

## Advanced Computer Science Masters/MSc

### Masters/MSc postgraduate degree course in Advanced Computer Science:

This programme is intended for graduates with a previous degree in Computer Science or a related discipline, and with a solid foundation in programming. It allows students to broaden their knowledge of cutting edge areas of Computing through the choice of options from a range of advanced taught modules. It also provides the opportunity for students to deepen their knowledge of selected areas of Computing by individual project work. The final four months of the programme is spent on a summer project. This could either be a software development oriented project, or a research oriented project, supervised by a member of staff who is active in that research area. Students undertaking research oriented projects (typically those interested in a career in research and development, or the pursuit of further studies, such as a PhD) will also complete one or two research mini-projects in the first part of the programme and undertake a Research Skills course.

For more information, including entry requirements, course details and module information, please visit: [www.cs.bham.ac.uk/admissions/postgraduate-taught/degree\\_info/msc-acs/](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree_info/msc-acs/) ([http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree\\_info/msc-acs/](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree_info/msc-acs/))

**Study here and find out why the University of Birmingham was awarded The Times and The Sunday Times University of the Year 2013-14** (<http://www.birmingham.ac.uk/news/latest/2013/09/20-sep-Birmingham-announced-as-University-of-the-Year.aspx>)

#### Course fact file

**Type of Course:** Combined research and taught, taught

**Study Options:** Full time

**Duration:** 1 year full-time

**Start date:** September/October

#### Related courses

[Multidisciplinary Optimisation Masters/MSc \(/postgraduate/courses/taught/computer-science/computer-multidisciplinary-optimisation.aspx\)](#)

[Computer Science Masters/MSc \(/postgraduate/courses/taught/computer-science/computer-science.aspx\)](#)

[Computer Security Masters/MSc \(/postgraduate/courses/taught/computer-science/computer-security.aspx\)](#)

[Human Computer Interaction Masters/MSc \(/postgraduate/courses/taught/computer-science/human-computer-interaction.aspx\)](#)

[Robotics Masters/MSc \(/postgraduate/courses/taught/computer-science/robotics.aspx\)](#)

#### Contact

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[School of Computer Science \(/schools/computer-science/index.aspx\)](#)

[Follow us on Twitter \(http://twitter.com/eps\\_unibham\)](http://twitter.com/eps_unibham)

#### Details



I wanted to further my knowledge of computer science by pursuing areas of research that interested me.



**Alexander Darer**  
MSc Advanced Computer Science (2013)



[\(/university/colleges/eps/postgraduate/student-profiles/alexander-darer.aspx\)](#)

This Masters comprises two mini-projects, one per semester, which lead into the summer project. In previous years, students have surprised themselves by their achievement, regularly producing project work at the level expected of a very good first year research student. Your project supervisors are able to draw on their research experience to help you develop your ability to work confidently on difficult tasks.

The core modules of the degree are:

- [Research Skills \(http://www.cs.bham.ac.uk/resources/modules/2010/06991.html\)](http://www.cs.bham.ac.uk/resources/modules/2010/06991.html)
- [First Semester Mini-project \(http://www.cs.bham.ac.uk/resources/modules/2010/07953.html\)](http://www.cs.bham.ac.uk/resources/modules/2010/07953.html)
- [Second Semester Mini-project \(http://www.cs.bham.ac.uk/resources/modules/2010/07954.html\)](http://www.cs.bham.ac.uk/resources/modules/2010/07954.html)
- [Summer Masters Project \(http://www.cs.bham.ac.uk/resources/modules/2010/02637.html\)](http://www.cs.bham.ac.uk/resources/modules/2010/02637.html)

In addition, there is a wide variety of optional modules in different areas of Computer Science to choose from.

We also support you by providing training in transferable skills relevant to your project work and in your future career. Our extensive computing facilities are available 24 hours a day (including a wireless network) to allow you to link in to our services from your own machines and the information resources (specialist library, information retrieval databases, electronic journals, etc) to support your project and course work.

