UNIVERSITY OF LEEDS

CANDIDATE BRIEF

KTP Associate – Design Engineer, Lightweight Steel Structures

Faculty of Engineering and Ilke Homes Limited

Salary: £30,000 - £34,000 plus training allowance of £6,000

Reference: CSRIS1101

Based at the company premises in Flaxby, North Yorkshire

Fixed term for 36 months due to external funding for a fixed period. We will consider flexible working arrangements

KTP Associate – Design Engineer, Lightweight Steel Structures, School of Civil Engineering and Ilke Homes Limited

Do you have a structural design background with a PhD in the design of steel structures, a related subject, (or close to completion) or an MSc/MEng in this subject with significant industrial experience? Do you want to further your career through a project with one of the UK's leading research intensive universities and ultimately, pursue a career in industry?

We have an opportunity for you to 'fast track' your career into business by leading a high profile and strategically important project to a successful conclusion. Through a Knowledge Transfer Partnership (KTP), you will be working in partnership with Ilke Homes Limited and the School of Civil Engineering. You should be seeking a career which allows you to utilise your academic achievements in an industrial setting.

Ilke Homes factory builds and delivers to site complete, easily installed homes using a precision-engineered, light gauge steel framed modular design. Their strategic goal is to develop an innovative, optimised structural system utilising novel techniques to significantly improve the performance, safety and cost of current modular design, contributing to easing the UK's housing shortage.

The KTP will develop an understanding of advanced structural engineering design and testing expertise by considering the interaction of different materials and designs to the dynamic loads experienced by the structures. The test results from suggested design modifications, proposed by the detailed analytical evaluations, will inform Ilke Homes' building designs both in the short and longer term.

You will be based at the company premises in Flaxby, North Yorkshire, but will be employed by the University of Leeds for the duration of the project, a fixed period of 36 months, also spending time at the University. Members of the University's School of Civil Engineering will provide academic and technical support to you throughout the project.

You will have a training and development package worth £6,000, to be spent according to your needs and the project's requirements, enabling you to work effectively on the KTP, and to plan for your future career. You will attend two weeks of residential KTP training to equip you with the skills and knowledge required to complete the project successfully, for which time is allocated and funding provided.


In addition to the challenges of the post, you will be expected to work towards a chartered membership of an appropriate professional body.

What does the role entail?

As a KTP Associate, you be working in a dynamic manufacturing environment to solve real world problems. Your main duties on the project will include:

- Understanding the commercial context, design requirements and technical challenges of the project;
- Planning of experimental activities;
- Characterising materials and structural components, gaining approvals for recommendations from the project team;
- Planning and undertaking experimental and numerical study of in-plane and out-of-plane wall constructions
- New product design, approval and implementation;
- Product life cycle analysis;
- Design Review against Building Codes and overseeing fire testing of designs;
- Working to implement selected design changes in manufacturing;
- Working with Ilke Homes on the new product launch;
- Dissemination and embedding of new techniques within Ilke Homes including developing and embedding a methodology for predicting the structural response to future design changes;
- Writing reports, undertaking literature reviews and preparing papers for publication, with guidance from the academic team as necessary.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a KTP Associate you will have:

- A PhD in steel structure design or a related subject (or close to completion) or an MEng/MSc in steel structure design or a related subject with significant industrial experience;
- A first or upper second class honours degree in Engineering in the area of structural design techniques and processes;


- Experience in testing and numerical modelling;
- Strong interpersonal and communication skills, both written and verbal enabling communication with a wide range of stakeholders including established structural engineers;
- Excellent project-management skills, with the ability to meet tight deadlines;
- The ability to work independently as well as part of a team;
- Enthusiasm and commitment to drive this challenging project forward;
- A strong desire to develop your career in a progressive engineering company and contributing to a major change in the modular housing sector;
- A full, current, valid UK driving licence or alternative means of travel to enable visits to the University, training and customer meetings as the role requires.

You may also have:

- Some industrial experience in the disciplines relevant to this project, and/or experience of working on industrially-relevant research projects.

How to apply

You can apply for this role online; more guidance can be found on our How to Apply information. Applications should be submitted by the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Dr Ornella Iuorio
Tel: +44 (0)113 343 2294
Email: o.iuorio@leeds.ac.uk

Additional information

Candidates must be available for an onsite interview at the company premises.

Ilke Homes' long term plan is to continue to invest in innovative designs. Pending the outcome of the project, the Associate will be in a prime position to occupy a function in Ilke Homes' Design Office upon completion of the KTP. Therefore, it is essential that you are aspiring to a career in business rather than academia.


Working as a KTP Associate
You will be employed by the University of Leeds and will have access to University facilities. However, you will be based for the majority of your time at the company premises, working to their terms, and benefitting from a bespoke benefits package.

You will have access to the University's USS pension scheme, with generous employer contributions.

Faculty and School Information
Further information is available on the research and teaching activities of the Faculty of Engineering and the School of Civil Engineering.

A diverse workforce
The Faculty of Engineering is proud to have been awarded the Athena Swan Silver Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Candidates with disabilities
Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found in our Accessibility information or by getting in touch with us at disclosure@leeds.ac.uk.

The post is located at the company premises. Candidates with disabilities wishing to review access to the building are invited to contact Laura Dugdale (Research and Innovation Service), L.Dugdale@Leeds.ac.uk or Tel: 0113 343 0928.

Criminal record information

Rehabilitation of Offenders Act 1974
A criminal record check is not required for this position, however, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information.