Candidate Information

Position:	Design Engineer, KTP Associate, McKee Engineering Solutions Ltd
School/Department:	KTP and Business Networks
Reference:	24/112176
Closing Date:	Monday 23 September 2024
Salary:	£25,000 - £36,927 per annum. One of the key KTP benefits is access to a £7,578 training and travel budget over the 24-month project.
Anticipated Interview Date:	Thursday 10 October 2024
Duration:	Fixed Term - Full Time available for 24 months

JOB PURPOSE:

Delivery of a Knowledge Transfer Partnership (KTP) project for McKee Engineering Solutions Ltd in partnership with Queen's University Belfast to develop, validate and embed a new smart accelerated design process using advanced 3D scanning, AR/VR and factory simulation technologies to increase precision, efficiency, productivity and profitability.

Employed and supported by a team of academic experts from the University, you will be based at McKee Engineering Solutions Ltd, Unit 25, Glenavy Road Business Park, 20 Glenavy Road, Moira, Co. Armagh, BT67 0LT.

As a KTP Associate, you will lead on the delivery of the following key project stages:

Stage 1 – Review existing design processes

Stage 2 – Identify future state processes

Stage 3 – Exploration of new technologies

Stage 4 – Client company pilot implementation

Stage 5 – Implement internally and embed

Stage 6 – Manufacturing process simulation

Stage 7 – Manufacturing process simulation – trial and embed

MAJOR DUTIES:

1. Plan, manage and coordinate the items of work as laid out in the project plan (project work plan will be provided by Supervisors). Plan day-to-day activity and contribute to the planning and management of the project, approximately 3-6 months in advance.
2. Attend training modules (mandatory and additional job-specific training). This may be local, national and international. Ensure that all training and development activity is scheduled to ensure that progress on the work plan objectives is not interrupted or delayed.
3. Plan and manage day-to-day resources to ensure the project runs to time and on budget.
4. Coordinate and obtain approval for planned expenditure/allocation of resources with the Management Committee and Steering Group, and monitor travel and development budgets and produce a Personal Development Plan which will ensure best use of financial resources.
5. Build relationships with both company and university staff to ensure effective working practices are established.
6. Liaise with company staff on a daily basis. Contribute to training of staff in the company and university as required, which may include the supervision of placement students or other staff members as required.
7. Attend and contribute to any appropriate meetings, both in the company and the university as required. Present regular progress reports to members of the Steering and Management Groups and to external audiences.
8. Perform any other additional duties as agreed by the Local Management Committee and Steering Groups to contribute to the development of the company, the university and the Associate.
9. Establish contacts with additional groups and organisations (other KTP Associates, other university departments, other industrial contacts, and Innovate UK) as required to develop knowledge and understanding and form relationships for future collaboration.

10. Act as an Ambassador for the Knowledge Transfer Partnership Programme.

ESSENTIAL CRITERIA:

1. Hold a Degree in Mechanical, Manufacturing, Electrical Engineering or closely related disciplines.
2. Have a high degree of competence in the use 3D-CAD.
3. Have a good knowledge of engineering design.
4. An understanding of advanced manufacturing processes. *may be demonstrated through the completion of a module, student project or placement.
5. Ability to think logically, create solutions and make informed decisions.
6. A high level of numeracy and the ability to interpret data.
7. Good oral, written and presentation skills.
8. High level of IT skills.
9. Self-motivated, capable of working independently, with a drive and ambition to succeed.
10. Ability to work effectively as a member of a group.
11. Enthusiasm for research/project area.
12. Well organised, attention to detail and ability to meet tight deadlines.
13. An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
14. Ability to take part in Associate management courses (requiring two one-week periods in England).
15. Willing/able to travel throughout the UK and Ireland and abroad as necessary.
16. Ability to attend work place McKee Engineering Solutions Ltd, Unit 25, Glenavy Road Business Park, 20 Glenavy Road, Moira, Co. Armagh, BT67 0LT and other work locations as required.

DESIRABLE CRITERIA:

1. Masters level degree in a relevant discipline.
2. Have a minimum of 6 months relevant work experience in an engineering discipline or demonstrate significant undergraduate experience/modules studied with skills relevant to the project.
3. Experience of using 3D scanning technologies.
4. Experience of the use of AR/VR technologies.
5. Experience of delivery of a relevant project. *may be demonstrated through the completion of a module, student project or placement.
6. Ability to deliver training and follow-up support to operatives.
7. Ability to influence people effectively.
8. Tenacious and committed to achieving goals.

ADDITIONAL INFORMATION:

Please note that the Shortlisting Panel cannot make assumptions on your experience or qualifications; it is the responsibility of the applicant to evidence their suitability for the role. As such your Application Form, CV and/or Cover Letter must clearly demonstrate how your Qualifications and Experience meet the Essential Criteria and, where possible, Desirable Criteria, as listed in the Candidate Information Booklet. Please ensure that you address all the criteria in the person specification and provide evidence to support your statements.

Knowledge Transfer Partnerships help forward thinking companies innovate for growth. They do this by connecting organisations who have an innovative idea with the knowledge and expertise to help deliver it. This dynamic three-way partnership formed between an inspired graduate, the university and the company means that the graduate, known as the KTP Associate, provides the link between an expert academic team and a dynamic organisation. This bridge gives the graduate unique and exceptional access to both world class academic support and experts from within the business.

For all KTP projects, the graduate is employed by the University but contracted to work at the business premises on a day-to-day basis, under the business' basic terms and conditions including holidays and hours of work. As a member of University staff, KTP Associates can join the University pension scheme, gain access to University resources including the Library. Please note that KTP Associates are not eligible for financial support for relocation from the University.

A KTP provides a fulfilling employment opportunity where you can apply your knowledge to turn a key strategic innovative idea into reality and although the KTP Programme is aimed at recent graduates, any suitable qualified graduate may apply. Each KTP Associate role is a fully salaried job and last between 12 months and three years with approximately 70% of Associates offered employment by the host business at the end of the project. Projects can be in any sector and for businesses of all sizes. Each KTP Associate will have a travel / training budget to provide funding for job-specific training and further professional development. Two, one-week residential management training modules are also included as part of the package.

KTP aims to help businesses improve their competiveness and productivity through the better use of knowledge, technology and skills held within the UK knowledge base. KTPs are funded by UKRI through Innovate UK with the support of co-funders, including the Scottish Funding Council, Welsh Government, Invest Northern Ireland, Defra and BEIS. Innovate UK manages the KTP Programme and facilitates its delivery through a range of partners including the Knowledge Transfer Network (KTN), Knowledge Bases (in this case, Queen’s University Belfast) and Businesses.

More details are available at www.ktp-uk.org

Informal enquiries may be directed to ktp@qub.ac.uk