supervision, operatives are responsible for the quality of their own work and ensure their work is completed safely and meets the specification whilst increasing their own skills and capabilities. They are based on-site or in workshops/fabrication facilities where they work on various types of engineering infrastructure plant and systems dependent on their given sector.

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1.3 Entry requirements

There are no mandatory entry requirements for this qualification.

The qualification is open to any candidate who the Approved Centre believes can reach the assessment requirements set out within this document.

A candidate must have a sound grasp of the English language and mathematics to be able to follow instructions as well as complete the learning and assessment required for this qualification.

The Approved Centre will work with prospective candidates and, where appropriate, employers, to determine a candidate's suitability for the qualification.

1.4 Language of Assessment

This qualification is available and assessed in English only.

Centres must ensure, prior to registration, that candidates have a sufficient standard of English language competence to understand the qualification requirements, access learning and assessment materials, communicate effectively, and generate evidence that meets the required assessment standards. This applies particularly to candidates for whom English is not their first language.

A candidate's English language ability must be sufficient to enable them to demonstrate the required knowledge, skills, and behaviours independently, without the need for translation or language support that could compromise the validity or reliability of the assessment. Candidates must also be able to communicate effectively in workplace and assessment environments and carry out activities safely and appropriately in accordance with qualification requirements.

1.5 Achievement

This qualification consists of the 11 mandatory units shown below. A candidate must successfully meet the requirements in each of the units in order to attain this qualification.

ECITB unit number	Qualifications Scotland Accreditation unit number	Unit title	SCQF level	SCQF Credit
ECITBCO-S1	UT09 04	Contribute to effective working relationships in engineering construction	5	6
ECITBCO-S2	UT55 04	Work safely and minimise risk in engineering construction	6	10
ECITBCO-S4	UT56 04	Work with environmental sustainability in mind	6	6
ECITBCO-S5	UT23 04	Interpret and follow documentation and procedures	6	6
ECITBCO-S6	UT54 04	Use digital technology and information effectively and securely	5	2
SAEC-01S	UT35 04	Prepare work areas in support of engineering construction activities	5	9
SAEC-05S	UT37 04	Reinstate the work area after completing engineering construction activities	5	8
SAEC-08S	UT06 04	Conduct basic marking out of materials in engineering construction	5	8

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SAEC-09S	UT07 04	Conduct basic shaping activities by material removal using hand tools	5	17
SAEC-13S	UT48 04	Support welding operations in engineering construction	5	8
SAEC-14S	UT08 04	Conduct plastic welding in engineering construction	5	10

This document details the learning outcomes and assessment criteria that a candidate must meet in order to demonstrate the acquisition of the knowledge and skills needed to be awarded an ECITB Diploma in Supporting Engineering Construction Activities at SCQF Level 5 - Welding pathway. Mandatory observation of the candidate by an Approved Centre assessor is required to achieve this qualification.

The contents of each unit within the qualification interrelate and the Awarding Body issues credit certificates for completion of stand-alone units, on request from the Approved Centre.

1.6 Credit and level

Credit is a value attached to each unit and each qualification, based on the amount of time it would take the average candidate to achieve and demonstrate the learning outcomes of a qualification.

In practice, individual candidate requirements and individual delivery methods mean there will be variation in the actual time taken to complete a qualification.

Credit are estimates, based on consultation with industry practitioners, supervisors, and assessors. One credit point is equivalent to 10 hours. Credit includes:

- Formal input, for example, contact time with tutor, acquisition of knowledge/understanding. Off the job time.
- Additional activities, for example, developing practice, reflection, research/study time. On the job time.
- Assessment, for example, planning, completion of assessment tasks.

This qualification has 90 credit points.

The credit points allow candidates, learning providers and employers to compare the size of different qualifications.

In some instances, it may be possible to transfer SCQF credit points to and from other learning programmes This will enable a candidate to include evidence of prior knowledge and competence and to ensure they do not repeat learning previously undertaken.

Universities, Colleges, Qualifications Scotland Accreditation and other awarding bodies decide how many of the credit points received from previous learning can be transferred into their programmes.

In all cases of credit transfer, it would be the decision of the accepting learning provider as to how many credit points could be transferred. Please refer to the *ECITB Recognition of Prior Learning Policy and Procedures*.

Time limits on the process of credit accumulation or exemptions are set out for each unit within the qualification structure.

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The SCQF level indicator describes in broad terms what a candidate should be able to do or demonstrate at a particular level. This qualification is at SCQF level 5 and the descriptor is as follows:

