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| Job Title | Associate Professor in Power Electronics, Machines and Drives |
| School/Department | Department of Electrical and Electronic Engineering |
| Job Level | UNNC Scale B Level 6 |
| Job Family | Research and Teaching |
| Contract Status/ Appointment Duration | This post is available from May 2025 and will initially be offered on a fixed-term contract with the University of Nottingham Ningbo China for a period of up to five years and a probation period of 6 months. |
| Location | University of Nottingham Ningbo China |
| Hours of Work | Irregular working hours |
| Responsible to | Head of Department of Electrical and Electronic Engineering |

Purpose of role:

The role holder will be expected to make a significant leadership impact within their academic unit and in the research and teaching area of Power Electronics, Machines and Drives.

The role holder will participate in the Department of Electrical and Electronic Engineering level organisation, management and strategic planning and will also contribute to the University’s strategic planning processes. They will act as principal investigator on major research projects in the field of Power Electronics, Machines and Drives and will identify opportunities for the development of new research projects.

The role holder will take responsibility for the quality of the design of Electrical and Electronic Engineering courses/programmes to maintain the high teaching standards and contribute generally to the development of teaching, teaching methods and assessments in the Department of Electrical and Electronic Engineering.

The role holder may have line management responsibilities including the responsibility for the professional development of the Department and contribute to the overall administration of the Department.

| | Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role) | % time per year |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Research | | |
| 1 | To provide academic and organisational leadership to those working within Power Electronics, Machines and Drives research area(s), by for example co-ordinating resources, the work of others to ensure the effective delivery of research projects and agree objectives and work plans with the team. | 5 |
| 2 | To act as the principal investigator on major research projects within the area of Power Electronics, Machines and Drives. Investigate and devise new research methods, generate new research approaches and contribute generally to the development of thought and practice in the field of Power Electronics, Machines and Drives . | 5 |

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| 3 | To interpret findings, review and synthesise the outcomes of research projects in Power Electronics, Machines and Drives and apply to research and teaching practice, where appropriate. | 5 |
| 4 | To develop and sustain an ongoing national reputation as a research leader in Power Electronics, Machines and Drives , through original research work. Disseminate and explain research findings through leading peer-reviewed national and international publications, and present or exhibit at national/ international conferences and other similar events. | 10 |
| 5 | To develop proposals for research projects which will make a significant impact by leading to an increase in knowledge and understanding and the discovery or development of new explanations, insights, concepts or processes. | 5 |
| 6 | To lead major funding bids which develop and sustain research support for the Power Electronics, Machines and Drives specialist area and develop research initiatives to foster collaboration and generate income. | 5 |
| 7 | To contribute to the development of research strategies and the teaching and learning policy in the School/Faculty of Power Electronics, Machines and Drives. | 2 |
| 8 | To lead and develop internal (e.g. by chairing/participating in University Committees) and external relationships (e.g. external examiners/assessors and/or active researchers) to foster future collaboration. | 3 |
| Teaching | | |
| 9 | To contribute to the curriculum leadership and the teaching and learning programmes in the Power Electronics, Machines and Drives academic unit e.g. through delivery of Power Electronics, Machines and Drives advanced lectures to staff and/or delivery of course modules. | 20 |
| 10 | To resolve problems affecting the quality of course delivery and student progress within the area of Power Electronics, Machines and Drives, referring more serious matters to others, as appropriate. | 5 |
| 11 | Disseminate conceptual and complex ideas to a wide variety of audiences using appropriate media and methods to promote understanding. | 15 |
| Other | | |
| 12 | Be responsible for administrative duties in areas such as admissions, timetabling, examinations, student attendance, and represent the school on various committees and working groups in the wider University and outside of the University and managing or monitoring assets and budgets allocated as part of the role. | 10 |
| 13 | To participate in training and staff development events as trainer or trainee as appropriate. | 2 |
| 14 | To maintain appropriate professional development, expertise and awareness. | 3 |
| 15 | To undertake other tasks and responsibilities as may reasonably be required. | 5 |



Person specification

| | Essential | Desirable |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Skills | <ul style="list-style-type: none"> ▪ Excellent oral and written communication skills in English, including the ability to communicate with clarity on complex information. ▪ Proven ability to provide effective leadership and management of groups and teaching activities. ▪ Proven ability with demonstrated success in obtaining sources of funding, providing effective leadership, planning, and building, resourcing a team and delivering research results. ▪ High analytical ability to facilitate conceptual thinking, innovation and creativity. | |
| Knowledge and experience | <ul style="list-style-type: none"> ▪ Extensive track record of published research, development and delivery of teaching units, successful consultancy activities and/or delivery of specialist services to external customers/client ▪ Extensive research and teaching experience with an established national and growing international reputation in the field of power electronics, machines and drives, in higher education ▪ Extensive experience in developing and devising new research programmes, models, techniques and methods. ▪ Proven record of promoting and maintaining collaborative links with industry/business/community. | <ul style="list-style-type: none"> ▪ An understanding of University management systems and the wider higher education environment. ▪ Previous experience of the supervision and pastoral care of students at all levels. |
| Qualifications, certification and training (relevant to role) | <ul style="list-style-type: none"> ▪ PhD or equivalent in relevant subject area ▪ Or equivalent extensive professional/research experience. | <ul style="list-style-type: none"> ▪ Membership of a professional body, where appropriate. ▪ Higher education teaching qualification or equivalent. |
| Statutory, legal or special requirements | | |



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** Understands that it is essential to provide a structure that people can thrive in. Knows how to communicate with people to create a healthy working environment and get the best out of people.
- Taking ownership** Communicates vision clearly, providing direction and focus. Knows how to create a productive environment where people are inspired and can work cross-departmentally in partnership.
- Forward thinking** Has the ambition to be a pioneer in own area, anticipating the future change, needs and challenges. Knows how to innovate within their work context and champions others to be inspired to be part of this ambition
- Professional pride** Keeps up to date on latest thinking, trends and work practices. Supports team to be thought leaders; willing to challenge if obstacles get in the way.
- Always inclusive** Establishes far reaching partnerships, well beyond own area across a broad range of networks. Understand role to pay due regard to the needs of the whole community.

Key relationships with others

