

Resource Guidance

Purpose of this resource guide: The information provides centres with an overview of guidance around the resource and learner support that will be needed for the delivery of the new suite of Construction and Building Services Engineering qualifications in Wales. Please be aware there may be additional requirements to deliver the full apprenticeship.

Stage	Foundation in Construction and Building Services Engineering (Level 2)	Core in Construction or Building Services Engineering (Level 2) (This is for learners who go straight to an apprenticeship)	Progression in Building Services Engineering (Level 2) Optional trade routes	Level 3 Building Services Engineering Optional trade routes	Progression in Construction (Level 2) Optional Trade Routes	Level 3 Construction Optional Trade Routes
Pre delivery Stage	Apply for approval	Apply for approval	Apply for approval	Apply for approval	Apply for approval	Apply for approval
Registering learners	Register learners Select two trade routes	Register learners Select one trade route	Register learners Select one trade route	Register apprentices Select one trade route	Register learners Select one trade route	Register apprentices Select one trade route
Delivery	<p>Deliver qualification content:</p> <ul style="list-style-type: none"> • 6 core units • Two trade routes <p>Deliver and invigilate, externally set and marked, multiple choice health and safety test (details of which are under review)</p> <p>Periodically review learner progress</p>	<p>Deliver qualification content:</p> <ul style="list-style-type: none"> • 6 core units • One trade route <p>Deliver and invigilate, externally set and marked, multiple choice health and safety test (details of which are under review)</p> <p>Periodically review learner progress</p>	<p>Deliver programme content:</p> <ul style="list-style-type: none"> • 4 core units • Trade specific units <p>Periodically review learner progress</p>	<p>Deliver qualification content:</p> <ul style="list-style-type: none"> • Initial employer meeting to identify range of tasks required to meet the industry occupational requirements. • Develop quality assurance check for employer confirmation process. • Periodic reviews of progress and quality checks of evidence. • Final review meeting with employer and confirmation document completion. 	<p>Deliver programme content:</p> <ul style="list-style-type: none"> • 4 core units • Trade specific units <p>Periodically review learner progress</p>	<p>Deliver qualification content:</p> <ul style="list-style-type: none"> • Initial employer meeting to identify range of tasks required to meet the industry occupational requirements. • Develop quality assurance check for employer confirmation process. • Periodic reviews of progress and quality checks of evidence. • Final review meeting with employer and confirmation document completion.

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Employer engagement				<ul style="list-style-type: none"> • Meet with employer to agree the requirements of the work based practical project assessment. • Introduction to task planning and process documentation for the practical project. 		<ul style="list-style-type: none"> • Meet with employer to agree the requirements of the work based practical project assessment. • Introduction to task planning and process documentation for the practical project.
Registering learners	Prepare learner for assessments: <ul style="list-style-type: none"> • Recap • Revision • Assessment technique 	Prepare learner for assessments: <ul style="list-style-type: none"> • Recap • Revision • Assessment technique 	Prepare learner for assessments: <ul style="list-style-type: none"> • Recap • Revision • Assessment technique 	<ul style="list-style-type: none"> • Assessor to initiate task planning and process documentation for the practical project • Assessor Complete and agree task planning with employer. • Complete task planning documentation. • Assessor to complete practical project observation plans 	Prepare learner for assessments: <ul style="list-style-type: none"> • Recap • Revision • Assessment technique 	<ul style="list-style-type: none"> • Assessor to initiate task planning and process documentation for the practical project • Assessor Complete and agree task planning with employer. • Complete task planning documentation. • Assessor to complete practical project observation plans