Characteristic 1 - Knowledge and understanding
Demonstrate and/or work with: • Basic knowledge. • Arrange of simple facts, ideas and theories in, about, and associated with, a subject/discipline/sector. • Knowledge and understanding of basic processes, materials and terminology
Characteristic 2 - Practice: Applied knowledge, skills and understanding
Apply knowledge, skills and understanding: • Relate knowledge and ideas to personal and/or practical contexts. • Use a range of skills associated with the subject/discipline/sector to complete some routine and non-routine tasks. • Plan and organise both familiar and unfamiliar tasks. • Select appropriate tools and materials and use them safely and effectively. • Adjust tools where necessary following safe practices.
Characteristic 3 - Generic cognitive skills
Use a process to deal with a problem, situation or issue that is straightforward. Operate in a familiar context, but where there is a need to take account of or use additional information of different kinds, some of which will be theoretical or hypothetical.
Characteristic 4 - Communication, ICT, and numeracy skills
Use a range of routine skills, for example: • Produce and respond to detailed written and oral communication in familiar contexts. • Use standard ICT applications to process, obtain and combine information. • Use a range of numerical and graphical data in routine contexts that may have some non-routine elements.
Characteristic 5 - Autonomy, accountability and working with others
Work alone or with others on tasks with minimum directive supervision. Agree goals and responsibilities for self and/or work team. Take lead responsibility for some tasks. Show an awareness of own and/or others' roles, responsibilities and requirements in carrying out work and contribute to the evaluation and improvement of practices and processes.

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1.7 Equity, diversity and inclusion

We have designed this qualification and its assessments to enable fair access to all candidates as far as reasonably possible, while taking industry requirements into consideration, for example, health and safety.

You may wish to refer to our *Equal Opportunities Policy* and the *Reasonable Adjustments and Special Considerations Policy and Procedure* that are published on the ECITB website.

If you would like to discuss arrangements for reasonable adjustments, please contact us at qualifications@ecitb.org.uk.

1.8 Career progression

Completing this qualification can lead to a range of further career options. Those who wish to stay in engineering construction can develop their skills further, or progress through supervision to senior positions such as Construction Manager.

Individuals can progress through additional qualifications and apprenticeships or into supporting engineering functions such as technical leadership, procurement, quality assurance, project management or project controls.

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2. Qualification units and scope of assessment

This qualification consists of 11 mandatory units. Candidates must attain all the learning outcomes in each unit to gain a Pass in the qualification. Candidates attain a learning outcome by meeting each of the assessment criteria linked to the learning outcome at the appropriate standard. The units in this specification show the assessment criteria that a candidate must meet to attain the learning outcomes.

The qualification grade available is Pass.

2.1 Unit features

Each unit has the following sections:

ECITB unit number	The unique unit code that identifies the unit on ECITB's system.
Qualifications Scotland Accreditation unit number	The unique unit code that the regulator (Qualifications Scotland Accreditation) uses to identify the unit.
Unit title	The name of the unit, which reflects the content of the unit.
SCQF level	These levels measure the degree of challenge posed by the qualification compared to other qualifications. The levels are determined by using the SCQF and EQF level descriptors.
Credit value	The credit value represents the learning time being defined as the time taken by candidates at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria.
Unit aim	A summary of what the unit enables the candidate to do.
Learning outcomes	What a candidate will know, understand and/or be able to do upon attainment of the unit. Each learning outcome starts with the letters LO.
Assessment criteria	The requirements a candidate is expected to meet to demonstrate the attainment of the related learning outcome. Each assessment criterion starts with the letter K if it relates to knowledge or understanding and with the letter S if it relates to skills. Each assessment criterion starts with a command verb which instructs the candidate in what to do.
Standards	The National Occupational Standard(s) that the unit is mapped to.

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2.2 Underpinning knowledge and skills

Units ECITBCO-S1 to ECITBCO-S6 detail the factual, procedural and theoretical knowledge that the candidate must acquire and also demonstrate on plant, equipment and systems of their selected discipline:

- Relevant national and industry health, safety and environmental standards and legislation and those relevant to the specific disciplines, as appropriate.
- Site safety responsibilities, own and others including first aid procedures, evacuation procedures and contingency reporting.
- Types and effects of hazards, safety assessment methods and techniques and how to minimise associated risks.
- The importance of understanding work relationship problems.
- Lines of communication, reporting lines and levels of responsibility in the workplace.
- The importance of ethical working and the sustainable use of resources including codes of conduct, minimising the impact of work on the environment.
- The importance of questioning and demonstrating initiative in day-to-day problem solving.
- Procedures and related documentation and responsibility for reporting and following procedures.
- Preparation and reinstatement of the work area including preparing, checking and handling material; types of equipment and the related care and control procedures; storing and disposing of material; handing over plant and equipment.

2.3 Plant, equipment and systems specific fabrication and installation knowledge and skills

Units SAEC-01S to SAEC-12S are discipline specific and the candidate must demonstrate their application of knowledge and skills on plant, equipment and systems.

The candidate is required to effectively demonstrate the theoretical, factual and procedural knowledge and practical skills of the following units that comprise the qualification in accordance with the stated assessment criteria and scope of assessment provided in this document.

ECITBCO-S1	Contribute to effective working relationships in engineering construction
ECITBCO-S2	Work safely and minimise risk in engineering construction
ECITBCO-S4	Work with environmental sustainability in mind
ECITBCO-S5	Interpret and follow documentation and procedures
ECITBCO-S6	Use digital technology and information effectively and securely
SAEC-01S	Prepare work areas in support of engineering construction activities
SAEC-05S	Reinstate the work area after completing engineering construction activities
SAEC-08S	Conduct basic marking out of materials in engineering construction
SAEC-09S	Conduct basic shaping activities by material removal using hand tools
SAEC-13S	Support welding operations in engineering construction
SAEC-14S	Conduct plastic welding in engineering construction

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2.4 Further information

For further information please visit our website or contact the ECITB Awarding Body.

