UCD DUBLIN

University College Dublin
Ireland's Global University

COURSE CODE: T195

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

UCD offers a skills conversion graduate programme for individuals who hold a primary degree in another discipline (e.g., Arts, Commerce, Engineering), and would like to enter an IT-related career. This programme provides a thorough foundation in modern Computer Science in a practically oriented learning environment.
On completion of the programme you will be able to:

- Demonstrate an integrated knowledge and understanding of the scientific principles of Computer Science.
- Demonstrate competence and specialist knowledge in areas such as Programming, Data Science, Software Engineering, Web Application Development, Database Design, Cloud & Distributed Computing, Artificial Intelligence & Cognitive Science.
- Undertake independent innovative research and development projects.
- Work with confidence both autonomously and as part of a team on projects related to real-world computer science applications.

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 trimester, students choose 30 credits of taught modules from the MSc Computer Science (Negotiated Learning) programme.

Year 1 (Autumn Trimester)
- Python Programming
- Object Oriented Programming
- Computational Thinking
- Relational Databases and Information Systems
- Operating Systems
- Web Application Development

Year 1 (Spring Trimester)
- Java Programming
- Data Structures and Algorithms
- Data Analytics
- Software Engineering
- Computer Architecture
- Networks and Internet Systems

Year 1 (Summer Trimester)
- Research Practicum

Year 2 (Autumn Trimester)
Choose* modules in areas such as:
- Data Science
- Software Engineering
- Artificial Intelligence and Cognitive Science

*Note that there may be some limitations on 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 have worked in include: Software Engineer, IT Project Analyst, Data Scientist, Python Developer, Web Applications Developer, Data Analyst, Business Analyst, Technical Analyst and Technical Consultant. Companies that have employed graduates include IBM, Dell, Accenture, SAP, Workday, Ericsson, Deloitte Ireland, First Derivatives, Bearing Point, Tableau Software, AIB, Web Summit and Zalando SE.

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, such as TOEFL (iBT) score of 90 or PTE score of 63.

Graduate Profile
Jack Halpin, Software Engineer, SN Systems Ltd.

I wanted to get into web and mobile development but only had a handful of programming experience from my degree. From doing the MSc, I've learned a lot about the underlying theory of Computer Science as well as becoming proficient across a number of technologies that are relevant to today's industry. I'd highly recommend the course to anyone thinking of pursuing a career in IT or software development.

EU ENQUIRIES : cs_conversion@ucd.ie
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/global

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