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 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 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	60 credits	30 credits	30 credits
taught masters	taught modules	research practicum	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)
- Python Programming
- Object Oriented Programming
- Computational Thinking
- Relational Databases & Information Systems
- Operating Systems
- Web Application Development

Year 1 (Jan-May)
- Java Programming
- Data Structures & Algorithms
- Data Analytics
- Software Engineering
- Computer Architecture
- Networks & Internet Systems

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
- 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.

Course code: T195

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 Demonware Ltd., Murex, SAP, Paddy Power Betfair, Novartis, CarTrawler, Amazon, Voysis, Zalando SE, Accenture, BT Ireland, Corvil, Guideware, and KPMG Ireland.

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 offers a number of postgraduate scholarships for full-time, 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

Aoife Whelan, Data Analyst at Accenture

Aoife previously studied Physics at undergraduate level prior to applying for the MSc. There she gained some technical skills but felt it was not enough for a career in IT. She had an interest in data science and wanted to increase her skills and knowledge in this area. After graduating from the MSc she began working for Accenture in the area of data analytics. "The workload is large and the time pressures can be challenging but you'll find yourself with a lot of relevant skills and knowledge for finding work in the industry. You will learn a lot in a relatively short period of time."

Conor O'Kelly, Java Software Developer at Murex

Conor is a graduate in Economics and Business and took the conversion Masters with the goal of switching to a career path in the IT industry. "The course took a huge amount of time and dedication to complete but was immensely rewarding. I feel that I have achieved a solid grounding in the fundamental aspects of Computer Science. This base of knowledge gives me a deeper understanding when learning new technologies. This will stand to me throughout a career that requires continuous learning. The course offers a fantastic opportunity to acquire the well-rounded skill set needed to be an effective part of any IT team. I would highly recommend it to anyone who is serious about beginning a career in IT."

EU Enquiries : cs_conversion@ucd.ie : +353 (0) 1 716 2953
www.ucd.ie/courses/msc-computer-science-conversion
UCD School of Computer Science, University College Dublin, Belfield, Dublin 4.

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

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