



Overview of Construction and Building Services Engineering Qualifications in Wales

It's estimated that there are **13,000 companies** working in the sector, employing more than **130,000 people** and contributing **6.5%** of the **country's Gross Value Added.**

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Introduction to building the future

Construction and the built environment is one of the most important employment sectors in Wales.

It's estimated that there are 13,000 companies working in the sector, employing more than 130,000 people and contributing 6.5% of the country's Gross Value Added.

That's why Qualifications Wales chose it for a major review of the qualifications available in the industry.

Vocational qualifications, including those for construction and the built environment, make up 90% of the regulated qualifications available in Wales. As such, they need to reflect the skills that employers need.

The review aimed to assess the qualifications available in the sector and decide whether they needed to be changed in any way. A large part of this work involved meeting and talking with both large and small scale employers across Wales, as well as those teaching the qualifications in schools and colleges, to find out what they need.

We want to thank all our sector stakeholders for the support they have provided through the sector review and the part they are playing in helping guide these qualifications to meet the needs of employers, learners and delivery centres across Wales.

Particular thanks go to the British Association of Construction Heads and the Stakeholder Advisory Group for their careful steering and wise guidance, which we are most grateful for.





Introduction to the qualifications

Qualifications Wales has laid the foundation for the future of the industry by appointing City & Guilds and EAL to collaborate on the development of a new suite of fundable Construction and Building Services Engineering qualifications in Wales. We offer a variety of trades, all of which provide the opportunity to progress in the Construction and Building Services Engineering sector.

These qualifications strive to be future-proof as they incorporate skills that the sector needs now and in the future. The new qualifications will start to help to simplify the complex landscape of more than 400 qualifications available in the sector.

Career choices

Learners doing these qualifications will be introduced to occupations such as plasterer, electrician, bricklayer, plumber, tiler, architectural joiner, and site carpenter, they will have the opportunity to become knowledgeable about the future trends of smart home technologies and sustainable construction, like solar panels and zero carbon buildings. Sought after traditional skills and techniques used on heritage buildings have been included in these qualifications to plug much needed skills gaps and open up more options for those starting on their career in this varied and exciting industry.

Who are the qualifications for?

They are suitable for:

- anyone aged 16+ currently working in or intending to work in the construction and building services engineering sector

Entry requirements

There are no formal English and maths entry requirements for these qualifications, but it is expected that learners will have a good basic understanding of English and maths. It is recommended learners develop further formal English and maths skills, such as Essential Skills or GCSE's to support successful progression with the programme.



The qualifications - in summary

First teaching from September 2021

→ Foundation in Construction and Building Services Engineering (Level 2)

- Working with brick, block and stone
- Wood occupations
- Decorative finishing and industrial painting
- Plastering and interior systems
- Plumbing, heating and ventilation
- Roofing occupations
- Wall and floor tiling
- Electrotechnical systems and equipment
- Construction and civil engineering occupations
- Plant operations

→ Progression in Construction (Level 2)

- Bricklaying
- Architectural Joinery
- Site Carpentry
- Timber frame erection
- Painting and decorating
- Solid Plastering
- Roof Slater and Tiler
- Dry Lining – Fixing
- Construction Operations – Groundworks

→ Progression in Building Services Engineering (Level 2)

- Electrotechnical Systems and Equipment: Installation
- Plumbing and Heating

First teaching from September 2022

→ Level 3 Construction (Taken as part of an apprenticeship)

- Bricklaying
- Architectural joinery
- Site carpentry
- Timber frame erection
- Painting and decorating
- Wall and floor tiling
- Plastering
- Roof slating and tiling
- Plant operations
- Dry lining
- Civil operations - groundwork

→ Level 3 Building Services Engineering (Taken as part of an apprenticeship)

- Heating and Ventilating Installation
- Heating and Ventilating Craftsperson
- Plumbing and Heating
- Electrotechnical Installation

Benefits for providers and learners taking these qualifications:

- The qualifications will give learners the skills that employers are looking for, to make them more employable
- Providers and learners will have resources to support them through the course to help them develop the skills the qualifications require
- As learners move through the framework of qualifications, they adopt a streamlined approach to assessment to reduce assessment duplication
- There are clear progression routes so learners can picture their path onto further study or into employment
- Learners will have the choice of bilingual (English and Welsh) learning resources, and assessments



The qualifications - progression

Vocational options start with a Foundation in Construction and Building Services Engineering (Level 2) qualification. This qualification includes two trade areas of interest and employability skills.

Once achieved, learners can move onto a Level 3 trade specialism with their employer as part of an apprenticeship, or take the Progression Qualification to strengthen their chosen trade skill.