Tel 01923 260000
Email Qualifications@ecitb.org.uk
Website www.ecitb.org.uk

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2.5 Units:

Unit reference and title: **ECITBCO-S1 Contribute to effective working relationships in engineering construction**		
Qualifications Scotland Accreditation unit code: **UT09 04**	SCQF level: **5**	Credit value: **6**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from ECITB/ECRS 11.04, NOS ECITB (CO 1)**	

Unit purpose and aim

1. Establish and maintain productive working relationships
2. Deal with disagreements in an amicable and constructive way so that good relationships are maintained
3. Keep others informed about work plans or activities which affect them
4. Seek assistance from others in a polite and courteous way without causing undue disruption to normal work activities
5. Respond in a timely and positive way when others ask for help or information

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand lines of communication and responsibilities	K1.1 Explain the individual's responsibilities and the responsibilities of others within the work location
	K1.2 Describe the lines of communication that exist within the individual's working environment and explain the agreed procedure for passing information
LO2 Understand the importance of creating and maintaining working relationships	K2.1 Describe the individual's responsibilities for creating and maintaining working relationships and explain why it is important to do so
LO3 Understand problems affecting relationships	K3.1 Describe different problems that can affect relationships, and the actions that can be taken to deal with specific difficulties
LO4 Establish and maintain productive working relationships	S4.1 Develop working relationships with different people in the work environment such as those for whom they are responsible, those to whom they are responsible, clients, colleagues, other tradespersons, suppliers, security/safety personnel

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	S4.2 Treat everybody fairly and with respect and support the creation of a welcoming and inclusive environment for everyone
LO5 Deal with disagreements in an amicable and constructive way so that effective relationships are maintained	S5.1 Maintain effective relationships by: a. Resolving disagreements in a constructive and objective manner b. Escalating if needed c. Reporting, in accordance with procedures
LO6 Seek assistance from others in a polite and courteous way without causing undue disruption to normal working activities	S6.1 Maintain effective relationships by seeking assistance from others in a polite and courteous manner
LO7 Respond in a timely and positive way when others ask for help or information	S7.1 Follow relevant work or professional codes of conduct, as appropriate for their role
	S7.2 Requests for help and information to identify exactly what is required
	S7.3 Resolve problems within the limits of their authority as they arise
	S7.4 Respond in a positive way when others ask for help or information

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Such methods may include discussions about product evidence and questioning. Assessment Criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. Knowledge criteria will be assessed through a variety of methods which will include technical discussions and online knowledge tests. Assessment criteria may be satisfied by observation, questioning, expert witness testimony. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**ECITBCO-S2 Work safely and minimise risk in engineering construction**		
Qualifications Scotland Accreditation unit code:	**UT55 04**	SCQF level: **6**	Credit value: **10**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from ECITB/ECRS 10.06 (CO 2), NOS ECITB (C0 4)**		

Unit purpose and aim

1. Work safely at all times, complying with health and safety and other relevant regulations and guidelines
2. Call for expert help in the event of contingencies occurring, using warning systems as appropriate
3. Take prompt and appropriate action to minimise risk of personal and third-party injury as a first priority and then damage to property and equipment
4. Follow shutdown and evacuation procedures promptly and correctly
5. Deal safely with dangers that can be contained using appropriate equipment and materials, in accordance with organisational policy and procedures

In the context of this unit, responsibility is limited to working within an overall risk control strategy which has been developed by safety specialists, and which includes detailed criteria for identifying risks together with clearly defined procedures for action which must be followed. In some cases, the learner may be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Explain the requirements of health and safety legislation
	K1.2 Explain the consequences for employers and employees of not fulfilling their legal health and safety responsibilities
	K1.3 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	K1.4 Describe hazards and the associated risk and their responsibility in relation to dealing with and reporting hazards including what risks there are in relation to health and safety
LO2 Understand personal site safety responsibilities	K2.1 Describe how to recognise health and safety training needs, the procedure for requesting training and who to ask for help in understanding the work instructions
	K2.2 Explain how to get information relating to the safe use of equipment and how to ensure the equipment is used safely
	K2.3 Describe how to recognise when personal protective equipment should be used and how to select and use the correct equipment for the work to be undertaken
	K2.4 Explain different types of vibration injuries and explain how they can be prevented
	K2.5 Explain the importance of personal behaviour in maintaining workplace standards
	K2.6 Describe the checks which are needed to make sure that portable electrical appliances are safe to use
	K2.7 Describe what a safe system for electrical isolation should include and why low voltage is generally safer in relation to health and safety
	K2.8 Explain the risks from overhead cables and how to control them
LO3 Understand others' site safety responsibilities	K3.1 Explain who is responsible for ensuring that equipment is checked and safe to use
	K3.2 Explain the need for health and safety training for themself and others in a workplace and the procedures for requesting training
	K3.3 Explain the consequences for employers and employees of not fulfilling their legal health and safety responsibilities

