

Composites Engineer – Role Description

About us!

Frewer Engineering is a Small to Medium-sized Enterprise (SME) consultancy working across a broad range of industries. Our work typically includes a combination of detailed design, structural analysis, fluid dynamics and thermal modelling. This role covers our **Composite** capability specifically.

Our mission is to provide **innovative, creative, and sustainable solutions** to complex engineering problems. To help achieve this, we're looking for people that can bring **diverse perspectives and ideas** and as such, we are committed to ensuring that we offer an inclusive environment for all our staff.

Team fit and company culture are paramount in our recruitment process. We are a **dynamic, high-talent, close-knit special projects team. Authentic enthusiasm** for the profession is counted as highly as **academic achievement**.

Frewer Engineering prides itself on offering an agile working environment, tailored to developing engineers from graduate level, through chartered status and beyond. Good ideas are always listened to by the people who can help make them happen. Engineers are offered significant **responsibility, autonomy and ownership** of key projects and tasks. The variety in size and complexity of our work provides opportunities to gain experience across a broad array of topics.



Agile

Swift, accurate & cost-effective response



Sustainable

Contributing to a low-carbon, circular economy



Secure

Respectful of client & project confidentiality



Customised

The right solution for customers' individual needs



Cutting-Edge

Investing in new tools, technology & staff development

Benefits

Frewer Engineering offer a range of benefits to our employees including:

- Competitive salary.
- Comprehensive Private Healthcare.
- Mentoring, funded professional development training and support.
- Competitive company pension and life insurance schemes.
- Cycle to work Scheme.
- Social events with the wider team.

Hybrid Working

Our hybrid working model combines remote work and office-based work, allowing individuals to work both from the company's physical premises and from remote locations. The purpose of this policy is to:

- Promote flexibility and work-life balance.
- Maintain a predominantly face-to-face coaching culture within the business.
- Ensure business continuity.
- Maintain a collaborative and productive work environment.
- Safeguard the well-being and safety of employees.

Job Description - Composite Engineer

As a Composite Engineer, you will support the design, analysis, and delivery of composite structures across numerous high-performance engineering sectors. We're seeking candidates that are highly skilled in the design OR analysis of composites. Both would be advantageous.

- Composite Design
 - Develop composite component and assembly designs using industry-standard CAD tools
 - Define laminate stacking sequences, ply orientations, and material selections
 - Design for manufacture (DfM), including tooling concepts and process selection (e.g. prepreg, RTM, infusion)
 - Produce detailed drawings, ply books, and manufacturing specifications
- Structural Analysis
 - Perform linear and non-linear analysis of composite structures using FEA tools (e.g. Abaqus, Nastran, Ansys)
 - Conduct hand calculations to support and validate analysis results
 - Assess strength, stiffness, buckling, fatigue, and damage tolerance
 - Apply appropriate composite failure criteria (e.g. Tsai-Wu, Hashin, Puck)
 - Correlate analysis with test data and support validation activities
- Support to Wider Organisation
 - Provide technical input to multidisciplinary teams
 - Contribute to internal best practices, methods development, and knowledge sharing
 - Assist in resolving technical issues during project lifecycle
- Project Management
 - Plan and deliver work packages to agreed scope, schedule, and budget
 - Provide accurate progress reporting and identify risks/issues early
 - Interface with project managers and clients to ensure requirements are met
 - Support proposal planning and estimation activities
- Business Development
 - Contribute technical input to bids, proposals, and capability statements
 - Support client engagement through technical discussions and presentations
 - Identify opportunities for follow-on work and new business
 - Represent the company professionally in client-facing situations
- Technical Reporting and Communication
 - Produce clear and concise technical reports, analysis summaries, and design justifications
 - Communicate complex engineering concepts effectively to technical and non-technical stakeholders
 - Present work at internal and external reviews
 - Maintain high standards of documentation and configuration control
- Leadership and Mentoring
 - Support peer reviews and promote engineering best practice
 - Contribute to a collaborative and high-performance team culture
 - Take ownership of technical quality within assigned work
- CPD (Continuing Professional Development)
 - Actively maintain and develop knowledge of composite materials, methods, and tools
 - Work towards or maintain professional accreditation (e.g. CEng)
 - Engage in training, conferences, and industry events
- Promote STEM Education & Awareness
 - Spearhead and participate in STEM outreach events or programs, aimed at promoting engineering and analysis disciplines to students and the community.
 - Collaborate with local schools, educational institutions, and community organisations to organise engaging STEM activities, workshops, or mentorship programs.

Location

Frewer Engineering is based near Ockley in Surrey. The office location is remote, as are many of our customer's sites. As such, it is essential that all staff have a full driving license valid in the UK prior to commencement of the role.

As the role is nominally office-based, applicants will need to be willing to relocate. Office-based work is preferred during the probationary period, after which our hybrid working policy shall apply. As this position requires mentoring, coaching and leadership, the need to be on-site for work in-person may be elevated at times as part of the role, for example during periods of project start-up, high recruitment or for new starter on-boarding.

Equal Opportunities

Frewer Engineering is an equal opportunities employer. We highly value diversity and inclusion and welcome applications from candidates from all backgrounds. Note we will not use any personal information relating to your background at any stage of the application process.

How to apply!

Email your CV, cover letter and portfolio (desired but not essential) to careers@frewer-engineering.com