

# CONSTRUCTION SITE ENGINEERING TECHNICIAN Apprenticeship Standard

## 1. Occupation(s)

The occupation covered by this standard is Construction Site Engineering technician and typical job titles can include: Assistant Site Engineer, Assistant Engineer, Civil Engineering Technician or Construction Site Technician. In the case of SME construction companies the roles are likely to include Site Engineer, Civil Engineer or Project Engineer. They are associated with the dimensional control and application of engineering solutions on construction projects and are based on construction sites with occasional time in offices.

## 2. Occupational profile

The main duties and tasks of a Construction Site Engineering Technician are:

- Dimensional control of construction projects
- Assisting design teams with civil engineering solutions on construction projects
- Supervision of specialist contractors
- Contribute to the control of health and safety on construction projects
- Recording, control and reporting of progress on a construction project
- Contribute to the minimisation of the environmental impact of construction projects
- Control the quality of works on a construction project

## 3. Requirements: Knowledge, Skills (and behaviours)

Knowledge	What is required
<b>Health and Safety</b>	Understand the principles and responsibilities imposed law and other regulations in a construction environment
<b>Sustainability</b>	Understand the sustainability issues in projects across economic, social and environmental aspects
<b>Engineering Principles</b>	Understand engineering techniques, procedures and methods and the principles of design
<b>Construction Management</b>	Understand management principles and the project management lifecycle
<b>Planning and Organising Work</b>	Understand the importance of project planning and resourcing and be able to analyse different techniques
<b>Monitor Quality</b>	Able to define the quality required on a finished construction project

Skills	What is required
<b>Health and Safety</b>	Identify risk of activities and encourage all employees to demonstrate safety-conscious behaviours
<b>Sustainability</b>	Assess, identify and record the environmental impact of projects
<b>Engineering Solutions</b>	Assist in the implementation of the most appropriate solutions for construction projects
<b>Construction Management</b>	Use effective management principles and be able to supervise construction workers
<b>Planning and Organising Work</b>	Understand overall plan for project and measure and record progress against plan
<b>Monitor Quality</b>	Assess and report on quality standards of finished construction projects

Behaviours	What is required
<b>Professional Judgement</b>	Be able to work within own level of competence and know when to seek advice from others
<b>Commitment to Code of Ethics</b>	Work within Rules and Regulations of Professional Competence and Conduct for the Institution of Civil Engineers
<b>Continuing Professional Development</b>	Identify own development needs and take action to meet those needs. Use own knowledge and expertise to help others when requested.
<b>Commitment to Equality and Diversity</b>	Understand the importance of equality and diversity and demonstrate these attributes so as to meet the requirements of fairness at work.
<b>Communicate Effectively</b>	Be able to contribute effectively to meetings and present information in a variety of ways including oral and written.
<b>Work in Teams</b>	Be able to work with others in a collaborative and non-confrontational way.
<b>Demonstrate Innovation</b>	Be able to identify areas for improvement and suggest innovative solutions.

#### 4. Duration

The typical duration for this Apprenticeship is three years but this will depend upon the previous experience of the apprentice and access to opportunities to gain the full range of competence.

#### 5. Entry requirements

The typical entry requirements for this Apprenticeship will be five GCSEs or equivalent, including Maths, English and a Science; or a Level 2 Apprenticeship.

#### 6. Qualifications

The following qualification will be gained:

- HNC in Civil Engineering

#### 7. English and Maths

English and Maths will be required to be demonstrated at Level 3 by the end of the Apprenticeship.

#### 8. Link to professional registration

This Apprenticeship will include the knowledge, skills and behaviours required to achieve Technician status with the Institution of Civil Engineers (EngTech TMICE). The Technician Professional Review process for EngTech TMICE is included in the end-point assessment process for this Apprenticeship and will lead to the designatory letters EngTech TMICE and the status of Engineering Technician.

#### Level

This Apprenticeship standard is at Level 4.

#### Review date

This Apprenticeship standard should be reviewed three years after approval of the standard.