Engineering



MSc in Electronic Engineering at Lancaster University, UK

Take the next step in technology with Lancaster University

Beyond Silicon

Silicon technology is moving beyond digital memory, microprocessors and mixed signal chips such sensor interfaces. Wi-Fi is now a common place feature with the chip assemblies becoming more like miniaturised systems than conventional electronic boards. The next phase will be the mass integration of sensing technology, energy generation and interaction with the surroundings.

Beyond Electronics

Emerging markets including Health, Security, Energy and the Environment need chips and assemblies with advanced sensor, actuator and display technologies and microwave or millimeter wave electronic systems. This course will cover MEMS design, microfluidics, high frequency technologies and control solutions in addition to advanced nanoelectronics.

Why Lancaster, UK?

The delivery team at Lancaster are multi-disciplinary and have extensive industrial links across the globe. The project you will engage in will hence involve key industrial partners and knowledge of both fundamentals and industry application will be fundamental to the program.

The Programme		
ENGR510	System-on-Chip	Logic synthesis, mixed signal design and testable systems.
ENGR502	Embedded Systems	Processors in everything; how to design, how to use?
ENGR506	Intelligent Control	From datapaths to full feedback – sense and actuate.
ENG524	Smart Systems	Combine silicon with biology, fluidics and functional materials.
ENGR 507	High Frequency Electronics	Wireless technologies and High Frequency Systems
ENGR540B	Individual Proiect	Carry out an industry linked project.

oin us for a year or two in one of the most beautiful areas of the UK



For more information please contact: **Prof. Andrew Richardson a.richardson@lancaster.ac.uk**





Professor Andrew Richardson, Director of Studies

On behalf of Lancaster University, I would like to invite you to apply to join us to study the skills you need to work on the next generation of technology. The delivery team are world experts In their respective fields with extensive links to global





Empoyment Prospects

The electronics industry is expanding rapidly with the UK alone aiming to increase the sectors economic contribution from £80bn to £120bn by 2020 and create a further 150,000 highly skilled jobs. Smart Grid, Health Care and Medicine, Energy and Environment are set to join established industrial sectors including Security, Transport and Aerospace as key employment sectors for Electronic Engineers. This course will link you into these sectors and give you the skills to contribute effectively.

Guidance from International Experts

You will benefit from the leadership of some of the world experts in their fields

Professor Claudio Paoloni, RF Systems

Prof. Paoloni is an expert in RF technologies and the leader of the new Horizon 2020 program in Travelling Wave Tube Technology for High Data Rate Systems



Professor Andrew Richardson Microsystems Prof Richardson is an expert in Design for Test Engineering and led a 150 strong team across Europe to integrate this technology into biomedical technology and smart phones



Professor Malcolm Joyce, Instrumentation & Energy Prof. Joyce is an expert in instrumentation for the energy sector and has delivered new practices in advanced electronics to the nuclear sector



Relevant & Industrially Linked Projects

You participate in exciting projects that are both challenging and linked into real industrial need. These projects are mostly connected to an industrial partner and have led to employment for many alumni of the course. Examples are:

- Detection of living cells in a microfluidic system using electrochemical and RF technologies
- Self-Repairable electronics through unification of self-test and calibration technology
- Solution processed electronics over large area: Design and realisation of a fully computerised XY(Z) spray coater employing multiple pneumatic and/or ultrasonic airbrushes:
- Higher order mode couplers in superconducting RF cavities
- Monolithic microwave integrated circuit (MMIC) design for wireless networks
- Vision and robotic control interface system)

Apply Now, 10 Scholorships available

10 postgraduate scholarships are available for the Master courses in Electronic Engineering and Mechanical Engineering.

- The scholarship award is worth £2,000 towards the course tuition fee.
- The scholarships are available for UK/EU and international students.
- The scholarships will be awarded on merit.
- Students are advised to apply at the earliest opportunity.

Our Facilities

You will be based in a band new state-of-the-art facility opened in January 2015. The building is equipped with Brand new laboratories fully equipped for the learning of modern electronic engineering.