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO4 Understand first aid procedures	K4.1 Explain relevant first aid procedures that typically relate to the workplace
	K4.2 Describe where information, competent assistance and local first aid facilities can be obtained
LO5 Understand and follow evacuation procedures	K5.1 Explain relevant evacuation procedures that typically apply in the workplace
	K5.2 Describe where information and competent assistance for evacuation can be obtained
LO6 Follow contingency reporting procedures	S6.1 Complete contingency reporting documentation following relevant systems to workplace activities
LO7 Follow appropriate reporting lines and procedures	S7.1 Comply with the various reporting lines and procedures that apply in the working environment

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from discussions with candidates about work-based activities on suitable engineering construction industry sites or realistic workplace environment. Such methods may include discussions about product evidence and questioning. Assessment Criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. Knowledge criteria will be assessed through a variety of methods which will include technical discussions and online knowledge tests. Assessment criteria may be satisfied by observation, questioning, expert witness testimony. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**ECITBCO-S4 Work with environmental sustainability in mind**	
Qualifications Scotland Accreditation unit code: **UT56 04**	SCQF level: **6**	Credit value: **6**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from ECITB/ECRS 11.04, NOS ECI (CO 5)**	

Unit purpose and aim

This unit has been designed to assess learner knowledge in being able to:

1. Explain how to establish and maintain environmental sustainability
2. Explain how to deal with environmental considerations
3. Explain how to keep others informed about environmental plans or activities which affect them
4. Describe how to minimise use of resources and production of waste materials
5. Understand how to store re-usable materials and dispose of waste materials
6. Explain how to report environmental information, improvements, concerns or incidents

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Work in a way that contributes to environmental sustainability	K1.1 Describe how to reduce impact on the environment by following environmentally safe working practices and taking precautions to minimise environmental damage
LO2 Understand the move towards a net zero future, in accordance with their organisation's policies and targets	K2.1 Explain how to deal effectively with resources taking environmental considerations into account
	K2.2 Describe how to minimise use of resources, where possible
	K2.3 Describe how to minimise the production of waste wherever and however possible
	K2.4 Explain the correct disposal of waste materials
	K2.5 Explain how to store re-usable materials and equipment in accordance with procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO3 Understand reporting lines and responsibility	K3.1 Explain how to report any environmental incidents, concerns or improvements that are identified

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from discussions with candidates about work-based activities on suitable engineering construction industry sites or realistic workplace environment. Such methods may include discussions about product evidence and questioning. Assessment Criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. Knowledge criteria will be assessed through a variety of methods which will include technical discussions and online knowledge tests. Assessment criteria may be satisfied by observation, questioning, expert witness testimony. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**ECITBCO-S5 Interpret and follow documentation and procedures**	
Qualifications Scotland Accreditation unit code: **UT23 04**	SCQF level: **6**	Credit value: **6**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from ECITB/ECRS 11.04, NOS ECITB (CO 1)**	

Unit purpose and aim

This unit has been designed to assess learner competence in being able to:

1. Interpret and follow documented procedures
2. Understand the principles of documentation
3. Understand the principles of quality control
4. Understand the principles of legal documentation
5. Understand the conventions of documentation and information communication
6. Understand the hazards arising from tools and equipment

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand the principles and conventions of documentation	K1.1 Explain the principles, uses and conventions of engineering documents
	K1.2 Describe the relevance of worksheets, technical drawings and related specifications
	K1.3 Describe the relationship between details and diagrams in engineering drawings and specifications
	K1.4 Explain the diagrams and key information in relevant catalogues and equipment manuals
	K1.5 Describe the sources of manufacturer or additional relevant information
	K1.6 Explain the use of plans and schedules
	K1.7 Describe procedures and authorisations related to tasks undertaken

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	K1.8 Describe quality control and documentation procedures
	K1.9 Describe the importance of checking and confirming procedures and documentation
	K1.10 Describe the importance of signing documentation and the legal consequences and accountabilities
	K1.11 Describe reporting of tasks undertaken
	K1.12 Explain actions to take in the event of variations to the plan of work
	K1.13 Describe reporting lines and procedures
LO2 Understand the hazards arising from tools and equipment	K2.1 Describe the hazards that can arise from preparing work materials, tools and equipment incorrectly
	K2.2 Describe the hazards that can arise from incorrectly reinstating work materials, tools and equipment
LO3 Interpret and follow documentation and procedures	S3.1 Check the revisions, date and validity of documentation
	S3.2 Follow specifications, engineering drawings and work instructions
	S3.3 Interpret and follow equipment manuals, relevant plans and schedules
	S3.4 Follow authorisation procedures, quality procedures and related documentation
	S3.5 Complete all relevant documentation correctly
	S3.6 Report defects or variations and any instance where the activity cannot be met
	S3.7 Check that all required actions are completed, and reports are finished
	S3.8 Follow all required actions and reporting once an activity is finished and to follow appropriate handover procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	S3.9 Follow safety procedures, risk assessments and methods of work when preparing and reinstating the work area, materials, tools and equipment.
	S3.10 Reinstate the work area, materials, tools and equipment