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Assessment	Manage assessments <ul style="list-style-type: none"> Multiple choice test externally set and externally marked Project externally set internally marked Guided discussion internally assessed 	Manage assessments <ul style="list-style-type: none"> Multiple choice test externally set and externally marked Project externally set internally marked Guided discussion internally assessed 	Manage assessments <ul style="list-style-type: none"> Centre based project (Trade specific) externally set internally marked Multiple choice test externally set and externally marked Guided discussion internally assessed 	Manage assessments <ul style="list-style-type: none"> Practical industry project – internally (employer/provider) set and internally assessed and marked Multiple choice test(s) externally set and externally marked Professional discussion externally assessed 	Manage assessments <ul style="list-style-type: none"> Centre based project (Trade specific) externally set internally marked Multiple choice test externally set and externally marked Guided discussion internally assessed 	Manage assessments <ul style="list-style-type: none"> Practical industry project – internally (employer/provider) set and internally assessed and marked Multiple choice test(s) externally set and externally marked Professional discussion externally assessed
Quality Assurance	IQA the Project, discussion and submit results	IQA the Project, discussion and submit results	IQA the Project, discussion and submit results	IQA the practical industry project and submit results	IQA the Project, discussion and submit results	IQA the practical industry project and submit results
Verifying	Externally verified	Externally verified	Externally verified	Externally verified	Externally verified	Externally verified
Certification	Consortium to Certificate learner	Consortium to Certificate learner	Consortium to Certificate learner	Consortium to Certificate learner	Consortium to Certificate learner	Consortium to Certificate learner

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Resources

Core and Foundation require fully equipped workshops for trade routes:

- Inclusive of tools and equipment providing suitable flexible space for learners to operate in a safe manner.
- Workshops and materials must be available for all required foundation training and assessment or practical activities.
- Typical materials and tools required for chosen pathway trades to enable training and assessment.

Progression Plumbing requires a fully equipped workshop for the trade route:

- Plumbing workshop inclusive of plumbing tools, soldering equipment, benches for typical plumbing installation and maintenance training.
- Bathroom appliances, heating equipment, flexible use of bays/wall space for training.
- Wrenches, pipe bending equipment, screwdrivers, hammers, drills, soldering equipment, adjustable spanners and a selection of consumables.
- Plumbing Bay - 2.4m square simulated assessment bay with live services with isolation points.
- Simulated cloakroom with airing cupboard inclusive of radiator, cylinder, basin, W.C., and combination boiler jig
- Range of typical pipework materials such as copper, plastic, low carbon steel (LCS), and associated fittings.

Progression Electrical requires a fully equipped workshop for the trade route:

- Range of typical wiring systems and equipment for domestic, commercial, and industrial systems.
- Steel wired amour (SWA), PVC/PVC, PVC Singles, MI cable glands, PVC trunking, PVC conduit, steel conduit, steel trunking, cable tray.
- Single phase consumer unit.
- Accessories and components including clips, cleats, and fixings.
- Bays with ceiling or joists (or similar) to enable fixing of PVC conduit.

Construction apprenticeship:

- Fully equipped workshops with a comprehensive range of hand and portable power tools that meet current industry standards.
- Centres will have designated cubicles or project areas supporting practical training of the skills, and the techniques the candidate needs to learn to complete the project in their chosen trade area and pathway.

Workshop Resources General

The workshop equipment, systems and machinery must meet current industrial standards and be capable of being used under normal working conditions. The workshop should be adequate in size for the number of candidates and not constitute a hazard to health and safety whilst practical task activities are being carried out. Full details of the workshop, material and equipment requirements will be issued through sector specific guidance documents.

Workshop equipment and positioning

The approved centre must ensure resources enable all the practical assignments to be completed including:

- Material & fittings
- Protective equipment (to a commercially acceptable standard)
- Tools and equipment
- Electrical supplies (where required) these must be 110V where possible, lockable with emergency stops and meet requirements of the centres own risk assessments

Benches and fixed equipment should be positioned to provide a clear and unobstructed working area, which will permit easy access in case of emergency. A passageway of one metre minimum width should be maintained between rows of benches; but where persons are working back to back between benches the space should not be less than 1.5 metres.

Storage facilities

The materials store should be adjacent to the workshop. This must be suitably fitted out with shelving and racks so tools and materials are stored in a safe and organised manner with adequate stock available and in good condition.

Note:

Centres using flammable liquids and low-pressure gases must take account of the special requirements needed to store these items safely.