	2021	2022	2023	2024
Option A Complete one year in full time learning before securing an apprenticeship	Foundation in Construction and Building Services Engineering	Level 3 Construction in your chosen trade (Qualification taken as part of an apprenticeship)		
		Level 3 Building Services Engineering in your chosen trade (Qualification taken as part of an apprenticeship)		
Option B Complete two years in full time learning before securing an apprenticeship	Foundation in Construction and Building Services Engineering	Progression qualification	Level 3 Construction in your chosen trade specialism (Qualification taken as part of an apprenticeship)	
	Broad level 1	Foundation in Construction and Building Services Engineering	Level 3 Building Services Engineering in your chosen trade specialism (Qualification taken as part of an apprenticeship)	
Option C Direct entry on to an apprenticeship from Sept 2022	Core qualification and Level 3 Construction or Level 3 Building Services Engineering in your chosen trade (Qualification taken as part of an apprenticeship)			

Apprenticeship length

The length of an apprenticeship programme can vary depending on the chosen trade.

“We are confident that these new qualifications will give learners and apprentices a strong set of skills that are both relevant and current.”

**Ifan Glyn, Senior Hub Director / Wales Director,
Federation of Master Builders**

“This is a great opportunity for industry in Wales. The qualifications are not just fit for now but also have an eye on future generations and the future progression of our industry. They meet the needs and wishes of the employers in Wales.”

Leigh Hughes, CSR Director, Bouygues UK



Foundation in Construction and Building Services Engineering (Level 2)

Qualification overview

The Foundation in Construction and Building Services Engineering qualification provides a broad introduction to construction and the built environment and develops knowledge and understanding of the sector. It is aimed at anyone age 16+ and has been developed for individuals in full-time further education.

Entry requirements

There are no formal entry requirements, although learners are expected to have a good basic understanding of English and maths.

What does the qualification cover?

Learners will choose a trade area from the units available in construction and BSE and develop their knowledge, skills and understanding for that trade.



Trade units

Learners will choose two trade units to spend additional time learning, which will include planning, performing and evaluating common tasks:

- Working with brick, block and stone
- Wood occupations
- Decorative finishing and industrial painting
- Plastering and interior systems
- Plumbing, heating and ventilation
- Roofing occupations
- Wall and floor tiling
- Electrotechnical systems
- Construction and civil engineering occupations
- Plant operations



Core units

Learners will complete six 'core' units which cover:

- An introduction to the built environment
- Employment and employability skills
- Health and safety

This qualification gives learners an introductory knowledge and understanding of:

- The built environment life cycle, the job roles within it, and the dependencies between people performing those roles
- How to promote and sustain health and safety for oneself and others
- Employability skills relevant to future work

The qualification provides sufficient knowledge to progress into an apprenticeship within the sector of choice of trade.

To achieve employment as a qualified tradesperson, learners would need to achieve a Level 3 qualification as part of an apprenticeship in the trade of their choice.



Progression in Construction (Level 2)

Qualification overview

The Progression in Construction has been developed for individuals working in or intending to work in, the construction sector. It is aimed at anyone who has achieved their Foundation in Construction and Building Service Engineering but does not yet have an apprenticeship.

Entry requirements

There are no formal entry requirements, although learners are expected to have a good basic understanding of English and maths.

What does the qualification cover?

Learners will choose a trade area from the units available in construction and develop their knowledge, skills and understanding for that trade.



Trade units

Learners will focus their time on one trade, choosing from:

- Bricklaying
- Architectural Joinery
- Site Carpentry
- Timber frame erection
- Painting and decorating
- Solid Plastering
- Roof Slater and Tiler
- Dry Lining – Fixing
- Construction Operations – Groundworks



Core units

Learners will also complete three 'core' units which cover:

- Employment
- Employability skills
- General construction practices

The qualification is aimed at furthering skills before starting an apprenticeship.

To become a qualified tradesperson, learners would need to achieve a Level 3 qualification as part of an apprenticeship in their choice of trade.



Progression in Building Services Engineering (Level 2)

Qualification overview

The Progression in Building Services Engineering (Level 2) qualification has been developed for individuals working in or intending to work in, the building services engineering sector. It is aimed at anyone who has achieved their Foundation in Construction and Building Services Engineering (Level 2) qualification, but does not yet have an employer to continue to an Apprenticeship.

Entry requirements

There are no formal entry requirements, although learners are expected to have a good basic understanding of English and maths.

What does the qualification cover?

Learners will choose a trade area from the units available in building services engineering and develop their knowledge, skills and understanding of that trade.



