



## School of Computing Science

### Third/Fourth Year Computing Science

*Encouraging depth of understanding and specialism*

Students can choose courses from an extensive list of elective 3<sup>rd</sup>/4<sup>th</sup> year courses:

- Advanced Network Systems
- Advanced Operating Systems
- Advanced Software Engineering Practices
- Algorithmics II
- Artificial Intelligence
- Big Data
- Computer Architecture
- Computer Vision: Methods and Applications
- Computing Science in the Classroom
- Constraint Programming
- Cyber Security Forensics
- Cryptography and Secure Development
- Distributed and Parallel Technologies
- Functional Programming
- Human-Centred Security
- Human Computer Interaction
- Information Retrieval
- IT Architecture
- Machine Learning
- Mobile Human Computer Interaction
- Modelling Reactive Systems
- Programming Languages
- Recommender Systems
- Robotics Foundations
- Safety Critical Systems
- Theory of Computation
- Web Science



#### Independent project

All students undertake a substantial individual project, designed and supervised by an academic member of staff. Many of the projects contribute to ongoing research programmes in the school.

Previous 4<sup>th</sup> year projects include: an algorithm animator, a personalised news portal, an intelligent timetabling system, a mobile social network application based on music preferences, and restaurant recommendations for groups.