GEOSPATIAL SCIENCES MSc

2019/20 ENTRY

www.ucl.ac.uk/graduate/
The MSc Geospatial Sciences teaches students the theory, tools and techniques for working with geospatial data, from acquisition to processing to analysis. Students have the opportunity to engage and work with academics and industrial partners on cutting edge research through seminars and a dissertation.

Degree summary

The programme educates students in the geospatial sciences, equipping them for careers in this rapidly developing subject. Students will gain broad knowledge of the means of acquiring, processing, and analysing spatial data. Through optional modules, students can study aspects of the subject in more depth – whether focusing on the environment (built, marine, terrestrial), the means of data acquisition or on the computational and analytical processes.

// UCL Civil, Environmental & Geomatic Engineering is an energetic and exciting multidisciplinary department with a tradition of excellence in teaching and research, situated in the heart of London. This exciting new MSc programme consolidates the department’s expertise in the geospatial sciences into a single degree, giving students a broad knowledge of the topic.

// Students studying the MSc in Geospatial Sciences will benefit from the department’s excellent research and industry links, including attending our industrial and research seminar series, and carrying out a research project with one of our many industrial partners.

The programme is delivered through a combination of lectures, computer sessions, seminars and field classes. Assessment is via coursework (individual and group), presentations, written examinations and the dissertation.

Accreditation

The Geospatial Sciences MSc is accredited by RICS. RICS works in partnership with universities to ensure that their accredited degree courses are relevant to industry. This means that when you study on an accredited degree this will be recognised by employers as the benchmark of quality.

Degree structure

Mode: Full-time: 1 year; Part-time: 2 years
Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of two compulsory modules (30 credits) and six optional modules (90 credits). All students carry out a dissertation (60 credits).

A Postgraduate Diploma consisting of two compulsory modules (30 credits) and six optional modules (90 credits) is also available.

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

All students will take the following compulsory modules in the first term:

// Geospatial Science
// Geospatial Programming

OPTIONAL MODULES

90 credits are to be studied from the following modules. Terms (T1, T2) are indicated in brackets.

// Spatial Analysis & Geocomputation (T1)
// Spatial Databases & Data Management (T1)
// Engineering Surveying (T1)
// Data Analysis (T1)
// Applied BIM (T2)
// Reality Capture & Precision 3D Sensing (T2)
// Sensors & Location (T2)
// Web & Mobile Apps & Programming (T2)
// Spatio-Temporal Analysis & Data Mining (T2)

Students choose two optional modules in term one and four optional modules in term two. One term two module may be exchanged for an elective at the discretion of the programme director.

DISSERTATION/REPORT

// All students undertake an independent research project which culminates in a dissertation of 10,000-12,000 words and a poster presentation (60 credits).

Some modules contain an element of fieldwork using specialist equipment in an applied setting.

There is no additional cost for fieldwork.
Your career

Students graduating with a degree in Geospatial Sciences will be equipped for a diverse range of roles, including GIS/BIM professional/officer, data scientist, geospatial software developer, and consultant. Our students establish strong links with industry through the industrial seminar series and industrial research projects. Additionally, many graduates from our programmes go on to PhD research at UCL or elsewhere.

Employability

Students will gain a range of technical skills in geospatial science that are highly valued by employers, including the use of specialist software for BIM and GIS (ArcMap, QGIS, FME, Revit, PostGIS); programming, web and software development (Python, R, Java, Javascript, HTML/CSS, PHP); geospatial data acquisition, processing and management; geospatial data visualisation and analysis.
Entry requirements

A minimum of an upper second-class UK Bachelor’s degree in a relevant discipline (such as engineering, architecture, geography, urban planning, mathematics, surveying, marine and earth sciences, computer science) from a UK university or an overseas qualification of an equivalent standard. Normally only candidates with either a first or upper second-class degree will be accepted, although applicants with a lower second-class degree supported by extensive work experience will also be considered.

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 Geospatial Sciences at graduate level
// why you want to study Geospatial Sciences at UCL
// what particularly attracts you to the chosen programme
// how your academic and professional background meets the demands of this challenging 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.