



University of
Nottingham

UK | CHINA | MALAYSIA

School of Computer Science Postgraduate Taught Courses

nottingham.ac.uk/pgstudy/computerscience



Research-engaged
teaching



Top 10 for
research power



Interdisciplinary
learning



Develop your
research skills



Exceed your potential

Overview

Be taught by academic staff who are undertaking internationally leading research, ensuring our programmes are at the cutting-edge of the latest learning.

World-class facilities

We are based on the University's Jubilee Campus, which offers excellent teaching and research facilities and a dedicated library. You can access our computer labs 24 hours per day, which offer more than 100 powerful PCs running Windows and Linux. There is also an Apple development lab with Macs and the latest tools to create software for iPhones and iPads – which includes the latest Augmented Reality technology.

Teaching and research excellence

In the latest Research Excellence Framework (REF 2014) the School of Computer Science was ranked in the top 10 of all computer science departments in the UK in terms of research power, and 99% of our research activity was classified as being at international level.

We deliver high quality teaching and learning for our students, as recognised with the Gold Teaching Excellence and Student Outcomes Framework award in 2017.

Computer Science MSc

This course is designed for those who have already completed a first degree in computer science or a related subject. The course content reflects the research strengths of the school, particularly in the mathematical foundations of programming, in automated scheduling and planning, in artificial intelligence, in human computer interaction, in modelling, and in interactive systems.

During semester one, you will take compulsory modules in Programming, and a choice of optional modules including:

- Advanced Algorithms and Data Structures
- Advanced Computer Networks
- Computer Graphics
- Data Modelling and Analysis
- Designing Intelligent Agents
- Fundamentals of Artificial Intelligence
- Fuzzy Sets and Fuzzy Logic Systems
- Games
- Machine Learning
- Mathematical Foundations of Programming
- Software Engineering

Over the summer period towards the end of the course, you will undertake a research project in computer science. This project involves conducting an in-depth piece of research, carried out under the supervision of a member of academic staff.

Human Computer Interaction MSc

Human-Computer Interaction (HCI) is a specialist branch of computer science dedicated to understanding the relationship between people and computers.

This course is intended for students with diverse disciplinary backgrounds and experiences, including computer science, engineering, natural science, social science, and art and design, so whatever your background, if you believe that people should be at the heart of computing and are interested in shaping our digital future to meet human need, then this is the course for you.

In semester one the compulsory modules are:

- Introduction to Human Computer Interaction
- Studying Human Performance
- Ubiquitous Computing

You'll also select one of these two options:

- Cognitive Ergonomics in Design
- Programming

During semester two, the compulsory modules are:

- Contemporary Issues in Human Factors and Interactive Systems
- Design Ethnography
- Human-Computer Systems

Example optional modules include:

- Machine Learning
- Mixed Reality Technologies
- Mobile Device Programming
- Physical Ergonomics
- Simulation and Digital Human Modelling
- Software Engineering Management
- Systems Engineering and Human Factors

You will also undertake an individual research project in human-computer interaction. The topic can be in any area of HCI ranging from purely theoretical studies to empirical studies of users and/or practical design work.

Advance your career

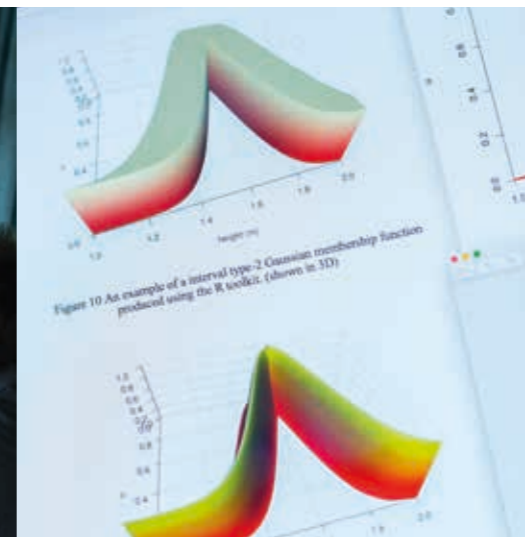
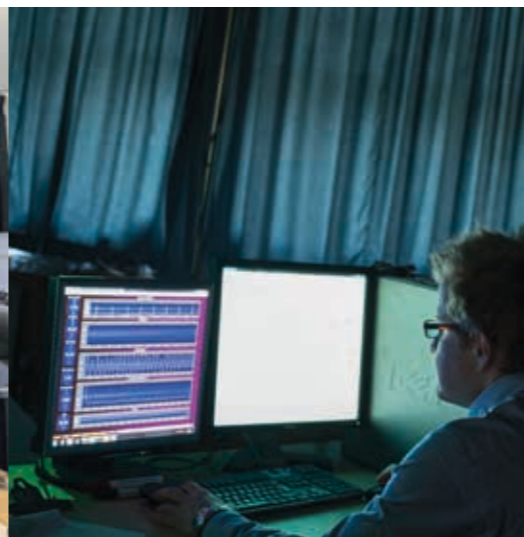
Graduates from the MSc Computer Science programme are prepared for careers in advanced software development, particularly where reliability and efficiency are vital requirements. This course also provides an excellent foundation for further study and you may decide to progress to a PhD in order to continue your research.

