



Job title	Assistant Professor in Manufacturing Systems	Job family and level	Research & Teaching Extended Level 5
Department	Department of Mechanical, Materials and Manufacturing Engineering	Location	University Park Campus

Purpose of role

To deliver high quality teaching and add expertise to the world class research conducted in the Institute for Advanced Manufacturing. The primary research requirement will be to deliver internationally leading research in one or several areas of manufacturing systems design and modelling, digital manufacturing, industrial control systems and manufacturing systems integration.

The role holder will take responsibility for delivering high quality teaching and will contribute to the planning, design, development and delivery of materials on our growing undergraduate taught programmes in mechanical, manufacturing and aerospace engineering. The role will include the development of course curricula and teaching materials as required.

The role holder may also make a significant contribution to their academic unit via leadership and/or administrative management and/or co-ordination of specific initiatives.

	Main responsibilities (R&T) (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	<p>Conduct successful research</p> <ul style="list-style-type: none"> ▪ Deliver internationally leading research in manufacturing systems with major contributions to science and industrial practices ▪ Seek and secure external research funding through successful applications to national and international funding bodies ▪ Publish their research in high quality publications in internationally leading peer reviewed journals ▪ Represent the university at meetings and conferences and disseminate key research findings. ▪ Supervise postgraduate research students conducting original research ▪ Contribute to research management by taking administrative and leadership roles 	typically 30 – 70%
2	<p>Deliver teaching, administration and leadership roles to a high standard</p> <ul style="list-style-type: none"> ▪ Lead/support the development/delivery of content in the Mechanical, Manufacturing or Aerospace taught programmes. 	typically 30 – 70%

	<ul style="list-style-type: none">▪ Deliver consistently excellent teaching and support for student learning, influencing others via own practice; develop and apply high quality and appropriate teaching techniques and materials.▪ Supervise final year undergraduates and taught postgraduates conducting individual projects▪ Provide tutorials and pastoral care of students.▪ Proactively identify the need for developing the aims, delivery or assessment of existing modules and make proposals on how this should be achieved.▪ Design and undertake assessments, marking and feedback that is robust and valid. Evaluate and respond to feedback to ensure student engagement with assessment.▪ Take responsibility for administrative duties as required in the leadership and operation of the Department▪ Deliver any other duties appropriate to the grade and role, as required	
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Person specification (R&T)

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Extensive knowledge and skills to undertake original, high-quality research in Digital Manufacturing. ▪ Extensive knowledge and skills to contribute teaching to the Mechanical, Manufacturing or Aerospace Engineering programmes at university level in at least one of: Digital Manufacturing, Systems Analysis & Electromechanical Systems. ▪ Excellent oral and written communication skills, including the ability to communicate complex information with clarity ▪ Self-starting and pro-active, demonstrating an ability to work alone or in a team to meet deadlines and to prioritise tasks ▪ Passion for student teaching and learning including the ability to engage constructively with students and innovatively develop effective teaching strategies. ▪ Able to professionally undertake leadership and management roles within the department and institute and demonstrate excellent collegiality 	<ul style="list-style-type: none"> ▪ Ability to teach other subjects within the department, such as automation & control, and systems engineering.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Research track record, including high quality outputs and/or impact, in an area of Digital Manufacturing. ▪ Strong publication record and/or delivering high impact industrial innovations 	<ul style="list-style-type: none"> ▪ Experience of delivering industrial projects in manufacturing systems design and planning. ▪ Experience working in or with industry in an aspect of digital manufacturing ▪ Experience in grant proposal writing and the acquisition of own research funding and the management and leadership of research programmes. ▪ Previous experience relating to manufacturing systems and control, including the teaching of these. ▪ Relevant teaching experience in higher education

Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD/EngD in Engineering, Mathematics or other relevant discipline 	<ul style="list-style-type: none"> ▪ Postgraduate study in manufacturing systems and control.
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The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

- Valuing people** Is always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others



