RAIL SYSTEMS ENGINEERING PG Cert / 2019/20 ENTRY

www.ucl.ac.uk/graduate/
This Postgraduate Certificate is designed for engineering professionals who are interested in developing their careers into systems engineering or project management roles in the rail domain.

Degree summary

Students will develop a powerful set of skills and knowledge about rail systems and gain awareness and understanding of the economic and organisational context within which rail systems are developed, including the limitations these can impose. Depending on the modules chosen, students may focus more on business, project management, reliability or design aspects.

The programme combines interactive lectures, group exercises and case studies to reinforce key points. Lecturers are experts in the field, many of whom have engaged in the practice of systems engineering in industry, and all of whom oversee research across a broad range of subjects relating to systems engineering, project management and technology management.

Students with this degree will gain the skills, knowledge and confidence to further their careers. They will be able to build their professional contacts with like-minded individuals from different organisations.

On successful completion of the 60-credit programme, students may choose to apply to transfer their credit towards a 120-credit Postgraduate Diploma or a 180-credit MSc in Systems Engineering Management.

The programme consists of four taught modules, each of which is delivered as a five-day block week consisting of a blend of interactive lectures, small-group exercises and presentations, case studies and workshop activity. Formative feedback is given to students throughout the modules. Modules are formally assessed through coursework to be completed a few weeks after the module, and for some modules there is also a short test or a 1.5 hour written examination.

Accreditation

The MSc in Systems Engineering Management (which students may choose to go on to study on successful completion of this Postgraduate Certificate) is accredited by the Institution of Engineering and Technology (IET) on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Degree structure

Mode: Part-time: 7-9 months; Flexible: up to 3 years
Location: London, Bloomsbury

Students undertake modules to the value of 60 credits. The programme consists of four taught modules of 15 credits each.

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 must take Rail Systems (15 credits) and either three from the list below or two from the list below and one optional module.
  - Business Environment
  - Lifecycle Management
  - Risk, Reliability, Resilience
  - Systems Thinking and Engineering Management

### OPTIONAL MODULES

- Systems Design
- Technology Strategy
- Project Management (leading to Association for Project Management exam)
- Delivering Complex Projects
Your career

Students who have studied this subject have found employment as systems engineers, engineering managers, project managers and consultants in rail, construction, engineering, IT and many other areas.

Employability

Systems engineering is a highly sought-after expertise, particularly in engineering and technology-based organisations. The programme’s industrial advisory board ensures that the subjects students learn about cover the key issues faced by industry.
Entry requirements

A minimum of a second-class Bachelor's degree in a relevant discipline from a UK university, or an overseas qualification of an equivalent standard. At least two years’ experience working in an engineering/technology environment is expected.

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: Good.

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 Rail Systems Engineering at graduate level?
- why you want to study Rail Systems Engineering at UCL?
- what particularly attracts you to the chosen programme
- how do your academic and professional background and skills meet the demands of this challenging programme?
- what programming experience you have
- where would you 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. Applicants who have a portfolio are strongly recommended to submit it when they apply.

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: £6,840 (PT)
- EU: £6,840 (PT)

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.

Fees for flexible, modular study are charged pro-rata to the appropriate full-time Master’s fee taken in an academic session.

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

Programme Administrator

Email: edu@mssl.ucl.ac.uk

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