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from discussions with candidates about work-based activities on suitable engineering construction industry sites or realistic workplace environment. Such methods may include discussions about product evidence and questioning. Assessment Criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. Knowledge criteria will be assessed through a variety of methods which will include technical discussions and online knowledge tests. Assessment criteria may be satisfied by observation, questioning, expert witness testimony Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**ECITBCO-S6 Use digital technology and information effectively and securely**		
Qualifications Scotland Accreditation unit code:	**UT54 04**	SCQF level: **5**	Credit value: **2**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from ECITB/ECRS 11.04, NOS ECITB (CO 1)**		

Unit purpose and aim

This unit has been designed to assess learner competence in being able to interpret and use basic digital information and technology securely.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Have a knowledge of basic digital information and technology	K1.1 Explain the need for security of digital data and technology use in the workplace, the reasons for and importance of this, including relevant legal aspects
	K1.2 Describe simple permission levels related to data access
	K1.3 Explain the requirement of passwords in data security and how to manage passwords effectively, as appropriate for their role
	K1.4 Describe how to use software and digital systems necessary for their role
	K1.5 Describe how to use digital technology and equipment necessary for their role
	K1.6 Describe how to handle digital content and online information, as relevant to their role
	K1.7 Describe how to conduct basic searches online, safely and appropriately to find digital information related to their role
	K1.8 Describe how to verify information, related to the task in hand and job role, is appropriate and correct
	K1.9 Describe how to learn and work remotely using IT

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	K1.10 Explain the benefits of e-learning and immersive technology for training and professional development and how to use and access this
LO2 Interpret and use basic technology and information	S2.1 Use basic digital information and technology securely in accordance with company procedures
	S2.2 Search, select and use work-related digital information, as requested by a supervisor, to support delivery of work-related tasks
	S2.3 Handle standard digital content in order to communicate information, as required for their role in accordance with requests or procedures
LO3 Comprehend standard digital technology and use effectively and securely	S3.1 Use the basic features of relevant digital technology and equipment, as relevant to their role
	S3.2 Use standard technology to save and send digital information, in accordance with procedures
	S3.3 Access appropriate help and support when problems with digital technology arise
	S3.4 Use a range of available technology for training and professional development

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from discussions with candidates about work-based activities on suitable engineering construction industry sites or realistic workplace environment. Such methods may include discussions about product evidence and questioning. Assessment Criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. Knowledge criteria will be assessed through a variety of methods which will include technical discussions and online knowledge tests. Assessment criteria may be satisfied by observation, questioning, expert witness testimony. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**SAEC-01S Prepare work areas in support of engineering construction activities**	
Qualifications Scotland Accreditation unit code: **UT35 04**	SCQF level: **5**	Credit value: **9**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from NOS ECISAEC01 and SAEC01**	

Unit purpose and aim

This unit has been designed to assess learner competence in being able to prepare materials in support of engineering construction activities.

In the context of this unit, responsibility is limited to working within clearly defined procedures. In some cases, the learner may still be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions within the limits of their responsibility.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Explain the requirements of health and safety legislation
	K1.2 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes
	K1.3 Describe the hazards and risks that can arise from preparing work areas
	K1.4 Describe work area preparations, requirements and terminology

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO2 Understand the tools, terminology, techniques and practices for preparing work areas in support of engineering construction activities	K2.1 Describe service supply and connection procedures
	K2.2 Describe the types of equipment to be prepared for supporting activities
	K2.3 Describe identification of materials, defects and serviceability
	K2.4 Describe material handling and preparation terminology
	K2.5 Describe material handling methods and techniques
	K2.6 Describe the consequences of not correctly preparing work areas, equipment, tools and materials
	K2.7 Describe the types of tools and equipment used and explain the care and control procedures
LO3 Work safely and minimise risk at all times	S3.1 Identify a range of hazards
	S3.2 Take appropriate action to minimise the risk from hazards
	S3.3 Refer safety related matters to appropriate persons as required
	S3.4 Work in accordance with relevant sections of the Health and Safety at Work Act and its associated regulations
	S3.5 Work in accordance with the requirements of risk assessments and permit to work systems
LO4 Ensure that the working environment is suitable for activities	S4.1 **Prepare the work area for the engineering activities to be carried out**
	S4.2 **Ensure all services and supplies are connected correctly**
	S4.3 **Obtain all equipment and carry out pre-use operational and calibration checks**
	S4.4 **Obtain materials and check for quality, quantity and carry out preparations**

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	S4.5 **Carry out preparation activities using suitable tools and equipment**
	S4.6 **Ensure all permits and method statements are in place**
	S4.7 **Confirm and report on the completion of preparation activities**
	S4.8 Deal promptly and effectively with problems and report those that cannot be solved
LO5 Prepare work area, materials and equipment	S5.1 Ensure that the work environment is suitable for the work activities to be undertaken

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Assessment criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. **Mandatory workplace observation is required for Assessment Criteria S4.1 to S4.7** which may take the form of an expert witness testimony supported by photographic and/or video evidence. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**SAEC-05S Reinstate the work area after completing engineering construction activities**		
Qualifications Scotland Accreditation unit code:	**UT37 04**	SCQF level: **5**	Credit value: **8**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from NOS ECISAEC05 and SAEC05**		

Unit purpose and aim

This unit has been designed to assess learner competence in being able to reinstate the work area after completing engineering activities in the engineering construction industry.

