Lecturer in Electronic Engineering and Intelligent Control Systems

Full-time: 1.0 FTE
Permanent
Grade AC3
Walton Hall, Milton Keynes

About the role
As a Lecturer in Electronic Engineering and Intelligent Control Systems, the post-holder will contribute to the development and delivery of electronics/electrical engineering modules within our distance-learning BEng/MEng qualifications. More broadly, they will also work as part of an energetic and committed engineering teaching team to help with the presentation of general engineering modules to diverse, motivated students learning ‘at a distance’; to develop new experiments for our OpenEngineering remote-access teaching laboratory; and to carry out up to two weeks of face-to-face teaching annually at our engineering residential schools held during July and August.

The post-holder will be research active in Electronics/Electrical Engineering and/or Intelligent Control Systems, or in a discipline that aligns with one of the existing research areas of the School of Engineering & Innovation. They will be supported to secure external research and scholarship funding, publish in high-ranking peer-reviewed journals and contribute to future REF submissions.

Key responsibilities

Teaching

- To contribute to the development, planning, implementation and updating of a high quality and successful curriculum at undergraduate and/or postgraduate levels.
- To prepare learning materials suitable for the teaching and learning methodologies used by the Open University.
- To contribute to the briefing, debriefing and training of part time teaching staff (Associate Lecturers).
- To contribute to the direction of teaching and assessment / examination by the University, monitoring of samples of marking by Associate Lecturers, and to act as a member of examination boards.
- To contribute to the assurance and enhancement of the quality of teaching, learning and research within the School of Engineering & Innovation and the wider STEM Faculty, and in line with University standards.
- To undertake professional development as an academic educator.

Research and Scholarship

- To undertake a self-directed programme of collaborative research and scholarship in a field that will contribute to the strengths of the School of Engineering & Innovation and the wider
STEM Faculty, and at a level commensurate with the current standards of excellence in the Faculty.

- To generate grant income as appropriate.
- To undertake research that is internationally excellent and leads to high-impact publications.
- To attract and supervise postgraduate research students.
- To participate in and host School and Faculty seminars and workshops aimed at sharing research outcomes and fostering interdisciplinary collaboration.
- To undertake professional development as an academic researcher.

**Outreach and Public Engagement**

- To contribute to the outreach activities of the STEM Faculty.
- To participate in the national and international STEM community and learned societies.
- To enhance the reputation of the School, the Faculty and the University through participation in relevant external meetings and activities.

**Enterprise and Impact**

- To apply/bid for, deliver, and manage individual enterprise activities (e.g. academic supervision of knowledge transfer programmes, consultancy).
- To further Faculty interests by developing and maintaining a network of contacts and engagements with businesses and government bodies as appropriate.
- To initiate and sustain activities that enhance the impact of your research and scholarship.

**Administration, Management and other duties**

- To engage with appropriate administrative tasks (e.g. workload planning, Career Development & Staff Appraisal).
- To contribute effectively to relevant academic or management fora.
- To undertake a programme of continuous professional development.
- To comply with the University’s Health and Safety and Equal Opportunities policies in the performance of duties.
- To co-operate with the Open University in ensuring as far as necessary, that Statutory Requirements, Codes of Practice, University Policies, and School Health and Safety arrangements are complied with.
- To have a strong commitment to the principles and practice of equality and diversity.
Person Specification below
Person Specification

Education, qualifications and training

**Essential**
- A good honours degree (or equivalent) in Electronics/Electrical Engineering and/or Intelligent Control Systems, or in a closely related area.

**Desirable**
- A PhD or equivalent in a relevant discipline
- HEA professional accreditation or equivalent qualification
- Membership of relevant professional institution

Knowledge, work and other relevant experience

**Essential**
- Ability to develop new distance-learning material at all levels in the field of Electronics/Electrical Engineering
- Ability to contribute to teaching across a broad range of Engineering disciplines
- Some experience of teaching support, training or supervision in a relevant subject area
- A broad knowledge of developments within the Engineering area relevant to teaching or research/scholarship needs
- Ability to carry out research in the field of in Electronics/Electrical Engineering and/or Intelligent Control Systems, or in one of the other research areas of the School of Engineering & Innovation.

**Desirable**
- Experience of producing online and/or distance learning materials
- Ability to design laboratory-based resources for learning and developing skills for practical enquiry
- Evidence of applying for external funding, taking into account stage of career
- A good publication record in mid to top-ranking peer reviewed journals, commensurate with stage of career
- Experience of working in/with industry

Personal abilities and qualities

**Essential**
- A demonstrable passion for teaching, whether in distance learning or face-to-face teaching environments, and enthusiasm in supporting distance learning by adults.
- Ability to work collaboratively with others in an interdiscipli
- Ability to develop a leadership role in teaching and/or research, commensurate with stage of career
- Excellent communication skills, both oral and written in a variety of contexts, including the ability to offer and receive constructive criticism
- Ability to plan and organise work to agreed deadlines
- Commitment to the aims, ethos and values of the Open University
Desirable

- The ability to write on issues outside of immediate area of expertise but in a related topic, in an informed and coherent manner
About the Unit

Faculty of Science, Technology, Engineering & Mathematics

The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 2500 staff including 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

We are inclusive:
- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience.
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM.

We are highly innovative:
- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation.
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy.

We deliver significant social and economic impact:
- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential.
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working.
The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers.

Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK.

Further details can be found at [http://stem.open.ac.uk](http://stem.open.ac.uk)

School of Engineering & Innovation

The School of Engineering and Innovation is one of the largest Schools in the STEM Faculty, with circa 85 academic staff and around 30 full-time and 25 part-time PhD students. It is a broad-based multidisciplinary School that leads the OU’s teaching in the areas of Engineering, Technology and Innovation Management, Design, Systems Thinking and Environmental Management. We support qualifications including the IMechE, IET, IOM3, IED and CIHSE accredited BEng/MEng, the IED accredited BA/BSc in Design and Innovation, the CIWEM accredited BSc in Environmental Science (Environmental Management), the MSc in Engineering, the MSc in Technology Management, the MSc in Systems Thinking in Practice, and the CIWEM and IEMA accredited MSc in Environmental Management.

The School is one of the most research-intensive in the University, hosting two submissions in both REF2014 and REF2021 under the Engineering and the Design Units of Assessment. Areas of active research within the School include Energy, Materials Engineering, Sustainability, Design, Engineering Education, Technology and Innovation Management, Systems Thinking, Waste Management, Acoustics.

The School adheres to the Athena SWAN Charter and holds an Athena SWAN Silver award.

Further details can be found at [https://www.open.ac.uk/stem/engineering-and-innovation/](https://www.open.ac.uk/stem/engineering-and-innovation/)