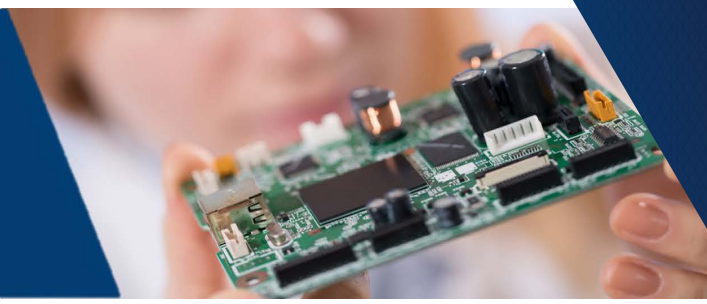
University College Dublin
Ireland's Global University

Course code: T257

MEngSc Electronic and Computer Engineering

One Year Full Time (September start)



Introduction

Ireland has evolved into one of the world's most important centres for high-tech businesses. The ICT sector in Ireland is a thriving and growing industry with 9 of the top 10 global ICT companies maintaining a presence in Ireland. The economic contribution of the sector is substantial with the ICT industry currently responsible for approximately 25% of Ireland's total turnover, representing one-third of Ireland's exports by value. The MEngSc in Electronic & Computer Engineering is a year-long programme designed to provide training for engineers who wish to work at a high level in the electronic and computer sectors worldwide. You will develop an advanced understanding of the theory and technology of modern electronic and computer systems and their business environment. You will build your knowledge through taught modules and project work and you will learn about design, innovation and problem solving at a level significantly beyond that of your bachelor's degree.

Course Highlight

Delivered by a highly research-active School composed of many internationally high-profile academics, including five IEEE Fellows. This master's provides intensive training to up-skill students to meet the needs of the growing Irish ICT sector.

Course Content and Structure

- 90 credits taught masters
- 60 credits taught modules
- 30 credits dissertation

Designed to meet the demands of modern high technology industries, this MEngSc covers topics from electronic engineering and computer science to business, delivered by internationally renowned academics. The modules that you take will depend on your interests and on your prior education.

Modules may include:

- Advances in Wireless networking
- Analogue Integrated Circuits
- Computer Science for Engineers
- Control Theory
- Digital Communications
- Digital System Design
- Enterprise, Innovation and Entrepreneurship
- Data Science
- Networks and Internet Systems
- Neural Engineering
- Numerical Algorithms
- Information Security
- Performance of Computer Systems
- Photonic Engineering
- Processor Design
- Research Skills and Techniques
- RF Electronics
- Software Engineering Project
- Signal Processing
- Wireless Systems

Why study at UCD?