In the context of this unit, responsibility is limited to working within agreed specifications and following clearly defined procedures with regard to the storage of resources but allows discretion to achieve satisfactory restoration of the work area according to local user needs.

In some cases, the learner may still be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Identify reinstatement procedures for materials, equipment, tools and resources
	K1.2 Identify storage locations for materials, equipment, tools and resources
	K1.3 Describe safe handling techniques
	K1.4 Describe correct labelling and storage procedures
	K1.5 Describe disposal and recycling of materials in accordance with environmental procedures
	K1.6 Describe quarantine procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
	K1.7 Explain storage documentation as required
	K1.8 Describe restoration and reinstatement of the work area
	K1.9 Explain related documentation for completion of reinstatement
	K1.10 Deal promptly and effectively with problems and report those that cannot be solved
LO2 Understand health and safety legislation, regulations and safe working practices and procedures	K2.1 Explain the requirements of health and safety legislation
	K2.2 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes
	K2.3 Describe the hazards and risks that can arise from preparing work materials
	K2.4 Describe reporting lines and procedures
	K2.5 Explain the impact and related actions of local procedures and guidance
LO3 Understand reinstatement procedures and health and safety regulations	K3.1 Explain reinstatement procedure and actions to be taken
	K3.2 Describe specific requirements on how to restore the work area
	K3.3 Explain the importance of good housekeeping standards
	K3.4 Explain the correct storage of materials, tools, equipment and resources for future use
	K3.5 Describe health and safety requirements for waste disposal and segregation in relation to environmental regulations

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LO4 Work safely and minimise risk at all times	S4.1 Identify a range of hazards
	S4.2 Take appropriate action to minimise the risk from hazards
	S4.3 Refer safety related matters to appropriate persons as required
	S4.4 Work in accordance with relevant sections of the Health and Safety at Work Act and its associated regulations
	S4.5 Work in accordance with the requirements of risk assessments and permit to work systems

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Assessment criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**SAEC-08S Conduct basic marking out of materials in engineering construction**	
Qualifications Scotland Accreditation unit code: **UT06 04**	SCQF level: **5**	Credit value: **8**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from NOS IPSPF-09S and NOS ECIIPSP09**	

Unit purpose and aim

This unit has been designed to assess learner competence in being able to conduct basic marking out of materials in engineering activities in the engineering construction industry.

In the context of this unit, responsibility is limited to working within detailed specifications and clearly defined procedures. In some cases, the learner may still be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions within the limits of their responsibility.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Explain the requirements of health and safety legislation
	K1.2 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes
	K1.3 Describe the hazards and risks that can arise from preparing work materials
	K1.4 Describe reporting lines and procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO2 Understand work area and equipment preparation and reinstatement requirements marking out to the required specification	K2.1 Describe methods and requirements for preparation and reinstatement work area and equipment
	K2.2 Explain the consequences of incorrectly preparing or reinstating the work area, materials and equipment
	K2.3 Describe the types of equipment used for marking out activities and explain the care and control procedures
LO3 Understand the terminology, techniques and practices for marking out to the required specification	K3.1 Explain the principles, uses and conventions of engineering drawings and related specifications
	K3.2 Describe geometric marking out methods and techniques
	K3.3 Describe surface preparation requirements
	K3.4 Describe tools, methods and techniques of marking out
	K3.5 Explain geometrical construction methods
	K3.6 Explain reporting documentation and control procedures
LO4 Work safely and minimise risk at all times	S4.1 Identify a range of hazards
	S4.2 Take appropriate action to minimise the risk from hazards
	S4.3 Refer safety related matters to appropriate persons as required
	S4.4 Work in accordance with relevant sections of the Health and Safety at Work Act and its associated regulations
	S4.5 Work in accordance with the requirements of risk assessments and permit to work systems

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LO5 Prepare work area, materials and equipment	S5.1 Ensure that the work environment is suitable for the work activities to be undertaken
	S5.2 Ensure that service supplies are connected and ready for use
	S5.3 Ensure that consumables are as specified and fit for purpose
	S5.4 Obtain and prepare the appropriate tools and equipment and ensure they are in a safe and usable condition
	S5.5 Ensure the materials are prepared to the required procedure
	S5.6 Ensure completion of preparations is in line with organisational procedures
LO6 Mark out to the required specification	S6.1 Identify and verify the correct drawings and specifications for marking out
	S6.2 Interpret marking out information from drawings and specifications
	S6.3 **Select correct marking out tools and equipment to conduct marking out**
	S6.4 **Prepare suitable datum and marking out surfaces**
	S6.5 **Mark out using approved methods**
	S6.6 **Check the marking out complies with the drawings and specification**
	S6.7 Deal promptly and effectively with problems and report those that cannot be solved
LO7 Carry out the necessary actions after marking out to the required specification	S7.1 Seek confirmation that the marking out operation is complete and complies with specification
	S7.2 Reinstate the work area to a safe condition and correctly dispose of waste materials

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Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Assessment criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. **Mandatory workplace observation is required for Assessment Criteria S6.3, S6.4, S6.5 and S6.6 which may take the form of an expert witness testimony supported by photographic and/or video evidence.** Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**SAEC-09S Conduct basic shaping activities by material removal using hand tools**	
Qualifications Scotland Accreditation unit code: **UT07 04**	SCQF level: **5**	Credit value: **17**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from NOS SAEC09 and NOS ECISAEC09**	

Unit purpose and aim

This unit has been designed to assess learner competence in being able to conduct basic shaping activities by material removal using hand tools in engineering activities in the engineering construction industry.

