

Structural Engineer

Location	Bristol
Employment type	Full-time
Business area	Nuclear
Salary	Competitive depending on experience

About Setec Consulting Engineers

Setec Consulting Engineers is a UK-based multidisciplinary engineering consultancy delivering complex, high-impact infrastructure across energy, transport, water and the built environment. We provide civil, structural and geotechnical design, safety analysis and project management services for UK nuclear projects.

Our engineers work on complex, highly regulated programmes and develop practical, low-carbon solutions that support safe delivery, climate resilience and long-term value for clients and communities.

Role purpose

We are seeking a Senior Structural Engineer to support Nuclear New Build projects, with a particular focus on Nuclear Island buildings at Hinkley Point C, Sizewell C and comparable projects. The role combines advanced structural analysis and design with technical coordination, delivery leadership and support to construction teams.

You will be accountable for producing and assuring high-quality structural engineering deliverables, coordinating interfaces across an international multidisciplinary team, and helping to ensure that nuclear structures meet applicable safety, quality, programme and technical requirements.

Key responsibilities

- Design and analyse reinforced-concrete and, where required, steel structures for EPR nuclear power plant buildings.
- Prepare and independently check structural calculations and finite-element models using ANSYS APDL or comparable analysis tools.
- Assess structures for relevant design actions, including permanent and variable loads, seismic and dynamic effects, impact loads, environmental actions and temporary conditions associated with the construction sequence.
- Apply relevant design codes, project requirements and nuclear-industry standards, including Eurocodes and ETC-C where applicable.
- Plan and manage assigned engineering activities to meet agreed scope, quality, schedule and budget requirements.
- Produce and review design reports, calculations, drawings, specifications and construction documentation, maintaining clear design records and traceability.
- Contribute to design reviews, technical governance and checking or approval activities in line with delegated authority and project procedures.
- Coordinate the work of engineers and designers across an international, multidisciplinary team, providing clear technical direction and constructive review.
- Work closely with engineering leads, technical direction, BIM coordination, drafting and detailing teams, project management, contractors and site teams.
- Communicate technical matters clearly to both specialist and non-specialist stakeholders and contribute effectively to client and project meetings.

Essential qualifications and experience

- Degree in Civil or Structural Engineering, or an equivalent relevant qualification.
- Substantial experience in the design and analysis of reinforced-concrete structures, supported by a sound understanding of structural behaviour and constructability.
- Experience of detailed design delivery and the transition of engineering information into the construction phase.
- Practical experience of structural finite-element analysis and use of ANSYS APDL or comparable software.
- Working knowledge of Eurocodes and relevant structural engineering standards.
- Ability to produce and review clear, auditable calculations, reports, drawings and specifications.
- Effective communication, coordination and interpersonal skills, with the ability to work across multidisciplinary and multicultural teams.
- Ability to organise engineering tasks, manage priorities and report progress against programme and commercial requirements.

Desirable qualifications and experience

- Master's degree in Civil or Structural Engineering.
- Chartered Engineer status, such as CEng MStructE or CEng MICE, or demonstrable progress towards chartership.
- Experience in the nuclear sector or another highly regulated, safety-critical or heavy-industry environment.
- Knowledge of ETC-C and the structural design requirements applicable to EPR nuclear power plants.

Professional behaviors

- Safety and quality-focused, with sound engineering judgement and attention to detail.
- Proactive, accountable and comfortable taking ownership of technically complex work.
- Collaborative and respectful, with the confidence to challenge constructively and seek alignment.
- Adaptable and willing to develop new capabilities, including innovative approaches to 3D reinforcement modelling and digital delivery.
- Committed to ethical practice, continuous learning and the development of others.

What we offer

- Opportunities to contribute to nationally significant Nuclear New Build projects.
- Complex and technically challenging work within a collaborative, international engineering environment.
- Professional development and support towards chartership and continued technical growth.
- Working in a diverse, inclusive and multi-cultural environment
- A competitive salary with a great benefit pack

Additional information

This role requires security clearance. Any offer of employment will be conditional upon the successful candidate obtaining and maintaining the relevant level of clearance.

Setec Consulting Engineers is committed to providing an inclusive recruitment process. Candidates who require a reasonable adjustment during the application or selection process are encouraged to contact the recruitment team.