

# Computer Science

MRes





## Aims

This advanced postgraduate programme offers a two-year part-time or one-year full-time research project, seminars and taught modules. Students follow a module on research methods in Computer Science and Information Systems as well as three taught modules relevant to their research interests.

The degree has been designed to meet the needs of students wishing to advance their knowledge of an area of research interest in Computer Science and research methods before embarking on a research degree or applying the specialist knowledge gained in their career.

Students who complete the programme will have gained an in-depth theoretical and practical knowledge of their chosen area of study in Computer Science, which they will be able to use in analysis of research problems arising in that area, the evaluation and application of existing technologies, and research and development of new technologies. They will also have gained the necessary foundations for continuing into an MPhil/PhD programme.

## Duration

Two years part-time or one year full-time.

## Attendance

Up to two evenings a week part-time;  
up to three days a week full-time.  
October-September.

## Programme Content

Full-time students undertake a one-year supervised research project, plus a research methods module, and also take three further taught modules. Part-time students undertake the research project, research

methods module and three other taught modules over two years. Students select modules appropriate to their chosen research area.

## Special Features

Students will have the opportunity to undertake their research within ongoing research projects in the School. At the end of their period of study, students will give a seminar on their research project in addition to submitting a written thesis. Several of the taught modules will include guided study of the research literature, including seminars and tutorial discussions.

## Entry Requirements

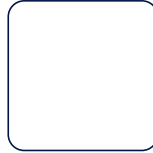
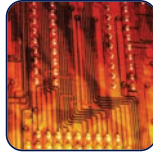
A good first degree or MSc in Computer Science. Joint-honours computing graduates may also be eligible provided they have covered the necessary prerequisite material at the appropriate level.

## Modules

### Three modules are chosen from:

- Advances in Data Management
- Component-Based Software Development
- Computational Intelligence and Visualisation
- Data Warehousing and Data Mining
- Image-Based Information Processing
- Information Retrieval
- Intelligent Technologies
- Internet and Web Technologies
- Knowledge Representation and Reasoning
- Mobile and Ubiquitous Computing
- Search Engines and Web Navigation
- Semantic Web

**Please note that not all of the above modules may be offered.**



## Assessment

Students are required to submit coursework during the programme. Assessment is by the research project, written examinations, and the coursework.

## The Research Environment

The School is a world-class centre of expertise in information and knowledge management, intelligent systems and computational intelligence. We also have major interdisciplinary activities in life sciences informatics and technology-enhanced learning. Our research collaborations include many industrial partners and other academic institutions in the UK and abroad, and we maintain a high level of activity in organising international conferences and workshops.

There are two main research groups in the School: Computational Intelligence, and Information Management and Web Technologies. In addition, there are informal interest groups which emerge and evolve over time within and between the main research groups, for example in search engine technology, sensor networks, semantic web, computer vision, cluster analysis, adaptive systems and learning environments.

There are two main interdisciplinary activities: Life Sciences Informatics and the London Knowledge Lab. We are collaborating in the Bloomsbury Centre for Bioinformatics and the Institute for Structural Molecular Biology with several other departments from Birkbeck and University College London. The London Knowledge Lab brings together computer scientists from Birkbeck and social scientists from the Institute of Education to explore the ways in which digital technologies and new media will shape the future of learning and knowledge.

## Computing Facilities

Students have access to computing labs in the School with platforms including Unix, Windows and Linux. A wide range of software is available including programming languages C++, C#, C, Java, AspectJ; database management systems: Oracle, DB2, SQLServer, MySQL, PostgreSQL, and many other packages for systems design, office productivity and web-page design. The College provides remote access to facilities via an Internet connection from home or work. The computing facilities are available to students on a 24-hour basis, seven days a week.

## Applications

Informal enquiries can be made to the programme administrator (see back cover for contact details). Application forms and College Prospectuses are available by calling 0845 601 0174, or online at [www.bbk.ac.uk/request](http://www.bbk.ac.uk/request)

Completed application forms should be sent to the College Registry. Information about the School's research activities can be found at [www.dcs.bbk.ac.uk/research](http://www.dcs.bbk.ac.uk/research)

## Related Courses

**MSc/PG Dip Computer Science**

**MSc/PG Dip E-Business**

**MSc Advanced Information Systems**

**MSc Intelligent Information Systems**

**MSc Web Information Management**

**MRes Information Systems and Management**

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*\*National Student Survey 2006, 2007 and 2008: for overall student satisfaction in London when compared with other multi-faculty institutions.*

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