Graduate education

12,800 graduate students; 17% graduate research students; structured PhDs

Global Profile

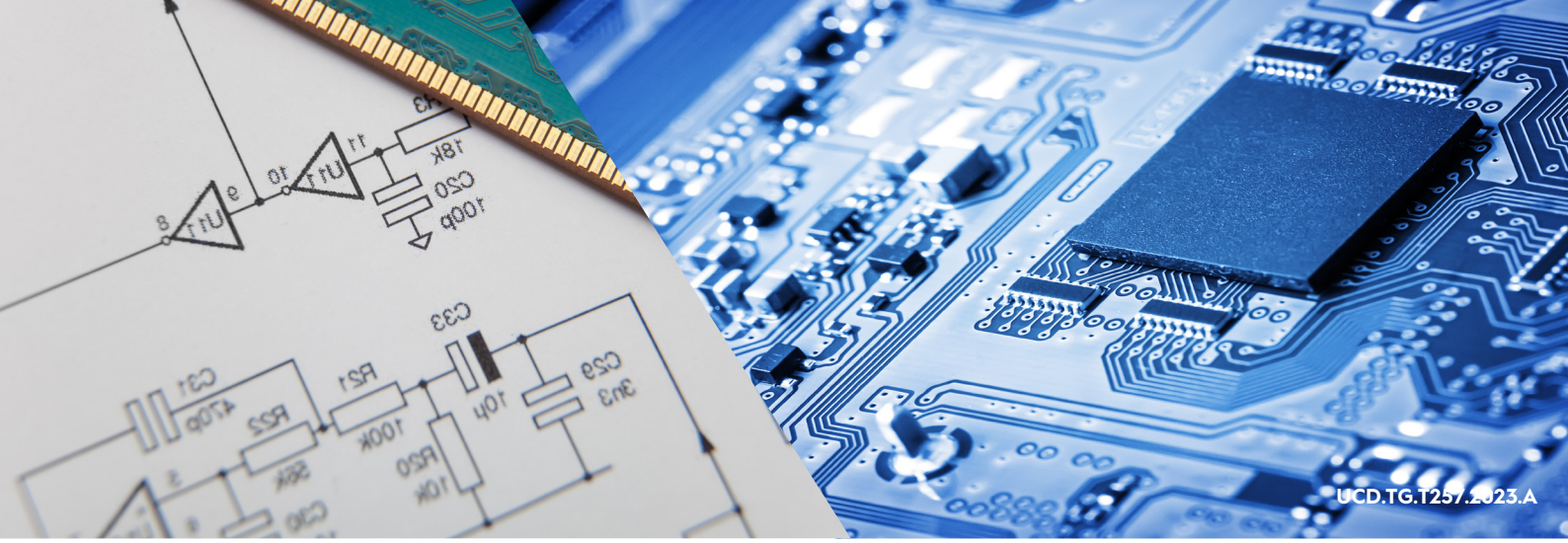
UCD is ranked in the top 1% of higher education institutions worldwide

Global community

9,500 international students and a 300,000 alumni network across 165 countries

Global careers

Dedicated careers support; 2-year stayback visa to work in Ireland



Career Opportunities

There are excellent job opportunities available in the ICT sector in Ireland. The Irish Government is to amend the work permit processing system in a bid to attract overseas workers to fill skill gaps in crucial areas like ICT and engineering. The Government has an ongoing commitment to generate thousands of jobs in the ICT sector every year. At present there are as many as 5,000 job vacancies in Ireland's burgeoning ICT sector and this gap could grow as Ireland hurtles towards becoming the digital capital of Europe. Prospective employers include: Accenture, Analog Devices, Intel, Microsoft, SAP, Synopsys and Xilinx.

Graduate Profile

Sudharsan Rajasekaran
Intel

During my course I was taught the problems that industries are currently facing, making it incredibly relevant. The course was quite brilliantly structured between hardware (Electronics) and software (Computer Science), designed in a way to learn by practice, offering me the confidence to face today's industrial demands. The course also offered a module on entrepreneurship which I believe to be incredibly important for my future Engineering career. Right now I am working alongside leading researchers for my master's project which is guiding me on the right career path and I truly believe that I will be one among tomorrow's industrial leaders. Moreover, I am proud to be a UCD student because it has one of the best campuses in the world

Applicant Profile

- Applicants must hold a bachelor's degree with a minimum upper second class honours (NFQ level 8) or international equivalent in an Electrical, Electronic or Computer Engineering programme.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.
- Students who do not meet the IELTS requirement may wish to consider taking the Pre-Sessional or Pre-Masters Pathway. Full details https://www.ucd.ie/alc/programmes/pathways/

International Fees and Scholarships

Tuition fee information is available on www.ucd.ie/fees. Please note that UCD offers a number of graduate scholarships for full-time, self-funding international students, holding an offer of a place on a UCD masters programme. Please see www.ucd.ie/global/scholarships/ for further information.

Related Masters Programmes of Interest

- ME Electronic & Computer Engineering
- ME Optical Engineering
- MSc Advanced Software Engineering
- MSc Computer Science NL (Negotiated Learning)
- MSc Information Systems

CONTACT US

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This programme receives significant interest so please apply early online at **www.ucd.ie/apply**