

Job title	Professor in Control of Power Electronic Converters	Job family and level	Research & Teaching Level 7
School/ Department	Department of Electrical and Electronic Engineering (EEE), Faculty of Engineering	Location	Jubilee Campus, University of Nottingham

## Purpose of role

The Role holder will be expected to undertake academic leadership and managerial responsibilities within the Faculty of Engineering. Roles at this level will have a significant impact on the direction, strategy, objectives and results of the University by influencing and shaping the available resources as appropriate to meet the current and future needs of the University.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Through original, recent and published research of international excellence, maintain and further develop an international reputation as a research leader in a major subject area. Where appropriate lead research and collaborative partnerships with other educational institutions or other external bodies and promote and market the work of the academic unit.	20%
2	Lead and support funding bids that develop and sustain research support for the specialist area and advance the reputation of the academic unit and the University.	10%
3	Lead the process of acquiring, analysing and interpreting research data and information, ensuring appropriate techniques, approaches, models and methods are selected, developed or devised for the purpose.	5%
4	Contribute to and/or lead the development of the curriculum in own area, demonstrate innovative/leading edge approaches to learning that achieve the educational standards of the School/ Department and, where appropriate, professional body. Disseminate best practise in teaching and learning methodologies within and outside the university.	5%
5	Deliver lectures and provide advice, instruction and examination in the subject at all levels, from undergraduate teaching to advising on post-doctoral research.	20%
6	Chair committees and participate in University decision making and governance and contribute to the development of academic policies across the University.	5%

7	Provide intellectual leadership of the Faculty's academic community, providing direction and mentoring for less experienced colleagues. Lead, appoint, manage and develop individuals and/or teams to deliver the research and/or teaching plans. Foster inter-disciplinary team working to develop team spirit and team coherence.	10%
8	Responsible for the management and resolution of all student and/or team issues drawing on specialist advice and support as required.	5%
9	Responsible for the organisation and deployment of resources within area of responsibility.	5%
10	Lead and develop internal and external networks to foster collaboration, share information and ideas and promote the subject and the University.	5%
11	Contribute to the running and strategic direction and development of the University through designated committees or project activities.	5%
12	Participate on national and international bodies; act as an advisor to government and in any other external advisory capacity. Where appropriate contribute to the development of higher education processes in the UK.	5%

## Person specification

	Essential	Desirable
Skills	<ul> <li>High level analytical capability to facilitate conceptual thinking, innovation and creativity</li> <li>Proven skills in coaching and developing others in best practice techniques.</li> <li>Proven ability to lead, motivate, develop and manage the performance of a team.</li> <li>Proven ability to plan and lead the delivery of research and teaching programmes, and to develop sources of funding.</li> </ul>	Skills in pastoral care and motivating students at all levels.
Knowledge and experience	<ul> <li>In depth knowledge of advanced control of power electronic converters an drive systems to enable the development of new knowledge, innovation and understanding in the field.</li> <li>Established and widely recognised excellence and reputation in an area of power electronics amongst peers nationally and internationally.</li> <li>Extensive experience in leading the design of research techniques and methods.</li> <li>Extensive experience and capability to act as a role model in the areas of research, and teaching, as appropriate.</li> <li>Previous experience and success in raising capital in support of new business projects, management of investment funds, grants and contracts.</li> <li>Previous success in transferring research results to commercial professional or other practical use.</li> </ul>	<ul> <li>An understanding of University management systems and the wider higher education environment.</li> <li>Significant record of supervision of postgraduate students on industrial or knowledge transfer projects.</li> <li>Previous leadership experience.</li> </ul>
Qualifications, certification and training (relevant to role)	<ul> <li>PhD, or equivalent supported by extensive and high level research and teaching experience in relevant area.</li> </ul>	<ul> <li>Membership of a professional body where appropriate</li> </ul>











## 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 Role models the highest ethical standards to cultivate a collaborative

workplace that develops talent and enhances wellbeing, whilst also

balancing the needs of the various stakeholders.

**Taking ownership** Translates the vision into a strategy for own area, enabling people to take

the right action for the wider organisation. Can resolve complex

problems, balancing the needs of varied stakeholders.

Forward thinking Always has the overall strategic goal in mind, manages to stimulate agile

and forward thinking in others, motivating them and giving them the

confidence to drive for continuous improvement.

Professional pride Goal is to be best in class; ensuring this can be achieved in line with long

term strategy regardless of short term challenges. Supports people to do

what is best for both the organisation and the department.

Always inclusive Promotes how collaboration and positive partnerships are essential to

success, constantly looking ahead to explore how to involve other

potential stakeholders.

## Key relationships with others

