



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

Purpose of role

Applications are welcome from individuals with teaching/research experience in any related areas of mechanical, manufacturing or aerospace engineering. Applications are particularly welcome from individuals with academic research and teaching or industrial experience within aviation propulsion, including current or novel approaches to propulsion that are addressing decarbonisation and net zero future requirements

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 post 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 (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	<p>Conduct successful research</p> <ul style="list-style-type: none"> ▪ Identify, conduct and lead original research ▪ Seek and secure external research funding through the development of applications to external funding bodies ▪ Conduct and supervise others conducting original research, resulting in high quality publications in nationally and internationally recognised peer reviewed journals ▪ Participate in meetings and conferences in order to disseminate research findings. ▪ Supervise postgraduate research students engaged in original research ▪ To be responsible for administrative duties as required in the leadership and operation of research 	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. 	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

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ 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 ▪ Interest in student teaching and learning including the ability to engage constructively with students to facilitate learning ▪ Able to professionally undertake leadership and management roles within the department and demonstrate excellent collegiality 	<ul style="list-style-type: none"> ▪ Ability to teach other subjects within the department.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Extensive knowledge and skills to undertake original, high-quality research in the area of Aerospace Propulsion. ▪ Extensive knowledge and skills to contribute teaching to the Mechanical, Manufacturing and/or Aerospace Engineering programmes at university level ▪ Relevant postdoctoral research experience or appropriate industrial experience ▪ Research track record, including high quality publications and impact related to aerospace propulsion 	<ul style="list-style-type: none"> ▪ Extensive knowledge and skills to perform research in modelling development or experimental analysis or design methods/approaches for propulsion ▪ Experience of working in or with the aerospace industrial sector. ▪ Experience working in or with industry and/or publicly funded research projects on the national and international level ▪ Experience in grant proposal writing and the acquisition of own research funding and the management and leadership of research programmes ▪ Previous experience relating to the thermofluids aspects of propulsion, including the teaching of this. ▪ Relevant teaching experience in higher education
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ Degree in a relevant discipline ▪ PhD in Engineering, Mathematics or other relevant discipline 	<ul style="list-style-type: none"> ▪ Postgraduate study in Experimental, Modelling or Design relating to Aerospace Propulsion.



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

Line manager



Role holder



Key stakeholder relationships

