

RAILWAY ENGINEERING DESIGN TECHNICIAN (ST0315)

Railway engineering design technicians prepare and produce railway engineering designs and provide technical support to their employer when they are planning the construction or maintenance of new or existing rail infrastructure or rail systems.

Core duties involve:

- **Railway Engineering** – Understanding and applying core engineering and mathematical principles and techniques to assist in the development of technical railway engineering solutions.
- **Information and data analysis** – Collecting, interpreting and analysing information, which contribute to technical to railway engineering solutions.
- **Communication** – Using digital technologies, such as CAD and BIM, to prepare and produce engineering drawings to specifications, and to industry codes, practices and regulations. Supporting in the development and presentation of reports.

Key elements include:

- Working independently and as a member of a team.
- Ensuring safe systems of work are applied and risks mitigated.
- Using quality management and assurance systems to proactively plan, manage and contribute to 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:



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Training programme:

- 30 month training programme.
- Entry with good GCSEs including Maths and English typically sought.
- Minimum 20% off the job training including completion of:
 - One of 5 mandatory knowledge (BTEC) qualification
 - For ICE route, development of competence via Pearson's Diploma in Civil Engineering for Technicians (Institution of Civil Engineers).
 - portfolio of evidence prior to EPA.
- Development of EngTech competence supported by on the job mentors.

Four month EPA:

- Mandatory four month End Point Assessment (EPA) to complete apprenticeship.
- EPA Gateway requires successful completion of training programme 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, IET and PWI.
- Registered End Point Assessment Organisations: ICE or IET.

Funding band assigned: £18,000.

Additional costs:

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

Reviewed and Re-approved: Re-approved in August 2020.

Employers involved: TAecom, AGH Engineering, Arcadis, Arup, Atkins, Jacobs, Siemens, Systra, Tony Gee and Partners, TFL, WSP.

Others involved: Institution of Civil Engineers (ICE)*, Institution of Engineering technology (IET)*, Pearson, Permanent Way Institution (PWI), Stegta.

*advised EPA organisations