In the context of this unit, responsibility is limited to working within agreed specifications and following clearly defined procedures with regard to the storage of resources but allows discretion to achieve satisfactory restoration of the work area according to local user needs. In some cases, the learner may still be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Explain the requirements of health and safety legislation
	K1.2 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes
	K1.3 Describe the hazards and risks that can arise from shaping operations
	K1.4 Describe reporting lines and procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO2 Understand work area, material and equipment preparation and reinstatement requirements for shaping components by material removal using hand tools	K2.1 Describe methods and requirements for preparation and reinstatement work area, material and equipment
	K2.2 Explain the consequences of incorrectly preparing or reinstating the work area, materials and equipment
	K2.3 Describe the types of tools and equipment used and explain the care and control procedures
	K2.4 Explain material segregation and preparation and finishing methods
LO3 Understand the tools, terminology, techniques and practices for shaping components by material removal using hand tools	K3.1 Describe the equipment, methods and techniques necessary to carry out shaping components
	K3.2 Describe types and applications of hand tools
	K3.3 Describe tool and equipment control
	K3.4 Describe quality checks and consequences of incorrect actions
LO4 Work safely and minimise risk at all times	S4.1 Identify a range of hazards
	S4.2 Take appropriate actions to minimise the risk from hazards
	S4.3 Refer safety related matters to appropriate persons as required
	S4.4 Work in accordance with relevant sections of the Health and Safety at Work Act and its associated regulations
	S4.5 Work in accordance with the requirements of risk assessments and permit to work systems

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO5 Shape components by material removal using hand tools	S5.1 Confirm relevant requirements for the component to be produced
	S5.2 Follow conventions of engineering drawings and related specifications
	S5.3 **Ensure material to be shaped quality and quantity**
	S5.4 **Shape the materials using appropriate basic methods and techniques**
	S5.5 **Check that the shaping has been completed to the required specification**
	S5.6 Deal promptly and effectively with problems and report those that cannot be solved
	S5.7 Seek confirmation that the marking out operation is complete and complies with specification
LO6 Carry out the necessary actions after completing shaping components by material removal using hand tools	S6.1 Conduct foreign material exclusion
	S6.2 Reinstate the work area to a safe condition and correctly dispose of waste materials

Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Assessment criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. **Mandatory workplace observation is required for Assessment Criteria S5.3, S5.4, & S5.5** which may take the form of an expert witness testimony supported by photographic and/or video evidence. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**SAEC-13S Support welding operations in engineering construction**		
Qualifications Scotland Accreditation unit code:	**UT48 04**	SCQF level: **5**	Credit value: **8**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from NOS ECISAEC13**		

Unit purpose and aim

This unit has been designed to assess learner competence in being able to support welding activities in the engineering construction industry.

In the context of this unit, responsibility is limited to working within agreed specifications and following clearly defined procedures with regard to the storage of resources but allows discretion to achieve satisfactory restoration of the work area according to local user needs. In some cases, the learner may still be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Explain the requirements of health and safety legislation
	K1.2 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes
	K1.3 Describe the hazards and risks that can arise from positioning and installation operations
	K1.4 Describe reporting lines and procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO2 Understand work area, material and equipment preparation and reinstatement requirements for welding operations	K2.1 Describe methods and requirements for preparation and reinstatement work area, material and equipment
	K2.2 Explain the consequences of incorrectly preparing or reinstating the work area, materials and equipment
LO3 Understand the tools, terminology, techniques and practices for welding operations	K3.1 Explain the principles of common welding processes, plant and equipment
	K3.2 Explain the requirements for pre and post heat treatment
	K3.3 Describe identification of the range of gasses required for specific processes
	K3.4 Describe how to apply the related control procedures for consumables for specific processes
	K3.5 Describe the identification and different types of consumables
	K3.6 Describe how to store and handle consumables
	K3.7 Describe the correct disposal of consumables after welding activities
	K3.8 Explain cable management and inspection procedures
	K3.9 Describe equipment handling and setting up methods for specific processes
	K3.10 Describe the types of tools and equipment used for welding operations
LO4 Work safely and minimise risk at all times	S4.1 Identify a range of hazards
	S4.2 Take appropriate action to minimise the risk from hazards
	S4.3 Refer safety related matters to appropriate persons as required
	S4.4 Work in accordance with relevant sections of the Health and Safety at Work Act and its associated regulations
	S4.5 Work in accordance with the requirements of risk assessments and permit to work systems

