

Qualification Description

T Level Technical Qualification in Design, Surveying and Planning for Construction

T Levels are new qualifications that follow GCSEs and are equivalent to three A Levels. T Levels will combine classroom theory and practical learning, and are made up of the following:

- Technical Qualification: the substantial component of your course.
- Industry placement: of at least 315 hours (approximately 45 days) with an employer to make sure you have authentic experience of the workplace.

The Technical Qualification is the main classroom-based element of the T Level. During your two-year course, you will learn the core knowledge that underpins the sector, and you will also develop occupationally specific skills that will allow you to enter skilled employment within a specific occupation.

This T Level Technical Qualification has been developed in collaboration with employers, so the content meets the needs of industry and prepares you for work. It will provide the knowledge and experience needed to open the door to skilled employment, an apprenticeship or higher-level study.

What is the construction industry?

The construction industry is of global importance and worth £90 billion annually in the UK. The impact that the construction industry has on daily life is diverse, from domestic building, maintenance and the provision of key building services, to large projects in civil engineering, providing essential public infrastructure in the form of roads, schools and hospitals.

All careers in construction require good communication skills, time management, a strong customer focus and the ability to work both in teams and with other trades. The skills learned for craft trades lead not only to a rewarding career but can also be used as a foundation from which to progress to advanced craft, technician, supervisory or management occupations, where established professional development routes and occupational standards exist.

Who is this Technical Qualification for?

This Technical Qualification can only be taken as part of a T Level course and is not available as a stand-alone qualification. It is for post-16 students and is ideal if you are intending to progress directly to employment within the construction design, surveying and planning sector in roles such as a Building Services Design Technician, Civil Engineering Technician, or Surveying Technician, to a construction related apprenticeship, or to further studies in construction.

What does the Technical Qualification cover?

The content is split into a core component that has been created for this T Level Technical Qualification in Design, Surveying, and Planning for Construction and a choice of one of four occupational specialisms. The specialisms are:

- Surveying and Design for Construction and the Built Environment
- Civil Engineering
- Building Services Design
- Hazardous Materials Analysis and Surveying.

The core component provides a broad understanding of the construction industry and covers the following topics:

- Health and safety
- Science
- Design
- Construction and the built environment industry
- Sustainability
- Measurement
- Building technology
- Information and data
- Relationship management

- Digital technology
- Project management
- Law

The core component will be assessed by two exams and an employer set project.

Your choice of occupational specialism will allow you to develop the relevant skills in preparation for your career in the construction sector. The occupational specialism is assessed by a project that is created in conjunction with employers. The content covers topics specific to that aspect of the construction sector, as follows:

Surveying and Design for Construction and the Built Environment

- Measuring the built environment
- Analysing the built environment
- Designing the built environment
- Verifying the delivery of the built environment

Civil Engineering

- Analysing civil engineering solutions
- Designing civil engineering solutions
- Verifying the delivery of civil engineering solutions

Building Services Design

- Analysing building services solutions
- Designing building services solutions
- Verifying the delivery of building services solutions

Hazardous Materials Analysis and Surveying

- Inspecting the built environment
- Identifying hazardous materials
- Analysing hazardous materials

As part of this Technical Qualification, you will also enhance your broader skills in literacy and numeracy, which will be valuable in supporting progression in other areas. In addition, you will develop transferable technical and practical skills in communication (working with colleagues, customers and clients), research and project work, providing you with an opportunity to demonstrate your reflective practice by suggesting alternative approaches to a problem.

What could this Technical Qualification lead to?

Achieving this Technical Qualification will provide several progression options. These include:

Skilled employment:

- Construction design, surveying and planning sector roles such as a Building Services Design Technician, Civil Engineering Technician or Surveying Technician.

A Level 3 Apprenticeship in:

- Asbestos Analyst and Surveyor
- Building Services Design Technician
- Civil Engineering Technician
- Construction Support Technician
- Digital Engineering Technician
- Geospatial Survey Technician
- Landscape Technician
- Surveying Technician

Higher level study:

- Higher Technical Qualification (HTQ). Like T Levels, HTQs are developed in consultation with employers. They are qualifications at levels 4 and 5 and prepare you for occupations at these levels.

Pearson HTQs you can progress to from the T Level Technical Qualification in Design, Surveying, and Planning for Construction are:

- Pearson BTEC Higher Nationals in Construction Management for England
- Pearson BTEC Higher Nationals in Modern Methods of Construction for England
- Pearson BTEC Higher Nationals in Architectural Technology for England
- Pearson BTEC Higher Nationals in Quantity Surveying for England

Degree related programmes:

So far, some of the common degree programmes this T Level aids progression onto include:

- Civil Engineering
- Surveying
- Construction Management
- Architecture

Below details some of these routes further.

- Civil Engineering

Civil engineers often started out as curious and inquisitive, always wondering how things work and how to make them better. A strong mathematical and scientific grounding is important for civil engineers, HEIs may have Level 2 or 3 maths entry requirements. Before any industry experience, you'll spend lots of time using models and simulations to understand the principles of engineering.

Civil engineering can be a competitive course because of its high career prospects, so expect to face some steep grade boundaries. If you want to show that you're truly dedicated, you should have further maths and design technology qualifications too.

It's essential that you check entry requirements with universities or colleges.

- Building and surveying

A degree in building or surveying will give you subject-specific skills to appraise buildings, an understanding of the design, construction, performance, and management of buildings, and the legal principles around building and their construction, regulation and management.

Building or surveying graduates are employed in all branches of the construction industry, and in other industries such as electricity generation and supply, oil and gas, transport and property management.

Graduates are more likely than most to start their career with an employer who gave them work experience, so it's particularly worth trying to secure links with industry if you take this degree.

Like Civil Engineering, it is competitive, and HEIs may have additional Level 2 or 3 maths related entry requirements.

It's essential that you check entry requirements with universities or colleges.

Who supports this Technical Qualification?

This Technical Qualification has been developed in collaboration with several stakeholders:

- Arup
- Balfour Beatty
- BAM Nuttall
- Cast Consultancy
- Chartered Institution of Building Services Engineer
- HEMSEC Manufacturing Ltd
- Institution of Civil Engineers
- Kier Group
- London South Bank University
- Lovell Homes Partnership
- Low Carbon Construction
- Portsmouth University
- Royal Institution of Chartered Surveyors
- Structural Timber Association

- TDO Architecture
- Technician Apprenticeship Consortium
- Thames Labs

This qualification has been developed under the advice of the professional bodies listed below, on behalf of the Engineering Council, to confirm that the qualification contributes to the requirements for professional registration; for example, as an Engineering Technician (EngTech) or associate member of their professional organisation. This qualification has been developed under the advice of the professional bodies who were part of our validation panel, including:

- Chartered Institution of Building Services Engineers
- Institution of Civil Engineers
- Royal Institution of Chartered Surveyors.

In addition, the Civil Engineering pathway of the qualification has been formally approved as meeting the Educational Base for the EngTech professional standard by the Institution of Civil Engineers.

Further information

Further information about this Technical Qualification can be accessed at:

<https://qualifications.pearson.com/en/qualifications/t-levels.html>

The T Level Technical Qualification in Legal Services will be approved and managed by the Institute for Apprenticeships and Technical Education. Pearson is currently authorised by the Institute for Apprenticeships and Technical Education to design and deliver the Technical Qualification.

For further information on the other components please see the DfE website at:

www.gov.uk/government/publications/introduction-of-t-levels/introduction-of-t-level

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