



MSc Power Systems and Energy Management

New challenges related to the distribution, generation and power supply systems call for expansion of professional skills. The Power Systems and Energy Management course has been designed to develop the skills of design, operation and analysis of power supply systems, power plant and industrial electrical equipment. Designed with industry needs in view, the course draws on the expertise of specialists from industry, as well as the staff of City University London.

Course aims

The course aims to provide graduates with the ability to:

- Critically evaluate methodologies, analytical procedures and research methods in Power systems engineering – using state-of-the-art computational tools and methods
- Design of sustainable electrical power systems and networks
- Apply regulatory frameworks for, and operation of, power systems and electricity markets
- Give graduates the education, the knowledge and the skills they need to make sound decisions in a rapidly changing electricity industry
- Familiarise professional engineers and graduates with the theory and application of new technologies applied to power systems

Who the course is aimed at

Graduates and professionals in the electrical engineering field who are looking to attain expertise in energy management.

It aims to provide a technical and economic framework within which the participants may develop the skills required by a successful industrial economy. This framework will include an examination of EU and UK government policies, commensurate strategies and their implications relative to global activities and the international market in energy resources. This must be against a background of continuing change.

Participants will therefore be well equipped with the technical, commercial and managerial skills that will be required to meet international commitments.

Why study Power Systems and Energy Management at City?

Teaching at City is informed by internationally renowned research, and industry links help keep City at the forefront of engineering, enhancing the courses we teach.

Key Facts:

- Strong industry links mean the course features visiting lecturers who are senior figures in their fields
- The scheduling of the course means it is possible to study part time while retaining a full time job. Both part time and full time students benefit from a high level of support in preparation for modules and project work.

Course Structure and duration

The course is normally taught full time between 15 - 18 months and part time over three years. Applicants may start at different times during the year.

To obtain an MSc, the student has to pass eight modules (six core and two elective) plus a dissertation.

Participants who fulfil the core and elective requirements but choose not to submit a dissertation will be awarded a Postgraduate Diploma.

Participants who pass four core modules but do not wish to proceed further will be awarded a Postgraduate Certificate.

Teaching is organised into modules which take up to three consecutive days. These are normally taken at the rate of one a month. This format makes the course attractive to those who wish to study part time while continuing to work full time. Full

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time students are expected to devote a significant part of their non-taught time to project work and private study.

As participants are likely to come from a variety of backgrounds, special introductory modules for engineers, managers and financial services professionals provide a common starting-point for the main part of the course.

Core modules

- Introduction to Power Systems and Energy Management
- Energy Supply and Conversion Technology
- Transmission and Distribution Systems Management
- Electricity Supply
- Energy Policies and Economic Dimensions
- Corporate Energy Management

Elective modules:

- Emissions Trading
- The Energy Market from the Purchaser's Perspective
- Energy in Industry and the Built Environment
- Renewable Energy and Sustainability

For MSc students the major project period provides an opportunity to undertake a substantial piece of work, developed in close collaboration with one of the staff members, many of whom are at the forefront of their technological fields.

Entry requirements

An upper second class UK honours degree, or international equivalent, in electrical, electronic or mechanical engineering, physical sciences or related disciplines. Applications are also welcome from those with industrial experience.

For further details please contact:

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