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO5 Prepare work area, materials and equipment	S5.1 Ensure that the work environment is suitable for the work activities to be undertaken
	S5.2 **Follow job instructions with the relevant welding procedure**
	S5.3 **Ensure that consumables, service supplies and ancillary devices are connected and ready for use**
	S5.4 **Obtain and prepare the correct welding equipment**
	S5.5 **Safely handle, transport and connect equipment in the appropriate location**
	S5.6 Ensure that the welding equipment and ancillaries are in a safe location and operating correctly
LO6 Disconnect welding equipment	S6.1 **On completion of welding activities, shut down the equipment and ensure it is in a safe condition.**
	S6.2 **Safely handle, disconnect and store welding equipment, ancillaries and consumables.**
	S6.3 Deal promptly and effectively with problems and report those that cannot be solved.
LO7 Carry out the necessary actions after completing the welding activities	S7.1 Reinstate the work area to a safe condition and correctly dispose of waste materials.

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Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Assessment criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. **Mandatory workplace observation is required for Assessment Criteria S5.2, S5.3, S5.4, S5.5, S6.1 & S6.2** which may take the form of an expert witness testimony supported by photographic and/or video evidence. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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Unit reference and title:	**SAEC-14S Conduct plastic welding in engineering construction**	
Qualifications Scotland Accreditation unit code: **UT08 04**	SCQF level: **5**	Credit value: **10**
Relationship between the unit and relevant NOS or other professional standards or curricula:	**Derived from NOS ECISAEC14**	

Unit purpose and aim

This unit has been designed to assess learner competence in being able to conduct plastic welding activities in the engineering construction industry.

In the context of this unit, responsibility is limited to working within agreed specifications and following clearly defined procedures with regard to the storage of resources but allows discretion to achieve satisfactory restoration of the work area according to local user needs. In some cases, the learner may still be expected to refer to others for final authorisations, even though they remain responsible for identifying and implementing decisions.

Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO1 Understand health and safety legislation, regulations and safe working practices and procedures	K1.1 Explain the requirements of health and safety legislation
	K1.2 Explain the purpose and nature of risk assessments, method statements, and permit to work systems, and the relevance of local procedures and guidance notes
	K1.3 Describe the hazards and risks that can arise from dismantling equipment and systems
	K1.4 Describe reporting lines and procedures

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO2 Understand work area, material and equipment preparation and reinstatement requirements for plastic welding operations	K2.1 Describe methods and requirements for the preparation and reinstatement of the work area, materials and equipment
	K2.2 Explain the consequences of incorrectly preparing or reinstating the work area, materials and equipment
LO3 Understand the tools, terminology, techniques and practices of plastic welding operations	K3.1 Explain the hazards related to plastic welding and the methods of minimising them
	K3.2 Explain the principles and terminology of plastic welding and variety of methods
	K3.3 Describe the control systems of plastic welding machines
	K3.4 Describe how to check material preparation to specification
	K3.5 Explain how to identify different types of consumables and related control procedures
	K3.6 Describe how to store, handle and dispose of plastic welding consumables
	K3.7 Explain how to set up and operate different equipment used for plastic welding
	K3.8 Describe common defects in plastic welding and actions to take if found
	K3.9 Explain the method of plastic welding inspection
LO4 Work safely and minimise risk at all times	S4.1 Identify a range of hazards
	S4.2 Take appropriate action to minimise the risk from hazards
	S4.3 Refer safety related matters to appropriate persons as required
	S4.4 Work in accordance with relevant sections of the Health and Safety at Work Act and its associated regulations
	S4.5 Work in accordance with the requirements of risk assessments and permit to work systems

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Learning outcomes The candidate will:	**Assessment criteria** The candidate can:
LO5 Conduct plastic welding activities	S5.1 Ensure that the work environment is suitable for the work activities to be undertaken
	S5.2 **Follow relevant joining procedures, work instructions and specifications**
	S5.3 **Ensure that materials and joining surfaces are suitable for plastic welding**
	S5.4 **Prepare materials and surfaces to be joined**
	S5.5 **Ensure that the parameters of the welding machine are set as required**
	S5.6 **Carry out and monitor the plastic welding operation**
	S5.7 Ensure that the plastic welded joints are to the correct quality and dimensional accuracy
LO6 Disconnect welding equipment	S6.1 **On completion of welding activities, shut down the equipment and ensure it is in a safe condition**
	S6.2 **Ensure confirmation that the welding activities are completed to the required specification**
	S6.3 Deal promptly and effectively with problems and report those that cannot be solved
LO7 Carry out the necessary actions after completing the welding activities	S7.1 Reinstate the work area to a safe condition and correctly dispose of waste materials

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Assessment requirements or guidance specified by a sector regulatory body
Assessment of this unit will be by occupationally competent assessors approved by an awarding body. They will gather sufficient evidence of competence from work-based activities on suitable engineering construction industry sites or realistic workplace environment. Assessment criteria may be satisfied by observation, questioning, expert witness testimony, professional discussion or any other approved method. **Mandatory workplace observation is required for Assessment Criteria S5.2, S5.3, S5.4, S5.5, S5.6, S6.1 & S6.2** which may take the form of an expert witness testimony supported by photographic and/or video evidence. Further guidance on this ECITB unit can be found in the ECITB Assessment Strategy document.

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