University College Dublin
Ireland's Global University

MSc Computer Science (Conversion)
(16 months Full Time)

Ireland is home to the world's top 10 technology companies. It is known as the Internet and Games Capital of Europe and is among the world's most technologically developed nations. There are excellent job opportunities, with 5,000 job vacancies in the sector at present.

UCD offers a skills conversion graduate programme for individuals who hold a primary degree in another discipline (e.g., Arts, Commerce), and would like to enter into an IT related career. This conversion MSc introduces students to computational thinking and provides a thorough foundation in the practical aspects of modern Computer Science.

On completion of the programme you will be able to:
- apply the core principles of programming to solve real-world problems and process different types of information
- design, develop and query relational databases
- demonstrate an awareness of the roles and interactions of hardware components, operating systems and networking
- employ web application development concepts and technologies to design and create feature-rich and versatile websites

Key Fact

The UCD School of Computer Science and Informatics has significant experience in the training of non-Computer Science graduates. The curriculum for this MSc is continually updated and the coursework is practically orientated, with an emphasis on developing coding skills and competence in emerging technologies.

Why study at UCD?

Tradition
Established 1854, with 160 years of teaching & research excellence

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

Global community
Over 6,000 international students from over 120 countries study at UCD

Global careers
Degrees with high employability; dedicated careers support

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

Course Content and Structure

120 credits taught masters	60 credits taught modules	30 credits research practicum	30 credits taught modules

This programme has been specifically designed for graduate students of disciplines other than Computer Science. No prior knowledge of programming is assumed. During the first year, students take modules with learning outcomes aimed at providing fundamental skills required by modern technology companies. A research practicum allows students to apply the skills learned in the taught modules in a more significant project and to see where these skills can play a role in industry. In the final semester, students choose 30 credits of taught modules from the MSc Computer Science (Negotiated Learning) programme.

The structure of the programme is as follows:

Year 1 (Sept-Dec)
- Programming I (Python)
- Computational Thinking
- Relational Databases & Information Systems
- Computer Architecture
- Networks & Internet Systems
- Operating Systems

Year 1 (Jan-May)
- Programming II (Java)
- Data Structures & Algorithms
- Data Analytics
- Web Application Development
- Software Engineering

Year 1 (May-Aug)
- Research Practicum with an opportunity to engage with employers

Year 2 (Sept-Dec)
Choose* modules in areas such as
- Data Science
- Cloud & Distributed Computing
- Software Engineering
- Forensics & Security
- Artificial Intelligence & Cognitive Science

Note that there may be some limitations on the choice due to pre-requisites and timetabling.

Modules and topics shown are subject to change and are not guaranteed by UCD.

Career Opportunities

Some of the roles graduates of this MSc have worked in include the following:

- Software Engineer
- Computer Programmer
- IT Project Analyst
- Performance Engineer
- SAP Support Engineer

- Python Developer
- Web Applications Developer
- Business Analyst
- Technical Analyst
- Technical Consultant

Companies that have employed graduates include IBM, Dell, Accenture, SAP, Mastercard, Computershare Ireland, Deloitte Ireland, First Derivatives, General Motors, Bearing Point, Logentries, AIB, Eircom and Paddy Power.

Apply Now

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

Entry Requirements

- This programme is intended for applicants who do not have a Computer Science or ICT background. An Upper Second class honours degree, or the international equivalent, in another discipline is required for entry.
- Computer Science is a mathematical subject involving logical understanding and reasoning and therefore applicants must be able to demonstrate a good knowledge of mathematics.
- 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.

Fees and Scholarships

Tuition fee information is available on www.ucd.ie/fees. Please note that UCD offer a number of postgraduate scholarships for fulltime, self-funding international students, holding an offer of a place on master's programmes. Please see www.ucd.ie/international/scholarships/ for further information.

Accommodation

UCD has accommodation for over 2,500 students across five locations. Places are limited and more information is available at www.ucd.ie/residences/ For information and advice on living off campus, please contact the UCD Residences Off-Campus Office or the UCD Student Union Accommodation Services. Please visit www.ucd.ie/residences/accommodation-booking-support/ for further details.

Related Masters Programmes of Interest

- MSc Computer Science (Negotiated Learning)
- MSc Information Systems

Graduate Profiles

Anthony McCourt,
Software Developer at Scream Technologies

Anthony worked as a pharmacist for 10 years before starting the MSc. He had an interest in IT and software and sought a career change into this area. After graduating he went straight into working in a software start-up in the area of speech technologies.
"The biggest challenge was the huge amount of work and the associated time pressures, especially considering I had no prior IT training and was still working every weekend as a pharmacist. I would say to anyone thinking of doing the course to prepare yourself for a lot of work, but the reward is huge. The amount you will learn is incredible."

Emily Castles,
Ruby on Rails developer at Red Hills Software.

"Having studied Civil Engineering, I already had a technical background and had completed a couple of Computer Science modules involving Visual Basic and C++. I had picked up some basic programming logic from these but I'm not sure that it gave me much of an advantage over other students in the Masters. I knew I wanted to work in the area of web development. Initially, I was exploring the idea of e-commerce and multimedia courses that included development modules but in the end I decided that I would prefer to get a good base knowledge in programming before specialising into any area."

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Non-EU Enquiries : internationaladmissions@ucd.ie
www.ucd.ie/international