

# BUILDING SERVICES ENGINEERING TECHNICIAN Apprenticeship Standard

## 1. Occupation(s)

The occupation covered by this standard is Building Services Engineering Technician and typical job titles can include: Assistant Project Engineer, Assistant Engineer or Building Services Site Technician. In the case of SME building services engineering specialist contractors the roles are likely to include Assistant Project Managers, Project Managers and Site Managers. They are associated with the supervision of the installation' commissioning or servicing of environmental technologies on construction projects and are based on construction sites with occasional time in offices.

## 2. Occupational profile

The main duties and tasks of a Building Services Engineering Technician are:

- Supervision of the installation of environmental technologies into buildings
- Assisting design teams with building services engineering solutions on construction projects
- Supervision of specialist contractors
- Control of health and safety on construction projects
- Recording, control and reporting of progress on a construction project
- Minimisation of the environmental impact of construction projects
- Control the quality of works on a construction project
- Ensure compliance with contractual conditions on a 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 building services 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>Project Management</b>	Understand management principles and the project management lifecycle and the contractual conditions on a project
<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 and the commissioning process on a finished building services 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 building services projects
<b>Project Management</b>	Use effective management principles and be able to supervise building services workers, ensuring adherence to contractual conditions
<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 and assist in commissioning of finished

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 Chartered Institution of Building Services 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

Individual employers will determine their own entry requirements, but 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:

A Level 4 qualification in Construction and Built Environment that meets the knowledge requirements of the standard and is approved by the Chartered Institution of Building Services Engineers as meeting the educational requirements for EngTech LCIBSE

#### 7. English and Maths

English and Maths at Level 3 will need to be achieved before taking the end point assessment and will form part of the Level 4 qualification.

#### 8. Link to professional registration

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