Trade units

Learners will focus their time on one chosen trade, choosing from:

- Electrotechnical Systems and Equipment: Installation
- Plumbing and Heating



Core units

Learners will also complete three 'core' units which cover:

- Employment
- Employability skills
- General construction practices

The qualification is aimed at furthering skills before starting an apprenticeship.

To achieve employment as a qualified tradesperson, learners would need to achieve a Level 3 qualification as part of an apprenticeship in their choice of trade.



Level 3 Construction (Taken as part of an apprenticeship)

Qualification overview

The Level 3 Construction qualifications are taken as part of an apprenticeship. They allow learners to demonstrate the range of their occupational knowledge, skills and understanding in a construction trade of their choice.

Entry requirements

There are no formal entry requirements, although learners are expected to have a good basic understanding of English and maths.

What do the qualifications cover?

Learners choose one specialism in construction and develop their knowledge, skills and understanding for that trade.



Qualifications

The range of qualifications to choose from, include:

- Bricklaying
- Architectural joinery
- Site carpentry
- Timber frame erection
- Painting and decorating
- Wall and floor tiling
- Plastering
- Roof slating and tiling
- Plant operations
- Dry lining
- Civil operations - groundworker



Core units

Learners will also complete two 'core' units covering the construction sector and practice in the sector within Wales.

On completion, the qualification will provide learners with the skills and knowledge required to be capable of working in their chosen trade across the UK.



Level 3 Building Services Engineering (Taken as part of an apprenticeship)

Qualification overview

The Level 3 Construction qualifications are taken as part of an apprenticeship. They allow learners to demonstrate the range of their occupational knowledge, skills and understanding in a construction trade of their choice.

Entry requirements

There are no formal entry requirements, although learners are expected to have a good basic understanding of English and maths.

What do the qualifications cover?

Learners choose one specialism in construction and develop their knowledge, skills and understanding for that trade.



Qualifications

The range of qualifications to choose from, include:

- Heating and Ventilating Installation
- Heating and Ventilating Craftsperson
- Plumbing and Heating
- Electrotechnical Installation



Core units

Learners will also complete two 'core' units covering the building services engineering sector and practice in the sector within Wales.

On completion, the qualification will provide learners with the skills and knowledge required to be capable of working in their chosen trade across the UK.



The qualifications - and related site cards

Qualification	Relevant card(s)
<p>City & Guilds Core in Construction and Building Services Engineering (Level 2) with one of the following trade experiences:</p> <ul style="list-style-type: none">• Working with brick, block and stone• Wood occupations• Plastering and interior systems• Decorative finishing and industrial painting occupations• Roofing occupations• Construction and civil engineering operations• Wall and floor tiling.	<p>Learners who undertake one of these trade experiences when registered on this qualification as part of an apprenticeship framework will be able to achieve a CSCS Apprentice card (subject to successful completion of the CITB HS&E test or approved equivalent).</p>
<p>City & Guilds Progression in Construction (Level 2)</p>	<p>Once registered on this qualification, learners will be able to achieve a CSCS Industry Placement Card (subject to successful completion of the CITB HS&E test or approved equivalent).</p>
<p>City & Guilds Construction (Level 3) – Architectural Joinery</p>	<p>Learners taking this qualification while registered on an apprenticeship will be able to apply for a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>



Qualification	Relevant card(s)
City & Guilds Construction (Level 3) - Site Carpentry	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>
City & Guilds Construction (Level 3) - Timber Frame Erection	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>
City & Guilds Construction (Level 3) - Bricklaying	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>



Qualification	Relevant card(s)
City & Guilds Construction (Level 3) - Painting and Decorating	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>
City & Guilds Construction (Level 3) - Solid Plastering	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>
City & Guilds Construction (Level 3) - Wall and Floor Tiling	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Advanced Craft card.</p>



Qualification	Relevant card(s)
City & Guilds Construction (Level 3) - Dry Lining	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Skilled Worker card.</p>
City & Guilds Construction (Level 3) - Civil Operations: Groundworks	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Skilled Worker card.</p>
City & Guilds Construction (Level 3) - Roof Slating and Tiling	<p>Learners taking this qualification while registered on an apprenticeship will be able to obtain a CSCS Apprentice card.</p> <p>Learners taking this qualification without being registered on an apprenticeship will be able to apply for a CSCS Trainee card (subject to successful completion of the CITB HS&E test or approved equivalent).</p> <p>Following successful completion of the qualification, learners will be able to obtain a CSCS Skilled Worker card.</p>

Get in touch

For more information that includes an overview, suitability, structure, progression and assessment details for each Construction and Building Services Engineering qualification available, please visit skillsforwales.wales/qualifications