

Student Internship – Engineering

1st September 2027 until 31st August 2028

About CFMS

The Centre for Modelling and Simulation (CFMS) is a growing, independent digital engineering research organisation providing technical expertise to help organisations create cutting-edge solutions by pioneering new approaches to product development, solving hyper-complex problems and enabling innovation services.

As a nationally recognised centre of excellence for modelling and simulation, our highly collaborative team of passionate and pragmatic problem solvers thrive on challenges others consider insurmountable, delivering game-changing, evidence-based solutions that surpass expectations and impress every time.

Working with commercial and research organisations of all sizes, we have a full portfolio of digital innovation capabilities, including design and analysis services, consultancy, and IT data centre infrastructure. We use digital innovation across the cyber-physical landscape to help develop more effective engineering solutions across industrial sectors critical to the UK economy.

As a commercially focused organisation, we reinvest profits from commercial activity into the continued development of our people, facilities, and research capability, allowing us to continue to innovate and push the boundaries of what is possible.

We have an exciting range of technologies and development programmes across a variety of sectors including aerospace, rail, construction, energy and space. Our expertise in advanced simulation, model-based engineering, AI, data science, and robotics is underpinned by our in-house data centre IT infrastructure. The close collaboration between our expert in-house teams enables greater innovation, knowledge sharing and more beneficial results for our customers.

About the role

We work with companies who want to develop their digital modelling and simulation capabilities to tackle interesting and challenging problems. We also work closely with academics and technology partners to create and evaluate new modelling algorithms and techniques, assess how they scale and how they can be applied in our state of the art data centre.

As an engineering intern, you will be joining a team of experts across systems engineering, mathematical modelling and simulation, AI, data analytics, robotics, advanced IT systems and data centre hardware. You will help to develop and prove new digital capabilities, matched, where possible, to your background and interests.



As an integral part of the CFMS team, you will work on real-world digital engineering problems with opportunities to interface with customers, gaining highly valuable experience.

Developing the next generation of engineers is important to CFMS and we also understand the desire to take theoretical understanding and turn it into practical outputs. With the support of the technical team, you will be empowered to do this, increasing your knowledge of the applications of theories and methods.

Many of our interns return as full-time employees, or are readily employable by leading companies, providing further development and learning opportunities.

Role and Responsibilities

Roles and responsibilities are dependent upon the individual, and will include some elements of:

- Collaboration with other CFMS technical team members on development, testing and benchmarking activities to support project needs
- Modelling physical phenomena using open source and vendor tools
- Development of new algorithms, methods and tools to meet engineering, simulation and HPC deployment challenges
- Deploying and maintaining data centre hardware, network, storage and applications
- Working with end users to understand and meet requirements
- Presentation of results to a range of audiences including internal and external stakeholders
- Supporting CFMS outreach activities, including school visit days
- In depth technical report writing, explaining and justifying methods and solutions

Skills Required

- Currently studying for a degree in a STEM or similar numerate subject
- Some experience of programming or an interest in learning programming skills
- Ability to think logically and critically apply knowledge to solve novel problems
- Ability and interest to engage with new technology and concepts
- Ability to work well both independently and collaboratively within a technical team
- Strong communication skills to support discussions with external stakeholders
- Ability to summarise and explain complex technical concepts to both technical and general audiences



How to Apply

Please send your up-to-date CV and a covering letter to: Recruitment Manager, email: careers@cfms.org.uk, with the subject line of your email: "Internship" by Thursday 5th November.

Applications will be reviewed on a rolling basis, and the internship may close earlier than the stated deadline.

Late applications will not be accepted.

This is a 12-month internship designed for students who need to complete a year-long placement as part of their degree program:

Wednesday 1st September 2027 until Thursday 31st August 2028.