Mathematics and Computer Science BSc (Hons)

College of Engineering and Technology

UNIVERSITY of DERBY

www.derby.ac.uk/engineering-technology

ⓘ Factfile

Where you'll study:
Derby Campus, Kedleston Road

UCAS code: GG41

Entry requirements: 260 UCAS points. For further information see the applying page

Duration and mode of study:
Three or four years full-time, with an optional placement year

Fees: £9,000 per year. For further information see the fees and funding page

Start date: September

Why choose this course?

The University of Derby received a 90% satisfaction rate for it's mathematics courses in the 2013 National Student Survey, with the same percentage progressing to further study and employment. Among many other things, we attribute this to our links with local and international companies. Such connections provide students with invaluable experience of applying learning to real-life situations.

About the course

This course enables you to develop your knowledge and understanding of concepts in mathematics, operational research and statistics. You'll also explore how mathematics can be applied to the modern world of business.

Teaching and learning

Formal lectures are supported by smaller, interactive tutorial groups and laboratory work, enabling you to develop a deeper understanding while also problem solving. A weekly mathematics drop-in clinic ensures that you receive one-to-one help and support from our experienced staff.

There is also an optional work placement year as part of the course. Work placements are ideal opportunities for you to apply your knowledge in a business environment while also receiving an income for your work.

Assessment

You'll be assessed through examinations and coursework projects.

Study modules

You'll study linear algebra, differential and integral calculus, computational mathematics, databases, networks and security, numerical methods, operational research, programming techniques, standard analytical techniques, statistics and topics in computer science. The Mathematics Group Project module enables you to experience working as a mathematician on a real and complex problem, as specified by industry managers.

Stage one

You'll study these modules:

- Analysis and Algebra
- Calculus
- Patterns of Problem Solving
- Programming 1
- Subjects in Computer Science
- Programming 2

Stage two

You'll study these modules:

- Application Development
- Databases
- Mathematical Methods
- Mathematics Group Project
- Networks and Security
- Operational Research

Optional placement year

Stage three

You'll study this module:

- Research Methods and Independent Study in Mathematics

You'll choose four options from:

- Cryptography and Coding
- Non-Linear Systems Dynamics
- Modelling with Differential Equations
- Graph Theory and Applications
- Discrete Event Systems
- Systems Programming
- Independent Studies

Your career

Employers recognise and value the problem solving, analytical and numerical skills and competences that mathematics graduates develop. Therefore, there is a wide range of careers available for graduates of these mathematical disciplines. During the course you'll develop skills for jobs such as computer programmer, network technician, systems architect or systems engineer with the potential to work at the level of IT director.

> The course is really interesting, with content ranging from statistics to pure and computer mathematics. Derby is a friendly and safe city to live in that I would recommend to anyone.
>
> **Alastair Williams**
> Mathematics and Computer Science graduate

Athena SWAN Member

The University is a member of the Athena SWAN Charter which promotes and rewards good employment practice in the recruitment, retention and progression of female academics in STEM.

Contact

College of Engineering and Technology
T: 01332 593302
E: tech@derby.ac.uk

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www.facebook.com/DerbyUniTech

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If you'd like this information in large print,
braille or audio please contact:
T: 01332 591044
E: marketing@derby.ac.uk

University of Derby
Kedleston Road
Derby DE22 1GB

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