

The Computer Science Department at Warwick offers first-rate research and teaching facilities, housed in a purpose-built building at the heart of the Warwick campus. The Department's research ranges from the foundations of computing to the creation and deployment of novel, industry-strength interdisciplinary applications. This activity is strengthened through excellent long-term collaboration with industry and academia, both in the UK and also internationally. Recent research partners have included the BBC, the Forensic Science Service, Harvard Medical School, IBM, Intel, Microsoft, MIT Center for Space Research, NASA and Rolls Royce.

RESEARCH DEGREES

PhD IN COMPUTER SCIENCE

MSc BY RESEARCH IN COMPUTER SCIENCE

TAUGHT MASTER'S DEGREES

MSc IN COMPUTER SCIENCE AND APPLICATIONS

MSc IN COGNITIVE SYSTEMS

CONTACT DETAILS

The Postgraduate Secretary
Department of Computer Science
University of Warwick
Coventry CV4 7AL
United Kingdom

☎ +44 (0)24 7652 3193

☎ comp-sci-pg@dcs.warwick.ac.uk

Dr. A. I. Cristea
Postgraduate Admissions Tutor
☎ acristea@dcs.warwick.ac.uk

Research Degrees

☎ cs-pg-res@dcs.warwick.ac.uk

Master's Degrees

☎ msc-admissions@dcs.warwick.ac.uk

RESEARCH GROUPS

Research in the **Foundations of Computer Science Group (FoCS)** research group spans a wide range of topics in Theoretical Computer Science. Our research goal is to improve the understanding of fundamental problems arising in Computer Science. Our main focus is on the design of mathematical tools and efficient algorithms to solve these problems, and on specification and design of computing and communication systems which are reliable and secure. The areas of our research range from theory to practice. FoCS is one of the core groups affiliated with the Centre for Discrete Mathematics and its Applications (DIMAP) at the University of Warwick.

The **Computational Biology and Bioimaging Group (CBB)** applies advances in Computer Science to the increasingly challenging applications in biology and neuroscience. Techniques from diverse areas such as machine learning, image processing and computer vision, data mining, statistical analysis, mathematical modelling and simulation, and compilation are crucial to organise and analyse the vast amount of data generated by biologists and contribute to the understanding of biological systems. Current work focuses on computational neuroscience, computational cell biology, bioimage informatics, proteomics, sociomicrobiology, and applications in medical visualisation.

The **Performance Computing and Visualisation (PCV)** group has six core threads: High Performance and Scientific Computing; Business and Internet Computing; Intelligent and Distributed Systems; Fault Tolerant and Reliable Systems; Multimedia Processing and Computer Vision and Digital Forensics. Research in this group often combines aspects of these core threads – for example in investigating fault tolerant and reliable P2P overlay topologies, or in benchmarking and modelling high-performance scientific codes to improve the data that can be visualised. The group is largely industry-funded, having close ties with government research labs, with large computing firms and with investment banks.

DEPARTMENT OF COMPUTER SCIENCE

www.warwick.ac.uk/go/compsci

The **Intelligent and Adaptive Systems Research Group (IAS)** explores and develops innovative software technologies applied to areas which include the social and semantic web, education and educational technology, and human-computer integration. The defining characteristics of our systems include autonomy, self-awareness, learning ability, pattern recognition, risk and uncertainty management, skill development and refinement/optimisation and coalition formation. We employ and extend techniques and technologies such as ontological and rule-based reasoning, Bayesian networks, adaptive hypermedia, service-oriented and agent-based systems, machine learning and data mining, user and group modelling, empirical modelling, context modelling and prediction, quality of service management, design, and decision support.

RESEARCH DEGREES

We welcome applications from qualified, enthusiastic candidates, both from the UK and overseas, to be part of our thriving research community. It is recommended that you contact a potential supervisor before applying to discuss your research options.

PHD IN COMPUTER SCIENCE

**Standard Duration: 3 years full-time,
6 years part-time**

MSc BY RESEARCH IN COMPUTER SCIENCE

**Standard Duration 1 year full-time,
2 years part-time**

APPLICATION FACT FILE (RESEARCH DEGREES)

Entry Requirements

Normally, a minimum 2.i or equivalent.

It is preferred that PhD applicants also hold an MSc in a related discipline

English Language Requirements

IELTS 6.5; TOEFL (iBT) 92 or equivalent

Application

All applications are made online at www.warwick.ac.uk/go/pgapply

Tuition Fees

(2011/2012 fees. Please note that fees for 2012/13 will be published online in spring 2012.)

Home/EU: Full-time £3,900, Part-time £2,340

Overseas: (Band 1) Full-time £12,115,
Part-time £7,269

(Band 2 – lab based) Full-time £15,460,
Part-time £9,276

Funding

A small number of Departmental scholarships, or contributions towards the costs are available each year and group scholarships are announced by groups depending on funding. See departmental website for further information. Details of the Chancellor's Scholarships and other funding opportunities are available from: www.warwick.ac.uk/go/graduateschool

TAUGHT MASTER'S DEGREES

MSc IN COMPUTER SCIENCE AND APPLICATIONS

**Standard Duration: 1 year full-time
Places available: 50**

The MSc provides a flexible interdisciplinary course covering a wide range of advanced research-led topics. The course provides a solid preparation for the use of cutting-edge tools, techniques and technologies in an industrial or business setting. Topics range from core Computer Science to the application of advanced techniques in areas such as mathematics, science, computational biology, and scientific computing. Students develop the skills needed in the many areas in which computing is applied, from bioinformatics to multimedia systems. The course also provides excellent preparation for PhD study and is informed by Warwick's leading edge research.

MSc IN COGNITIVE SYSTEMS

**Standard Duration: 1 year full-time
Places available: 30**

The Cognitive Systems (CogSys) course offers interdisciplinary study that harnesses the potential at the junction of normal cognition (Psychology), and complex computing systems (Computer Science). The course covers topics in the study of cognitive processes, in both natural and artificial systems. CogSys aims at human cognition, the understanding of how these complex cognitive systems are instantiated and developed. It also provides access to data and signal modelling approaches, neuroimaging and neurophysiological technology. CogSys integrates AI studies of problem-solving, reasoning, planning, and natural language use that are based on higher level (symbolic) functionality. The MSc also examines human-computer interaction with computational artefacts such as conversational agents, multimodal interfaces, virtual reality environments, and dialogue systems, and methods for automatically training these systems.

APPLICATION FACT FILE (TAUGHT DEGREES)

Entry Requirements

MSc in Computer Science and Applications:
A 2.ii or equivalent in Computer Science or related discipline.

MSc in Cognitive Systems: Minimum 2.ii degree or equivalent in Sciences (from Computer Science, Psychology, Engineering and Mathematics background).

English language requirements

IELTS 6.5, TOEFL (iBT) 92 or equivalent

Application

All applications are made online at www.warwick.ac.uk/go/pgapply

Tuition fees

(2011/2012 fees. Please note that fees for 2012/13 will be published online in spring 2012.)

Home/EU: Full-time £6,080, Part-time £3,040

Overseas: (Band 1) Full-time £12,325,
Part-time £6,163

Overseas: (Band 2, lab-based) Full-time £16,000,
Part-time £8,000

Funding

A few merit scholarships are available each year. See departmental website for further information. Other funding opportunities are listed on the Graduate School website: www.warwick.ac.uk/go/graduateschool