The MSc Human Computer Interaction will equip you with the skills and knowledge essential to design companies that appreciate the value of human-centred design in shaping the development of new technology. It also provides a pathway to careers in interactive systems design, user experience design, user interface design, and usability engineering, while other graduates progress to PhD research.

In 2016, 95.5% of postgraduates from the school who were available for employment had secured work or further study within six months of graduation. The average starting salary was £27,550 with the highest being £40,000.*

* Known destinations of full-time home postgraduates 2015/16. Salaries are calculated based on the median of those in full-time paid employment within the UK.

Find out more: nottingham.ac.uk/careers





Our research

The school's research covers a range of areas, and you can find out more on our website: nottingham.ac.uk/computerscience/research

Here are examples of some of our research groups.

Computer Vision Laboratory

The Computer Vision Lab (CVL) is a multidisciplinary group performing basic and applied research in image manipulation, image analysis, computer vision and related areas of machine learning.

Our goal is to develop novel and efficient techniques for the extraction of quantitative descriptions of viewed objects from a variety of images and image sequences. We also seek to translate those techniques into high quality software tools that can be used to address real world problems.

Intelligent Modelling and Analysis

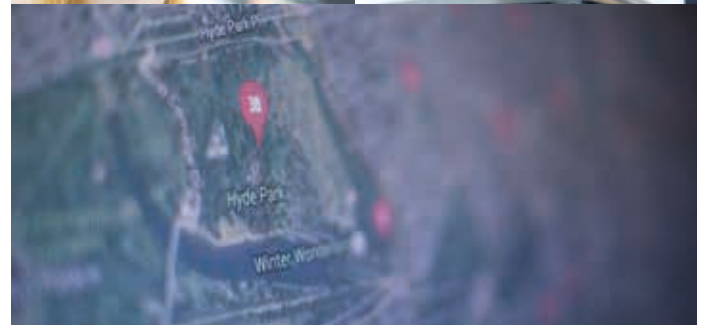
Our research objectives are to model and represent challenging problems, and to create cutting-edge analysis methodologies. We focus on difficult and important real-world problems, with particular emphasis on large and noisy data sets.

To undertake this research we use a range of techniques including: AI-based Data Mining, Bio-Inspired Algorithms, Computational Modelling, Discrete and Agent-Based Simulation, Fuzzy Methodologies, Multi-Sensor Data Fusion, and Qualitative Methods including Structured Interviews.

Mixed Reality Laboratory

The Mixed Reality Laboratory is a dedicated studio facility where computer scientists, psychologists, sociologists, engineers, architects and artists collaborate to explore the potential of ubiquitous, mobile and mixed reality technologies to shape everyday life.

Our research is grounded in a user-centred approach. We build on an expertise in interaction and distributed systems design to prototype new interactive technologies, and employ multiple evaluation techniques, to understand how these are experienced by people in the real world.



This flyer has been drafted in advance of the academic year to which it applies. Every effort has been made to ensure that the information contained in this flyer is accurate at the time of publishing, but changes (for example to course content) are likely to occur given the interval between publication and commencement of the course. It is therefore very important to check our website for any updates before you apply for the course by following nottingham.ac.uk/pgstudy. Where there is a difference between the contents of this flyer and our website, the contents of the website take precedence.

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Fund it

When looking at how to fund your postgraduate studies, it's worth taking the time to research your options, as funding is available from a variety of sources.

Find out more at nottingham.ac.uk/pgstudy/funding

Discover more

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nottingham.ac.uk/contact

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