#### Related links

[School of Computer Science \(http://www.cs.bham.ac.uk\)](http://www.cs.bham.ac.uk)

## Modules

This is a one-year, full-time programme. In the first eight months, students spend half their time studying taught modules chosen from a wide range of topics, and the other half working on two mini-projects. In the final four months, one of the mini-projects is extended into the final summer dissertation. The mini-projects and the dissertation are individually supervised by a member of our research-active staff.

For more information, including entry requirements, course details and module information, please visit our website: [www.cs.bham.ac.uk/admissions/postgraduate-taught/degree\\_info/msc-acs/](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree_info/msc-acs/) ([http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree\\_info/msc-acs/](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree_info/msc-acs/))

## Fees and funding

### Tuition fees

Tuition fees for 2015/2016 are as follows:

- £6,840 for **home/EU students**
- £17,960 for **international students**

### Part-time programmes

Most part-time programmes run for two years and their fees are one half of the standard full-time programme fees. A small number of part-time programmes run for three years and in these cases the annual fees are one third of the total full-time cost. Contact us for further information.

UK student visa regulations mean that students classed as overseas for fees purposes may normally only register on a full-time basis.

### Further funding information

**Standard fees** ([/postgraduate/pgt-fees/fees.aspx](http://www.cs.bham.ac.uk/admissions/postgraduate/pgt-fees/fees.aspx)) apply

Learn more about **fees and funding** ([/postgraduate/pgt-fees/index.aspx](http://www.cs.bham.ac.uk/admissions/postgraduate/pgt-fees/index.aspx))

### Scholarships and studentships

For information about scholarships visit [www.cs.bham.ac.uk/admissions/postgraduate-taught/scholarships.php](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/scholarships.php)

(<http://www.cs.bham.ac.uk/admissions/postgraduate-taught/scholarships.php>). International students can often gain funding through overseas research scholarships, Commonwealth scholarships or their home government.

For further information contact the School directly or email [financialsupport@bham.ac.uk](mailto:financialsupport@bham.ac.uk) (<mailto:financialsupport@bham.ac.uk>).

## Entry requirements

At least an Upper Second Class (2.1) degree or an international equivalent in Computer Science or a closely related discipline and a solid foundation in programming are required. Knowledge of object-oriented programming will be a strong asset. Students who have not studied in English must pass a recognised English test.

Learn more about **entry requirements** (<http://www.birmingham.ac.uk/students/pg/requirements>).

### International students

We accept a range of qualifications from different countries – learn more about **international entry requirements** (<http://www.birmingham.ac.uk/students/pg/requirements/international>).

**Standard English language requirements** ([/postgraduate/requirements-pgt/international/index.aspx](http://www.cs.bham.ac.uk/admissions/postgraduate/requirements-pgt/international/index.aspx)) apply

## How to apply

When clicking on the Apply Now button you will be directed to an application specifically designed for the programme you wish to apply for where you will create an account with the University application system and submit your application and supporting documents online. Further information regarding how to apply online can be found on the **How to apply pages** (<http://www.birmingham.ac.uk/students/courses/postgraduate/apply-pg/index.aspx>).

**Apply now** (<https://pga.bham.ac.uk/lpages/EPSo02.htm>)

## Learning and teaching

For more information, please visit: [www.cs.bham.ac.uk/admissions/postgraduate-taught/degree\\_info/msc-acs/](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree_info/msc-acs/) ([http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree\\_info/msc-acs/](http://www.cs.bham.ac.uk/admissions/postgraduate-taught/degree_info/msc-acs/))

## Employability

Students graduating from the MSc in Advanced Computer Science usually have developed a taste for working on difficult problems and look for a career where they will be able to apply their enhanced analytical and technical skills. The majority of our graduates look for **Computer Science PhD** (<http://www.cs.bham.ac.uk/admissions/postgraduate-research>) places, either at the University of Birmingham, elsewhere in the UK or abroad. Some of our most successful PhD students studied for their MSc in the School of Computer Science. Other graduates move into industry, typically taking technically demanding jobs.

