



Candidate Information

Position:	Manufacturing Engineer (CNC) Advanced Manufacturing
School/Department:	Northern Ireland Technology Centre (NITC)
Reference:	19/107317
Closing Date:	Tuesday 30 April 2019
Salary:	£33,199 - £39,610 per annum (potential to progress to £43,266 per annum through sustained exceptional contribution)
Duration:	Available until 31 March 2022

JOB PURPOSE:

To support Advanced Manufacturing activities within NITC, utilising specialist knowledge and experience of methods and processes, to generate innovative research outputs which have a direct economic and technical benefit. Working collaboratively with academia, technology providers, national technology centres, and industry to deliver key projects focused on Advanced Manufacturing activities.

MAJOR DUTIES:

1. Undertake high quality industrial research, development and knowledge transfer in the area of manufacturing process development, and in particular in one or more of the following technology areas
 - a. Advanced CNC – Milling
 - b. Advanced CNC – Mill Turn
 - c. Advanced Forming and Joining
 - d. Automation Control and digitisation
 - e. Robotics – Industrial/Collaborative
 - f. High Value Design
 - g. Digital Manufacturing – 3D Simulation
 - h. Digital Manufacturing – Digitisation
 - i. Advanced Metrology
2. Development and implementation of selected technology applications
3. Development and implementation of digital technologies supporting selected technology
4. Development and implementation of smart factory technologies
5. Formally evaluate the effectiveness of new or enhanced methods arising from research
6. Document activities through formal high quality technical reports
7. Engage with industrial partners to facilitate the transfer of NITC capabilities into commercial R&D teams
8. Contribute to the planning, development, delivery, maintenance and trialing of NITC projects
9. Participate constructively in multi-disciplinary research activities, including staff training and development
10. Help develop the international reputation of NITC and QUB through presentations, attendance at trade-shows and visiting major companies and research & technology centres worldwide
11. Produce high quality technical reports and demonstrations to assist in generating funding opportunities to support further programme activity
12. Carry out routine administrative tasks to ensure project goals are completed on time and within budget
13. Undertake any other duties that may reasonably be requested by management

Planning and Organising:

1. Plan own work to meet given objectives and processes
2. Plan, schedule and monitor work activities in order to meet time and quality targets
3. Plan for the use of research resources and laboratories where appropriate
4. Plan in advance to meet deadlines as required by management and project requirements
5. Liaise with other team members to achieve co-ordinated progress against objectives

Resource Management Responsibilities:

1. Ensure research and development resources are used in an effective and efficient manner
2. Coordinate and liaise with other members of the project team over work progress

ESSENTIAL CRITERIA:

1. 2:1 Honours Degree, or equivalent, in related engineering discipline OR minimum HND in related engineering discipline with at least three years' relevant experience.
2. Competent in the application of manufacturing technology in your selected technology areas, with clear experience of using supporting computer aided manufacturing solutions.
3. Strong evidence of complex problem solving skills with a proven ability to develop innovative solutions.
4. Experience of using research tools and techniques resulting in high quality project and technical reports
5. In depth understanding of fundamental engineering concepts.
6. Evidence of communicating complex technical information.
7. Evidence of leading and delivering on multifaceted projects within deadlines and budget, displaying strong resource management ability. – need to explore further Explore at interview.

DESIRABLE CRITERIA:

1. Hold or be about to hold a relevant higher degree or PhD.
2. Experience of collaborative research and effective working in a team.
3. Experience of working with international OEMs and SMEs.
4. Experience in using commercial digital manufacturing/simulation software tools.
5. Experience in using manufacturing technology in selected technology area.
6. Experience with manufacturing automation.