SYSTEMS ENGINEERING MANAGEMENT MSc / 2017/18 ENTRY

www.ucl.ac.uk/graduate/spacephysics
The Systems Engineering Management MSc has been specifically designed for the needs of engineering professionals working in the field of complex systems development. The programme encompasses not only the technical tools and approaches needed to build success in this area, but also the management dimension of the relevant processes.

**Degree summary**

Students gain an integrated, interdisciplinary view of complex systems and an advanced understanding of the systems engineering process. They gain the ability to apply this process to a variety of real-world situations and the management skills necessary to facilitate the development of complex systems on time and within budget.

- This MSc combines academic rigour with the practical expertise exemplified by our collaborators in UK industry and government. The flexible programme enables participants to structure their studies to suit their own career goals, and is accredited by the Institution of Engineering and Technology (IET) as a programme of further learning for registration as a Chartered Engineer.

- 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.

- Industry is operating in an environment where technology changes rapidly, and where global competition grows ever more intensive. The challenge to remain competitive means we must make the right thing at the right price. Our MSc equips graduates with the skills to meet this challenge.

The programme is delivered through a combination of lectures, discussion sessions, workshop activity, and project work. Each taught course will be separately assessed through a combination of course work and a written examination. The project will be assessed through written dissertation and subsequent oral examination.

**Accreditation**

This Master's Programme is accredited by the IET on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

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**Degree structure**

**Mode:** Full-time: 1 year; Flexible: 2-5 years

**Location:** London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of four core taught modules (60 credits) two optional taught modules (30 credits) and three research modules (90 credits). Modules are generally taught as intensive five-day 'block weeks' to minimise time away from the office.

A Postgraduate Diploma (120 credits, full-time one academic year, or flexible study up to five years) is offered.

A Postgraduate Certificate (60 credits, full-time 12 weeks, or flexible study up to three years) is offered.

**CORE MODULES**

- Systems Thinking and Engineering Management
- The Business Environment
- Risk, Reliability, Resilience
- Lifecycle Management

**OPTIONAL MODULES**

- Students choose two of the following:
  - Project Management
  - Delivering Complex Projects
  - Systems Design
  - Technology Strategy
  - Space Systems
  - Rail Systems
  - Defence and Security Systems

**RESEARCH MODULES**

- All MSc students undertake a structured research programme comprising the following mandatory modules: Systems Engineering in Practice (15 credits) Systems Engineering Project Concept (15 credits) Systems Engineering Research Project (60 credits)
Your career

Complex systems are commonplace in many branches of UK industry including rail, aerospace, defence, and manufacturing. The ability to create such systems effectively is crucial to the competitiveness of these industries and has a direct bearing on the wealth of the nation.
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 industrial experience is preferred.

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 Systems Engineering Management at graduate level
// why you want to study Systems Engineering Management at UCL
// what particularly attracts you to this programme
// how your academic and professional background meets the demands of this 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.

FEES AND FUNDING 2017/18 ENTRY

// UK: £18,580 (FT)
// EU: £18,580 (FT)
// Overseas: £27,540 (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 Current 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: 28 July 2017

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/eu-referendum

This information is for guidance only. It should not be construed as advice nor relied upon and does not form part of any contract. For more information on UCL’s degree programmes please see the UCL Graduate Prospectus at www.ucl.ac.uk/graduate