### University Careers Network

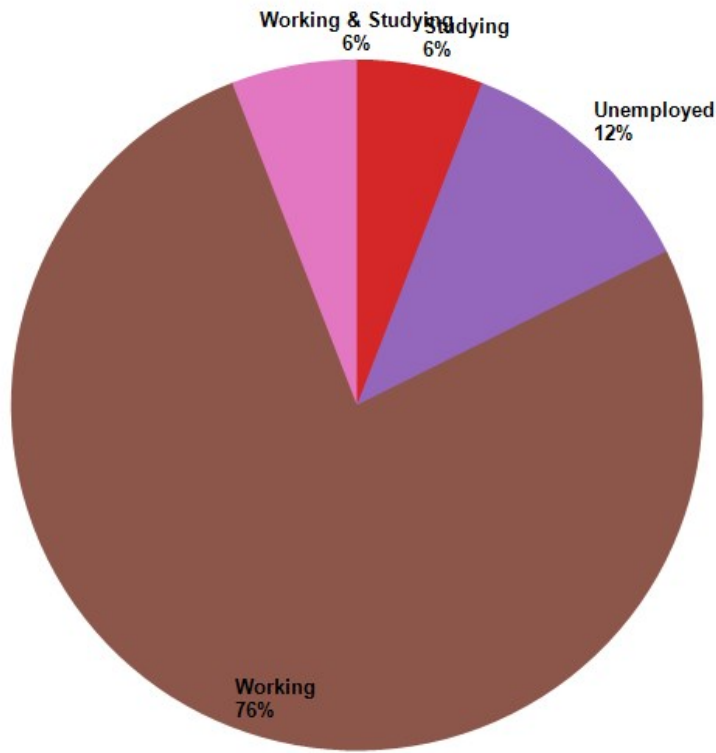
Preparation for your career should be one of the first things you think about as you start university. Whether you have a clear idea of where your future aspirations lie or want to consider the broad range of opportunities available once you have a Birmingham degree, our Careers Network can help you achieve your goal.

Our unique careers guidance service is tailored to your academic subject area, offering a specialised team (in each of the five academic colleges) who can give you expert advice. Our team source exclusive work experience opportunities to help you stand out amongst the competition, with mentoring, global internships and placements available to you. Once you have a career in your sights, one-to-one support with CVs and job applications will help give you the edge.

If you make the most of the **wide range of services** (<https://intranet.birmingham.ac.uk/as/employability/careers/college/eps/index.aspx>) you will be able to develop your career from the moment you arrive.

## Destinations of Leavers from Higher Education (DLHE) 2011/12 (postgraduate taught graduates)

The DLHE survey is conducted 6 months after graduation.



### Examples of employers

- Credit Suisse
- Innovise
- Atos
- BAe Systems
- Bank of America
- J.P. Morgan
- Logica
- Tessella
- Morgan Stanley
- QinetiQ

### Examples of occupations

- Software Engineer
- Software Developer
- Technical Analyst
- Applications Developer
- Cyber Security Consultant
- Design Engineer
- Junior Programmer
- Software Consultant
- Technical Consultant
- Technology Analyst

### Further study - examples of courses

- MSc Computer Security

- MSc International Business
- MEng Aeronautics & Astronautics
- MSc Computer Science
- MSc Artificial Intelligence
- MSc Operational Research
- MSc Imbedded Systems
- PhD - Physical Sciences in the Biomedical Imaging
- PhD - Computer Science

Visit the [Careers section of the University website \(https://intranet.birmingham.ac.uk/as/employability/careers/college/eps/index.aspx\)](https://intranet.birmingham.ac.uk/as/employability/careers/college/eps/index.aspx) for further information.