

## Senior Engineer

Cake Engineering is a structural engineering consultancy that operates as part of the Cake Industries group. It carries out structural engineering design for external clients in both the public and private sectors, as well as design and engineering work for projects fabricated by Cake Industries.

Cake Industries design, engineer, fabricate and make beautiful things; from sculpture and staircases to bridges and pavilions. Working with the finest materials and taking a design-focused approach to all projects, we work with architects, designers, artists and contractors to bring concepts to life.

We are currently looking for a Senior Engineer to join our growing team at Cake Engineering.

### *Role*

- You will carry out the structural engineering design and drafting of a wide range of complex and interesting projects, including staircases, public sculpture, footbridges and bespoke structures, in conjunction with the design team.
- You will carry out finite element analysis, capacity calculations, and design checking in line with codes and standards for projects for external clients as well as internal projects at Cake Industries.
- You will have an awareness of fabrication with a range of materials and processes, and experience designing thoughtful and buildable solutions of the highest quality.
- You will uphold high standards of production, demonstrating awareness of quality management across varying outputs including reports, drawings and calculations.
- You will engage confidently and competently with our clients, and be responsible for leading the design process for structural engineering projects.
- You will be prepared to mentor younger engineers and designers and develop their design skills through a mentored training scheme.
- You will have a positive attitude and enjoy problem solving within a creative and collaborative environment.
- You will maintain high standards of health and safety in your work, and plan for successful and safe fabrication and installation.
- You will report to the Director for Design & Engineering.

### *Salary*

£39,000-£44,000 per annum, based on experience and competence.

### *Job Type*

A full time salaried package including annual leave and statutory benefits.

### *Location*

London or Cambridge.

This role is expected to be hybrid, with at least two days per week in the office. If preferred, full time office working can be discussed.

### *Essential skills*

- Degree level qualification in Engineering at a university accredited with the IStructE or ICE.
- Chartered member status with either the IStructE or ICE.
- Prior experience in practice as a structural engineer, with more than five years preferred.
- Experience in 3D design, drawing and visual programming using computer geometry packages.
- High level of competence in the use of finite element analysis packages, including for dynamic analysis (time history or response factor assessments).
- Detailed working knowledge of steel and/or timber structural design, including to the relevant Eurocode design norms and execution standards.
- Excellent communication skills, both verbal and in writing.
- Knowledge of running successful projects, including external collaboration at all stages from concept to construction, and ensuring projects are run to budget.
- Exemplary time management and an organised and coherent approach to your work.
- Confidence and competence in using all relevant IT packages.

### *Desirable skills*

- Experience and competence in public speaking, including presenting publicly and to potential clients.
- Experience in the use of Solidworks, and/or Rhino 3D and Grasshopper.
- Confidence in using visual programming (ideally Grasshopper) to handle complex geometry, including generating workflows to create fabrication information.
- Experience with programming in Python
- Experience with the use of Karamba3D and/or GSA/Lusas for finite element analysis
- Experience with the presentation of design information, including modelling, hand sketching and detailed technical drawings.
- Experience in the use of National Highways Design Manual for Roads and Bridges.
- CSCS Card and/or formal health and safety training.

Please submit your CV and a portfolio of previous work including contact details for two references to [info@cakeindustries.com](mailto:info@cakeindustries.com).

Applicants will be selected subject to an interview.

Cake Engineering is an equal opportunities employer, and welcome applications from those who are historically not well represented in the construction industry.