

Advanced Computing MSc

Year of entry: 2019

Duration: one year

Study mode: full-time

www.kcl.ac.uk/study/postgraduate/taught-courses/advanced-computing-msc.aspx



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The Advanced Computing MSc provides knowledge and experience of computing at an advanced level. The programme allows students to select modules on a wide range of advanced computer science subjects, so that they can build a programme that suits their interests and career aspirations.

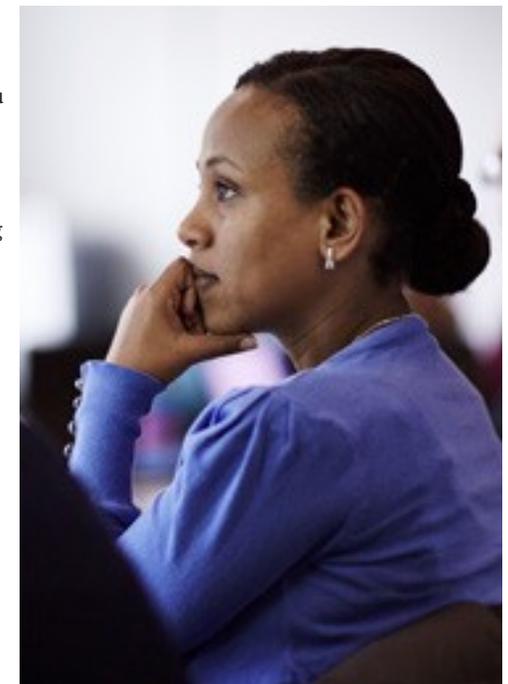
Key benefits

- Located in central London, giving access to major libraries and leading scientific societies, including the Chartered Institute for IT (BCS) and the Institution of Engineering and Technology (IET).
- You will learn advanced practical techniques and implementation skills for solving complex computational problems.
- You will develop critical awareness and appreciation of the changing role of computing in society and motivating you to pursue further professional development and research.
- Frequent access to speakers of international repute through seminars and external lectures, enabling you to keep abreast of emerging knowledge in advanced computing and related fields.
- The Department of Informatics has a reputation for delivering research-led teaching and project supervision from leading experts in their field.

Course details

Rooted in the renowned research strengths of the Department of Informatics, this course enables you to study a wide variety of topics in advanced computing while allowing you to specialise through your choice of modules.

You will complete the course in one year, studying September to September. You must take modules totalling 180 credits to meet the requirements of the qualification, 60 of which will come from an individual project.



Teaching

We use lectures, seminars and group tutorials to deliver most of the modules on the course. You will also be expected to undertake a significant amount of independent study.

You are expected to spend approximately 10 hours work per credit for each module you attend in your degree, e.g. 150 hours work for a 15 credit module. These hours cover every aspect of the module.

Assessment

The primary method of assessment for this course is a combination of written examinations, essays, coursework and individual or group projects and oral presentations. The individual project will be assessed on one 15,000-word dissertation.

Regulating body

King's College London is regulated by the Office for Students.

Course structure

Courses are divided into modules. You will normally take modules totalling 180 credits.

Required modules

You are required to take:

- Individual Project (60 credits)

Optional modules

You are required to take 120 credits from a range of optional modules, which may typically include:

- Group Project (30 credits)
- Cryptography (15 credits)*
- Nature-Inspired Learning Algorithms (15 credits)*
- Pattern Recognition, Neural Networks & Deep Learning (15 credits)*

- Network Theory (15 credits)
- Model Driven Development (15 credits)
- Security Management (15 credits)
- Artificial Intelligence Planning (15 credits)
- Agents & Multi-Agent Systems (15 credits)
- Computer Vision (15 credits)
- Security Engineering (15 credits)
- Big Data Technologies (15 credits)
- Software Measurement & Testing (15 credits)
- Simulation and Data Visualisation (15 credits)
- Software Engineering and Underlying Technology for Financial Systems (15 credits)
- Distributed Ledgers and Crypto-Currencies (15 credits)

You will be able to select up to 30 credits from a range of level 6 modules, which may typically include:

- Machine Learning (15 credits)*
- Optimisation Methods (15 credits)*
- Artificial Intelligence (15 credits)*
- Human-Computer Interaction (15 credits)*
- Software Design & Architecture (15 credits)*
- Formal Verification (15 credits)*
- Compilers & Formal Language (15 credits)*
- Computational Models (15 credits)*
- Software Performance Engineering (15 credits)*
- Information Security (15 credits)*

* These modules are not available if you have previously studied in the Department of Informatics and have already taken this module at Level 6.

King's College London reviews the modules offered on a regular basis to provide up-to-date, innovative and relevant programmes of study. Therefore, modules offered may change. We suggest that you keep an eye on the course finder on our website for updates.

Location

The course is taught at the King's College London Strand and Waterloo Campuses, putting you in the heart of London with access to all its academic resources and within easy reach of the social and entertainment attractions of one of the world's most cosmopolitan cities. The Department of Informatics is based in the recently renovated Bush House on the Strand Campus.

Career prospects

Our graduates have progressed to have very successful careers in general software consultancy companies, in specialised software development companies and IT departments of large institutions (financial, telecommunications and public sector). Their jobs involve specialist programming and problem-solving as well more conventional software development, maintenance and project management roles.

Some of our graduates have chosen to pursue academic and industrial research in software engineering, bio-informatics, algorithms and computer networks



Fees and funding

Full-time tuition fees – UK

The UK tuition fees for the 2019–20 academic year are available on the course web page.

Please note that the tuition fees for subsequent years of study may be subject to increases in line with King's terms and conditions.

Full-time tuition fees – EU

Students starting their programme in 2019/20 (September 2019) who are eligible to pay EU fees will pay the same rate of tuition fees as UK students. This will apply for the duration of their programme, but may be subject to change by the UK Government for subsequent cohorts from 2020/21.

The UK tuition fees for the 2019–20 academic year are available on the course web page.

Please note that the tuition fees for subsequent years of study may be subject to increases in line with King's terms and conditions.

Full-time tuition fees – International

The International tuition fees for the 2019–20 academic year are available on the course web page.

Please note that the tuition fees for subsequent years of study may be subject to increases in line with King's terms and conditions.

Deposit

When you receive an offer for this course you will be required to pay a non-refundable deposit to secure your place. The deposit will be credited towards your total fee payment.

The UK/EU deposit is £500.

The International deposit is £2,000.

For further information, please visit the fees and funding section of our website:

www.kcl.ac.uk/study/postgraduate/fees-and-funding/index.aspx

Additional costs

In addition to your tuition fees, you can also expect to pay for:

- books if you choose to buy your own copies
- clothing for optional course related events and competitions
- library fees and fines
- personal photocopies
- printing course handouts
- society membership fees
- stationery
- travel costs for travel around London and between campuses
- graduation costs.

Disclaimer

Although this PDF was up-to-date at the time it was produced, please make sure you check our website www.kcl.ac.uk/study or contact us directly for the very latest information before you commit yourself to any of our courses.

Contact us

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