

# CIVIL ENGINEERING SENIOR TECHNICIAN (ST0046)

Civil engineering senior technicians coordinate, manage and provide the technical planning, design, building, management, maintenance or dismantling of the built environment and infrastructure, by using and applying their advanced engineering knowledge and technical know-how to prepare, analyse, produce and produce plans, designs and documentation, and to manage civil engineering tasks and their associated resources, to relevant codes of practice, and to industry and statutory standards.

## Core duties involve:

- **Civil Engineering** – Use and apply their technical knowledge, underpinned by scientific principles and theories, propose numerous suitable techniques, procedures, and methods to undertake and deliver civil engineering solutions.
- **Information and data analysis** – Sourcing, reviewing, analysing, and evaluating a range of data and information, perform advanced calculations, and analysing civil engineering problems to reach proven solutions.
- **Communication** – Using digital technologies, such as CAD and BIM, to prepare, produce and present civil engineering information, designs and documentation to specifications, and to industry codes, practices and regulations.
- **Environmental impact and sustainability** – Consider the whole life cycle of a built asset, ensuring building

service engineering systems and projects align with United Nations Sustainable Development Goals (UNSDG), respond to net-zero emissions targets and are compliant with climate change acts, and environmental and sustainability policies and legislation.

## Key elements include:

- Working independently and as a member of a team.
- Informing and managing tasks, team members and resources within their allocation.
- Supervising and mentoring others (where appropriate)
- Applying appropriate project management knowledge and techniques.
- Ensuring safe systems of work are applied and risks mitigated.
- Using quality management and assurance systems, contributing to more complex projects.
- Working to improve the environmental, sustainability challenges, ethical conduct, and equality, diversity and inclusion.
- Carrying out and maintaining competence in line with professional codes of conduct.

## Approved training providers:



## Professionally recognised by:



## CIVIL ENGINEERING SENIOR TECHNICIAN (ST0091)

### Training programme:

- 30-month training plan.
- Entry with good A-levels (including Maths), BTEC in Civil Engineering, or completion of the level 3 Civil Engineering Technician apprenticeship typically sought.
- Minimum 20% off the job training including completion of:
  - A mandatory Level 4 qualification in Construction and Built Environment that meets the level 4 EngTech knowledge requirements and is approved by the Engineering Council.
  - Portfolio of evidence prior to EPA.
- Development of EngTech competence supported by on the job mentors.

**Funding band assigned:** £11,000 (increased from £9,000 in July 2022).

#### Additional costs:

- Providers may charge employers above the funding band
- Professional membership and Engineering Council registration fees (optional).

**Reviewed and re-approved:** Reapproved July 2022;  
First approved: March 2018.

**Employers involved:** Adept Consulting, Aecom, Anderson Group, Arcadis, Arup, Balfour Beatty, BDP, Capita, Cormac, Clancy, Cormac, Curtins, East Riding of Yorkshire Council, EDF, Laing O'Rourke, Morgan Sindall,

### Four month EPA:

- Mandatory 4-month EPA to complete apprenticeship.
- EPA Gateway requires successful completion of training programme, qualification and portfolio.
- EPA includes:
  - Project set by EPA organisation.
  - Professional Interview with portfolio.
- Grades: distinction/pass/fail.
- Aligned to EngTech professional review process with ICE, CIHT, IStructE, IHE, PWI, CABE and now recognition via CIOB also available.
- Registered End Point Assessment Organisation: ICE

Mott MacDonald, Pell Fischmann, Skanska, Stantec, Systra, Tony Gee & Partners (Chair), TFL, Tideway, Wiltshire Council, WSP.

**Others involved:** Pearson, CABE, CIOB, Institution of Civil Engineers (ICE)\*, Chartered Institution of Highways and Transportation, East Surrey College, Institute of Highways Engineers, Institution of Structural Engineers, Leeds College of Building, Solihull College and University Centre, London South Bank University, Exeter University, Civil Engineering Contractors Association (CECA), Permanent Way Institution, National Skills Academy for Rail (NSAR).

\*advised EPA organisations