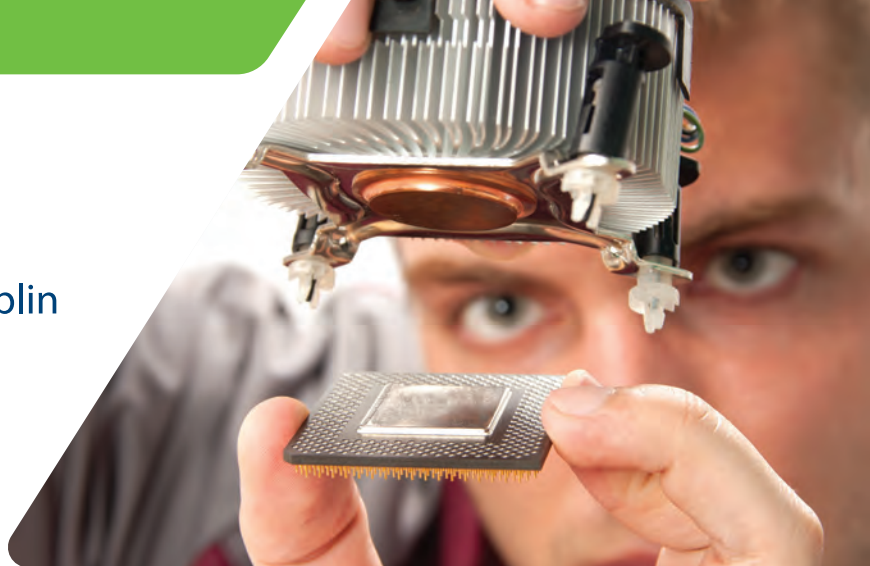




University College Dublin  
Ireland's Global University



## ME ELECTRONIC & COMPUTER ENGINEERING (TWO YEARS FULL TIME)

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. The ICT industry is responsible for approximately 25% of Ireland's total turnover,

representing one-third of Ireland's exports by value. This ME in Electronic & Computer Engineering is a two-year programme designed to develop professional engineers who can excel in the electronic and computer sectors worldwide. The ME programme is professionally accredited by Engineers Ireland and recognised by the Washington Accord for Chartered Engineer status.



### PROFESSIONAL WORK PLACEMENTS PROVIDED

Delivered by a highly research-intensive School composed of many internationally high-profile academics including five IEEE Fellows. This two-year programme provides 6-8 months' professional work experience as an embedded element of the programme.

### WHY STUDY AT UCD?



#### Professional Work Experience

6-8 month Professional Work Experience internship opportunity



#### Tradition

Established 1854, with 160 years of teaching and research excellence



#### Global profile

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



#### Global community

Over 8,000 international students from over 139 countries study at UCD



#### Global careers

Degrees with high employability; dedicated careers support; two-year stay-back visa (for non-EU students)



#### Safety

Modern parkland campus with 24-hour security, minutes from Dublin city centre

## COURSE CONTENT AND STRUCTURE

**120 credits**  
taught master's

**65 credits**  
taught modules

**30 credits**  
work placement

**25 credits**  
research project

Modules cover the following topics:

- Analogue Integrated Circuits
- Communications Theory
- Computer Networks
- Control Theory
- Digital Communications
- Digital System Design
- Electromagnetic Waves
- Embedded Systems
- Entrepreneurial Management
- Foundations of Computing
- Neural Engineering
- Operating Systems
- Photonic Engineering
- Professional Engineering Management
- Signal Processing
- Software Engineering
- RF Electronics
- Wireless Systems

Project topics are spread across a wide range, but related to and drawing on the topics covered in the taught modules. Similarly, your work placement can involve a variety of roles in a range of different companies in the electronic and computer engineering field.



## 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.



## APPLY NOW

This programme receives significant interest so please apply early online at [www.ucd.ie/apply](http://www.ucd.ie/apply)

## ENTRY REQUIREMENTS

- A 4-year 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 STUDENTS

- Option to stay in Ireland to seek employment and/or work for 2 years after graduating
- Approved by US Dept of Education for federally supported loans
- Apply for University non-EU Scholarships: [www.ucd.ie/global/study-at-ucd/scholarshipsfinances/scholarships/](http://www.ucd.ie/global/study-at-ucd/scholarshipsfinances/scholarships/)
- Apply for College of Engineering & Architecture non-EU scholarship: [www.ucd.ie/eacollege/study/non-eu-scholarships](http://www.ucd.ie/eacollege/study/non-eu-scholarships)

## RELATED MASTER'S PROGRAMMES OF INTEREST

- ME Optical Engineering
- MEngSc Electronic & Computer Engineering
- MSc Advanced Software Engineering
- MSc Computer Science NL (Negotiated Learning)
- MSc Digital Investigation & Forensic Computing
- MSc Information Systems

## FEES

Fee information is available at [www.ucd.ie/fees](http://www.ucd.ie/fees)

## CONTACT US

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## GRADUATE PROFILE

**Ruth Fitzmaurice**  
Intel

I studied electronic and electrical engineering at UCD and graduated with a Bachelor of Science degree in 2017. I then moved on to complete a master's in electronic and computer engineering also in UCD.

When looking at postgraduate courses, the electronic and computer engineering masters at UCD stood out to me due to its excellent facilities and respected lecturers. The two-year course includes an 8-month internship, 3 trimesters of taught subjects and an 8-month research project. For my internship, I worked with the Internet-of-Things and Wearables Group at Intel. Working within Intel as an intern gave me the opportunity to enhance the technical and problem-solving skills I acquired throughout my previous three years at UCD.

Both my electronic engineering degrees from UCD have given me the knowledge and experience that I will use in the future and therefore I would strongly recommend this course. I am currently working as a Graduate Product Development Engineer with the Manufacturing Verification and Performance Group in Intel.