



Centre for Advanced Timber Technology – Research Fellow

(Tracked Tenure)

NMITE is a new Higher Education provider, with an explicit focus on engineering, education and impact. We have received philanthropic funding to establish a Centre for Advanced Timber Technology that will play a strategically influential role in supporting and expanding the use of timber in modern construction, intervening across the lifecycle from ‘seed to building’. Having recently appointed CATT’s Founding Director, we are now looking to begin expanding the team.

Central to our CATT concept is the delivery of a “Living Lab” CATT building that will serve to educate the built environment professionals of the future through experiential research and active, integrated learning techniques. The CATT building will showcase the value of timber as a material when combined with appropriate construction delivery methods. To achieve this ambition, we are now seeking to appoint a Tenure Tracked Research Fellow in Timber Engineering. The successful candidate for this post will be instrumental in informing the delivery of the building by undertaking the necessary research to ensure it is established as a beacon of sustainability, and act as both a showcase in the sector and as an educational toolkit for the next generation of built environment professionals in timber engineering. A founding member of the CATT team their underpinning research will not only support the building delivery it will curate content for a timber engineering curriculum that will cover the following from September 2022 onwards:

- Timber as a structural material
- The evolution of timber construction
- The value chain journey from forest floor to built asset
- Timber technologies and systems
- Industrialised and Mass Timber Construction
- Design for Manufacture and Assembly
- Structural Timber Design
- Building, Durability and Fire Performance
- Building Information Modelling and Digitisation
- Retrofit and Restoration

This post therefore brings together building research, industrial engagement and educational development, and will play a key role in establishing NMITE and Hereford as a first-choice location for timber engineering expertise with UK wide outreach and international recognition. The research work undertaken will ensure the building embodies the ethos of NMITE, enabling future students to learn from the environment they are being educated in and by undertaking real-world, fully contextualised engineering and technical projects provided by employers across the timber value chain and local community groups.

The postholder will use digital methods to capture and interrogate live information from the construction and design process to produce research outputs, external outreach material and educational content. You will leverage and develop an external network including, for example, the supervision of undergraduate and postgraduate students at other Higher Education providers. You will hold a PhD in construction-related field or will be able to demonstrate equivalent (industrial) experience including the potential for independent thought leadership and high-quality peer-reviewed outputs.



As a founding member of the CATT academic team this role will help shape the Centre's organisational development, its educational portfolio, industrial collaborations and impact profile. This is a unique opportunity to make a difference to the sector and the region.

Job Role

- Integrate with the CATT building design and delivery team to collate and codify information for the purposes of education and outreach with an emphasis on supply chain evaluation, digital modelling and building performance evaluation including post occupancy studies.
- Work with the CATT Director and wider NMITE team to establish "Living Lab" approaches in order that the building is a research and learning showcase for future built environment professionals and the sector.
- Inform the decision-making process on building and equipment specification for the purposes of timber engineering education including scenario planning and risk modelling.
- Enable the establishment of regional and UK skills framework for timber engineering education with an emphasis on partnering with industry and external stakeholders.
- Work with the broader academic and professional team to support the creation and implementation of an industry-relevant, forward-looking educational offering including a new Level 6 Timber Engineering programme, and financially sustainable CPD/life-long learning programmes, in synergy with NMITE's wider educational offering and academic staff.
- Support the CATT Director and wider NMITE team in attracting industry and professional support for the Centre to establish it as the leading national location for timber engineering development and education.
- Actively and enthusiastically use and share knowledge, skills and experiences with students and colleagues. Enhance and encourage a collegiate atmosphere where social and ad hoc learning is the norm.
- Actively follow and promote the vision, ethos and policies of NMITE, including those around diversity and equal opportunities.
- Draw on your experience and activity to support the development, dissemination and promotion of the NMITE pedagogy and approach to engineering education.
- Maintain own continuing professional development and professional standing.
- Be flexible, adaptable and willing to take on other tasks as necessary to support the entire development and delivery of NMITE, and positively contribute to the wider activities of NMITE's leadership.

Qualifications & Experience

- A masters level degree in timber, structural or environmental engineering or a cognate discipline with either a PhD or equivalent industry experience including membership of a professional body or institution.
- A passion for timber engineering education and research with a broad understanding of the subject matter (see future curriculum content above) with specialist knowledge in selected areas.
- Knowledge and experience in digital design tools with an emphasis on Building Information Modelling as well as test methods for structural or building performance evaluation.
- Experience in project coordination and working with stakeholders including managing, analysing, and presenting complex information coherently to varying audiences.
- A keen interest in education and the skills needed to tackle the climate crisis and meet the UK net zero-carbon target by 2050.



As a new and founding member of the NMITE-CATT team you will need to perform with agility and be capable of working closely with internal and external stakeholders to develop mutually beneficial relationships between employers, industry bodies, HEI's, and the CATT. You will be passionate about delivering the built environment more sustainably via the utilisation of advanced timber technologies encouraging innovation, entrepreneurship and excellence in a manner that is inclusive and empowering for all staff and students.

Cultural Alignment

- Equality focused
- Inclusive
- Respectful
- Creative
- Honest
- Non-judgemental

Our offer

We offer competitive salaries and a competitive benefits package, including pension scheme, life assurance, 30 days holidays (plus Bank Holidays & closure days), ongoing training & development. We also have a clear progression framework in place. This post is an initial 2-year fixed term contract with a structured review at 18 months for a permanent academic position. We offer you the opportunity to be the change that you want to see.

Location: Hereford

To apply

Please email a full academic CV, covering letter and a two-minute video to vacancies@nmite.ac.uk. In your video, explain why you want the role, and how you feel you could contribute to NMITE. Your covering letter should outline how you meet the person specification.

Informal questions about the roles can be addressed to the CATT Director, Professor Robert Hairstans (Robert.hairstans@nmite.ac.uk)

NMITE is committed to promoting a diverse and inclusive community – a place where we can be ourselves and succeed on merit. Whilst all applicants will be judged on merit alone, we particularly welcome applications from groups currently underrepresented in engineering education. Part time proposals and secondment arrangements may also be considered.

The opening date for applications is Friday 26th March 2021. The closing date for completed applications is Monday 26th April 2021.