

CIVIL ENGINEERING SENIOR TECHNICIAN APPRENTICESHIP STANDARD

Standard Code STO046
Course Level 4
Day Release
Location: Lincoln
Funding Level £11000
Duration 39mths including EPA

Course Description

The occupation covered by this standard is Civil Engineering Senior 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.

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

Off the Job Training

A key requirement of an Apprenticeship is Off-the-job training. This must make up an average of 6 hours per week of the apprentice's working hours, over the total duration of the apprentice's planned training period. Off-the-job training must be directly relevant to the apprenticeship standard and must take place within the apprentice's normal working hours.

The new learning must be documented and reflected on through the Learner Journal on their e-portfolio.

What counts as off the job training?

- Days spent training for the standard at college
- Any training given to the apprentice at work where they are not physically working on the job role (e.g., a manager explains how and why a job is going to be completed before the task has started).

Entry Requirements

A minimum of 48 UCAS Tariff points from the following:

- GCE A and AS Levels with at least one subject at A Level.
- BTEC National (Diploma or Extended Diploma) in a relevant subject
- Access to HE
- Scottish Higher / Advanced Higher with at least one subject at Advanced Higher.

For mature applicants some experience may be taken in lieu of A Levels / BTECs

5 GCSEs at Grades 4 – 9 including Maths (Grade 5/6), English and Science or their equivalent.

Before a candidate is offered a place on programme, both the candidate and the employer will be assessed to make sure they're suitable to undertake the apprenticeship. The apprentice will need to meet academic entry requirements and the employer must be able to offer the apprentice the range of work required to enable the candidate to gather sufficient evidence throughout the course.

Once they have been accepted on to the programme all apprentices will be required to attend a Lincoln College Induction. Apprentices will require access to a tablet/computer to access their e-portfolio.

Knowledge, Skills and Behaviours

KNOWLEDGE

Health & Safety

- Understand the principles and responsibilities imposed law and other regulations in a construction environment.

Sustainability

- Understand the sustainability issues in projects across economic, social and environmental aspects.

Engineering Principles

- Understand engineering techniques, procedures and methods and the principles of design.

Construction Management

- Understand management principles and the project management lifecycle.

Planning and Organising Work

- Understand the importance of project planning and resourcing and be able to analyse different techniques.

Monitor Quality

- Able to define the quality required on a finished construction project.

SKILLS

Health and Safety

- Identify risk of activities and encourage all employees to demonstrate safety-conscious behaviours.

Sustainability

- Assess, identify and record the environmental impact of projects.

Engineering Solutions

- Assist in the implementation of the most appropriate solutions for construction projects.

Construction Management

- Use effective management principles and be able to supervise construction workers.

Planning and Organisation Work

- Understand overall plan for project and measure and record progress against plan.

Monitor Quality

Assess and report on quality standards of finished construction projects.

BEHAVIOURS

Professional Judgement

- Be able to work within own level of competence and know when to seek advice from others.

Commitment to Code of Ethics

- Work within Rules and Regulations of Professional Competence and Conduct for the Institution of Civil Engineers.

Continuing Professional Development

- Identify own development needs and take action to meet those needs. Use own knowledge and expertise to help others when requested.

Commitment to Equality and Diversity

Understand the importance of equality and diversity and demonstrate these attributes so as to meet the requirements of fairness at work.

Communicate Effectively

- Be able to contribute effectively to meetings and present information in a variety of ways including oral and written.

Work in Teams

- Be able to work with others in a collaborative and non-confrontational way.

Demonstrate Innovation

- Be able to identify areas for improvement and suggest innovative solutions.

Assessment

Assessment is done through a combination of practical tasks, written assignments, oral discussions and online tests throughout the programme. To ensure that we can support you to meet these, we will complete an in-depth initial skills analysis to ensure that we can tailor our delivery to meet these unique requirements. We will then use the most relevant delivery methods to support your learners which include:

- One to one coaching from a dedicated, professional assessor/instructor allocated to the learner for the duration of the programme.
- Work based assignments and projects to be completed in an e-portfolio.
- Job shadowing and mentoring.
- Review of progress every 4 – 10 weeks.
- Employer led in house training.
- Independent learning and research as directed by the assessor/instructor.

End Point Assessment

The end point assessment will be in two stages and typically undertaken in the last two months of the apprenticeship:

Stage 1 – is the preparation for the presentation and structured interview. It will consist of: -
A project which will test the apprentice's ability to integrate the knowledge, skills and

behaviours acquired during the apprenticeship by developing a response to a technical brief set by the assessment organisation, with a number of options and a rationale for the choice of one as the optimum solution - A written report of 1500-1600 words which demonstrates how, in the course of their apprenticeship, the apprentice has integrated the knowledge, skills and behaviours to be a competent Construction Site Engineering Technician. The report is verified by a professionally qualified engineer and will be used to inform the structured interview

Stage 2 – is the face to face stage which will consist of: - A 10 minute presentation by the apprentice to the Assessor Panel showcasing their response to the project brief. This will be followed by 10-15 minutes of questions and discussion. - A 30-40 minute structured interview based on the written report submitted prior to the interview, the purpose being to determine the apprentice's ability to integrate the knowledge, skills and behaviours acquired during the apprenticeship.

To be successful the apprentice must pass the Presentation and Structured Interview. The presentation is supported by a technical project brief which will be graded as part of this assessment method. The structured interview is informed by a written report, which will also be graded as part of this assessment method. The assessment will satisfy the requirements for registration as an Engineering Technician by the Engineering Council. The Assessor Panel will consist of two experienced, qualified and trained Civil Engineers nominated by the relevant End-point assessment organisation (EPAO). Benchmarking the EPA against the Engineering Council UK-SPEC requirements for EngTech means that the assessment outcomes will be consistent and reliable, allowing a fair and proper comparison between apprentices employed across the UK in different types and sizes of organisations

Qualifications

Apprentices will complete a BTEC Level 4 Higher National Certificate in Construction and the Built Environment: 603/0465 (Civil Engineering) qualification.

Progression

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

Fees

As an Apprentice, you will pay no course fees. However, your employer may have to pay towards your training as well as providing you with a wage. All Apprentices are entitled to the national minimum apprentice wage within their first year of training from their employer, although they can, and often do, pay more. In the second and subsequent years

of an Apprenticeship programme, if you are aged 19 or over, the national minimum wage for your age would apply [<https://www.gov.uk/national-minimum-wage-rates>]

If you are an employer and want to find out more information regarding employer contributions and any further costs related to the Apprenticeship programme, please contact our dedicated Apprenticeship team at employers@lincolncollege.ac.uk

Business Benefits

Employers have designed the Apprenticeship Standards to meet the needs of the sector and industry. Ensuring they include:

- Relevant Knowledge, skills and behaviours ensure that the Standard is relevant to the occupation.
- Widening participation Apprenticeship standards provide opportunities to employees that may not previously have been available.
- Development tools A cost effective way to train your employees to undertake specific roles in your business.
- Return on Investment On average, an apprentice who has completed their course will increase business productivity by £214 per week (CEBR, 2015).

Key Contacts

For further information or to arrange a face to face visit, please contact a member of the Construction Apprenticeships team using the details below;

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