

Job Description

Role Title:	Lecturer in Power Electronics
School / Dept:	School of Science, Engineering and Environment
Reference:	MPF
Grade:	8
Full or Part time:	Full time
Hours:	1.0 FTE / 36.25
Reports to:	Head of Networking and Math

Overview

The School of Science, Engineering and Environment (SEE)

The School of Science, Engineering and Environment (SEE) is a centre of discovery and innovation. With a broad portfolio across computer sciences, engineering, built environment and human and natural sciences, we are one of the largest schools within the University, home to over 6000 students and over 370 colleagues.

Our Research and Innovation Centres work together to collaborate around the world's greatest challenges including Net Zero, Climate Change and Resilience, Healthy Living, and Industry. Our focus is on translating our pioneering research into real-world impact for people and industry and our research is recognised as world leading.

With the largest group of research centres at the University, plus world-class test facilities such as Data Science and AI (DSAI) Hub, Energy House 2.0, North of England Robotics Innovation Centre (NERIC), and the Acoustics Research Centre, we are at the forefront of pioneering discovery, nurturing the next generation of industry leaders.

The Electrical & Electronic Engineering programme at the University of Salford is currently undergoing a period of strategic growth and now seeks to appoint a talented individual to the role of Lecturer in Power Electronics.

Role Detail

Role Purpose

The purpose of this role is to facilitate high-quality and engaging learning across various modules, programmes, and short courses, both on campus and online, using strategies that maximize student engagement, attainment, and progression. It also involves engaging in scholarly activity and conducting high-quality, impactful research and knowledge transfer, contributing to current and emerging research themes within the School and University. Additionally, the role includes contributing to the planning, design, and development of new programmes and learning materials, as well as reviewing, refreshing, and enhancing existing provisions.

Responsibilities

Research and Innovation

Undertake individual and collaborative research and innovation projects aligned to the research themes and priorities of the School and University.

Extend, transform, and apply knowledge acquired from scholarship to learning, research, innovation, and external engagement activities.

Identify external sources of funding and develop or contribute to funding bids and grant applications for research, innovation, and knowledge transfer.

Promote graduate studies and contribute to the supervision of postgraduate research students.

Write or contribute to publications in peer reviewed academic journals and/or disseminate research findings using other appropriate media.

Make presentations at conferences or exhibit work at other appropriate events, participating in dissemination and engagement activities to contribute to the knowledge base in your area of expertise.

Maximise the policy, media, industrial and/or community impact of your research and innovation work.

Learning and Teaching

Deliver teaching and facilitate learning across a range of modules in Electrical & Electronic Engineering and/or within the specialist subject domain.

Design and develop course materials and deliver such materials using a combination of face-to-face and online teaching.

Contribute to the planning, design, development and enhancement of modules and programmes.

Supervise undergraduate and postgraduate student projects, field trips and placements, and act as a personal tutor.

Set and mark assessments and examinations ensuring students are provided with timely feedback.

Engage actively in student feedback, reflection, and quality enhancement processes, constantly striving for the best possible student outcomes.

Leadership, Management and Administration

Take a lead in your own area of expertise and support less experienced colleagues in developing their teaching and research.

Lead and co-ordinate the work of others to ensure teaching, enterprise and research projects are delivered to high standards and to ensure student needs and expectations are met and exceeded.

Act as module leader and programme leader where required, and deploy strategies to maximise student engagement in learning, and to drive strong student performance and progression outcomes for a diverse range of students.

Collaborate with external organisations such as industry, public sector, charity, and local community groups and organise external facing activities such as field trips and student placements.

Plan, co-ordinate and implement research, innovation and industry/community engagement programmes and projects, monitoring and managing budgets to ensure effective use of resources.

Discharge administrative duties in an efficient and timely manner.

Engage with and participate in the University's performance review process as reviewee and reviewer as appropriate.

Other Tasks

Perform any other duties appropriate to the grade as may be required.

Comply with the personal health and safety responsibilities specified in the University Health and Safety policy.

Engage with the University's commitment to put our students first and deliver services which are customer orientated, represent value for money and contribute to the financial and environmental sustainability of the University when undertaking all duties and aspects of the role.

Promote equality and diversity for students and staff and sustain an inclusive and supportive study and work environment in accordance with university policy.

This role detail is a guide to the work you will initially be required to undertake. It may be changed from time to time to meet changing circumstances. It does not form part of your Contract of Employment.

Indicative level of membership for Higher Education Academy: Fellow

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Person Specification

The successful candidate should demonstrate the following, which are 'Essential' (E) or 'Desirable' (D), as indicated.

Qualifications

1. An Hold a Postgraduate Certificate of Academic Practice or equivalent higher education teaching qualification or commit to enrol on the University programme during the probationary year and complete within three years. (E) (A) (I) (C)
2. Hold a PhD in Electrical Engineering in or have equivalent and quantifiable industrial experience at this level. (E) (A) (I) (C)
3. Membership of subject related professional bodies. (D) (A) (I)
4. Fellowship of the Higher Education Academy (HEA), or international equivalent..(D) (A) (I)

Background and Experience

5. Experience of planning, preparing, and delivering high quality, undergraduate and/or postgraduate teaching and assessment, on campus and online. (D) (A) (I)
6. Understanding of the metrics for evaluation of teaching quality and student experience in contemporary Higher Education. (D) (A) (I)
7. Experience of undertaking research and knowledge transfer in the subject domain. (D) (A) (I) (P)
8. Publications in high quality journals and/or conferences. (D) (A) (I)
9. Evidence of contribution to research bidding activities and grant applications. (D) (A) (I)
10. Industry engagement/experience in the subject domain. (D) (A) (I)

Knowledge

11. Contemporary and emerging issues at the leading-edge of the Power Electronics field. (E) (A) (I) (P)
12. Tools, technologies, approaches, and best practice in the subject domain. (E) (A) (I) (P)

Skills and Competencies

13. An Ability to plan, prepare and deliver high quality teaching in pedagogy appropriate for the Electrical & Electronic Engineering domain within modern Higher Education. (E) (A) (I) (P)
14. Ability to communicate complex ideas clearly to a diverse range of students using a variety of teaching methods. (E) (A) (I) (P)
15. Ability to undertake advanced scholarship and high-quality academic research in the subject domain. (E) (A) (I)
16. Commitment to ongoing personal and professional development. (E) (A) (I)

17. Commitment to the wider team and ability to work collaboratively with a diverse range of people to generate innovative and practical solutions to address complex challenges. (E) (A) (I)
18. Quantifiable evidence of teaching excellence driving strong student outcomes. (D) (A) (I)
19. Experience of supervision and assessment of student projects in the subject domain. (D) (A) (I)
20. Experience of supervision, to successful completion, and examination of postgraduate research students undertaking individual research projects in the subject. (D) (A) (I)
21. Evidence of contribution to research bidding activities and grant applications. (D) (A) (I)
22. Active participation, and/or Leadership, within funded research programmes/activities. (D) (A) (I)
23. Holding of current professional certifications relevant to the specialist subject domain. (D) (A) (I)