Storage facilities

- **Induction** – A full health & safety induction needs to be provided by the centre prior to commencing practical activities (either training or assessment) in the practical workshop.
- **Personal Protective Equipment (PPE)** – Adequate and appropriate PPE must be supplied by the centre to staff and learners in line with risk assessments and method statements
- **Risk assessments/Method statements** – Up to date and sufficient risk assessments and method statements to permit safe working on the full range of practical assignments.
- **Statutory notices** – All necessary statutory and advisory notices are prominently displayed by the centre adjacent to items/locations to which they refer.
- **Safety equipment** – Safety guards shall be fitted and used on all workshop machines.
- **Trained First Aiders/Responsible persons** – Should always be readily available when learners are present in the workshop. The name(s) and location(s) of the first aider or responsible person should be prominently displayed in the workshop area.
- **First aid boxes** – These must be provided in the workshop and their contents should comply with the Health and Safety at Work legislation requirements and the current Standards.
- **Fire exits** – Adequate provision must be made to allow occupants of the workshop to escape in the case of fire.

Classroom facilities

An appropriate classroom with adequate seating and spacing suitable for theory delivery will be required for academic learning.

Appropriate research material

Access to the full range of building regulations, legislative and approved documents referred to in the range of delivery. This can be made available in hard copy or online.

IT Equipment

Appropriate IT equipment to enable access to the internet for research purposes and the availability of resources for word process relevant work

Assessor requirements

Assessors of these qualification must:

- be occupationally competent; this means that each assessor must be capable of carrying out the full requirements of the area they are assessing to at least the same level. Occupational competence means that they are also occupationally knowledgeable. This could be verified by a combination of:
 - Curriculum vitae and employer endorsements or references.
 - Possession of a relevant NVQ/SVQ, or vocationally related qualification.
 - Membership of, or recognition by, a relevant professional body
- maintain their occupational competence through relevant and clearly demonstrable continuing learning and professional development
- hold or be working towards the current Assessor qualifications, i.e.
 - Level 3 Award in Assessing Competence in the Work Environment or
 - hold the A1 Assessors Award or D32/33 units

Where assessors have legacy assessor qualifications such as A1 assessors award, they must demonstrate that they are assessing in line with current assessment standards. City & Guilds/EAL also accept alternative nationally accredited assessor qualifications.

When working towards an assessor qualification there must be a countersigning arrangement in place from a qualified assessor from the same or related occupational area.

The centre must provide City & Guilds/EAL with the details of personnel who they plan to undertake Internal Quality Assurance, so they can be approved prior to carrying out this role. Prior to the first assessments taking place, Internal Quality Assurer's (IQAs) must also access City & Guilds/EAL email updates. This is to ensure the reliability of assessment at centres over time. It is advised that personnel sign up to be notified of updates by email via the [skillsforwales.wales](https://www.skillsforwales.wales) website.

IQAs

IQAs must

- prepare for and participate in relevant City & Guilds/EAL meetings and events, such as induction, Continuing Professional Development (CPD)/training and standardisation events, and monitor assessor action/improvement plans are achieved, within agreed timescales and to the required standards.
- have a minimum level of occupational experience evidenced by having a building services engineering/construction related qualification or proven sector competence/experience at least equivalent to the level of the qualification, to enable them to conduct their role as an IQA. This evidence is quality assured by City & Guilds/EAL.
- be working towards, or have achieved, a relevant recognised Internal Quality Assurance qualification such as the Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practice and continue to practice to that standard. IQAs who hold earlier qualifications (V1 or D34) must demonstrate CPD evidence to the most current industry standards.
- be able to demonstrate evidence of being up to date with the relevant trade/industry. This can be evidenced for example by either accessing trade publications, undertaking courses of learning, attending networking events relevant to this qualification and/or attending industry events.

The IQA has a pivotal role in ensuring that centre marked assessment is standardised. They should work with assessors to ensure that the correct procedures are always being followed and ensure that assessment decisions taken by different assessors are consistent, fair and reliable.

Key activities may include:

- meeting with assessors (individually and collectively) throughout the course to discuss quality assurance and standardisation issues and provide support and guidance where needed,
- observing assessors and giving them feedback to help improve their assessment technique,
- sampling evidence across different cohorts to ensure that appropriate standards have been met,
- arranging cross-marking of assessments to compare results and agree benchmarks in line with the City & Guilds/EAL training.

City & Guilds/EAL will provide guidance to centre IQAs throughout the introduction of the new suite of qualifications.

Further details available in the qualification handbooks

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