Applied Analytical Chemistry MSc

Analytical chemistry underpins many important commercial enterprises from jet engine development to food production, and is also applied to many other academic disciplines such as Earth sciences, medicine, archaeology, pharmacy and forensics. This MSc seeks to train the next generation of analytical scientists in state-of-the-art methods and skills to tackle the challenges of this broad range of applications.

Degree summary

This programme is designed to provide comprehensive training in analytical chemistry and its implementation. A thorough understanding of error analysis, data processing and data presentation will be at the foundation of this programme. The programme will contain minimum formal instruction, but emphasise self-learning and originality of thought. Students will develop and demonstrate self-direction and originality, and the independence required for continuing professional development.

- Using a non-traditional approach this programme will prioritise independent learning and research. Students also participate in peer-review assessment of posters and talks. Peer assessment is an important transferable skill that is used widely in industrial and academic environments.
- Emphasis will be on designing appropriate analytical methodologies and the relevant underpinning data handling, analysis and interpretation. The physics and chemistry behind state-of-the-art measurement technologies, their methods and application limitations will also be prioritised.
- You can watch a YouTube video of Dr Daren Caruana talking about the ethos behind this programme.

This degree emphasises self-learning and is delivered through individual and team-based tasks. The programme will focus on developing students’ knowledge of analytical methodology, philosophy and design. Assessment is by presentations, vivas, and problem-solving coursework. There are no written exams for this programme.

Degree structure

Mode: Full-time: 1 year
Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of four core modules (60 credits), two modules focused on developing transferable skills (30 credits), a literature project (30 credits) and a research project (60 credits).

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

COMPULSORY MODULES

Students take the following core modules (120 credits) and submit a research dissertation (60 credits).

- Analytical Strategies I
- Data Analysis and Theory in Analytical Chemistry
- Practical Aspects of Analytical Chemistry
- Analytical Strategies II
- Transferable Skills for Chemists
- Researcher Professional Development
- Literature Project for Applied Analytical Chemistry

DISSERTATION/REPORT

All students undertake a substantial research project selected from a range (60 credits).
Your career

Graduates will be equipped for varied employment in industry and the public sector: analytical science techniques have a very broad range of applications in many sectors, ranging from forensics to global climate change and medicine to the automotive industry.

Employability

This MSc seeks to train the next generation of analytical scientists in state-of-the-art methods and skills to tackle the challenges of a broad range of applications. Students are connected to industry partners through our teaching delivery (several of our guest speakers are from other universities and industry) and project participation, and receive important professional skills in two dedicated research and transferable skills modules.
Entry requirements

A minimum of an upper second-class Bachelor's degree in a relevant discipline from a UK university or an overseas qualification of an equivalent standard.

English language proficiency level

If your education has not been conducted in the English language, you will be expected to demonstrate evidence of an adequate level of English proficiency.

The level of English language proficiency for this programme is: Standard.

Information about the evidence required, acceptable qualifications and test providers is provided at:
www.ucl.ac.uk/graduate/english-requirements

Your application

Students are advised to apply as early as possible due to competition for places. Those applying for scholarship funding (particularly overseas applicants) should take note of application deadlines.

When we assess your application we would like to learn:
why you want to study Analytical Chemistry at graduate level
why you want to study Analytical Chemistry at UCL
what particularly attracts you to this programme
how your personal, academic and professional background meets the demands of a challenging programme
what you expect to get out of the programme
where you would like to go professionally with your degree.

Together with essential academic requirements, the personal statement is your opportunity to illustrate whether your reasons for applying to this programme match what the programme will deliver.

There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at:
www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

// UK: £10,720 (FT)
// EU: £10,720 (FT)
// Overseas: £29,220 (FT)

The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information on fee status, fee increases and the fee schedule can be viewed on the UCL Students website.

Students can be self-funded or find sponsorship from alternative sources, for instance via those shown on the UCL scholarships and funding pages.

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 26 July 2019

Details on how to apply are available on the website at:
www.ucl.ac.uk/graduate/apply

CONTACT

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EU referendum

For up-to-date information relating to specific key questions following the UK’s decision to leave the EU, please refer to www.ucl.ac.uk/brexit