ELECTRONIC ENGINEERING

As an electronic engineering undergraduate at the University of Westminster, you will be part of the Faculty of Science and Technology, based at our purpose-built Cavendish Campus in the heart of London, close to major industry headquarters and the City. The Faculty and Campus have undergone a major programme of refurbishment, with more than £30million invested in creating cutting-edge learning environments and opportunities. You will benefit from fantastic facilities and resources including numerous laboratories offering access to Windows and Unix platforms running industry-standard, computer-aided analysis and design applications.

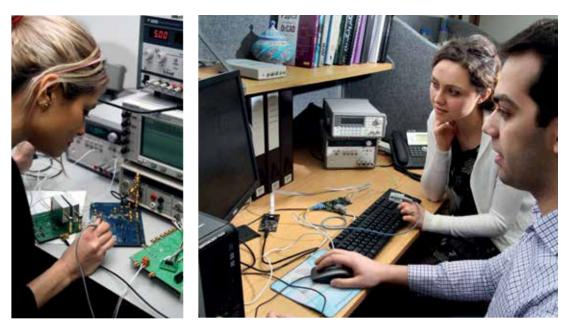
Teaching and learning

Studying electronic engineering at Westminster provides you with a solid grounding in the fundamentals of electronics and communications, including digital and analog processing, computing, embedded systems, project work, design, and management. Our strong mathematical and theoretical teaching approach coupled with practical project work gives you the know-how to become anything from a professional electronic system designer to a researcher.

Employability

All of our courses offer you the opportunity to take a year-long industry placement between Years 2 and 3, giving you a competitive edge in the job market and contributing to your professional development. Our courses are accredited by the Institution of Engineering and Technology (IET) and the Engineering Council, enabling you to become a Chartered and Incorporated Engineer after gaining professional experience. We are an Enhanced Academic Partner of the IET, which gives you unique access to industrial practice. Our graduates have gone on to work for organisations such as the BBC, British Aerospace, BT, Channel 4, GEC, Mitsubishi, Nokia and Sony. Some have started up their own businesses in manufacturing or consultancy, while others work in the financial sector and the City.

See also: Computer & Network Engineering p82 • Computer Science & Software Engineering p86 • Multimedia & Games Computing p140









Electronic Engineering facilities at Cavendish Campus

BIOMEDICAL ELECTRONIC AND INSTRUMENTATION ENGINEERING BSc HONOURS

Length of course: Three years full-time; four years full-time with industrial placement or Foundation UCAS code: H160; with Foundation: H161

Campus: Cavendish (See p22)

Anticipated offer for 2017: A Levels – BCC/A*A to include at least one technical subject; International Baccalaureate – 26 points to include 5 in any Higher level technical subject; Pearson BTEC Level 3 Extended National Diploma/National Diploma – DMW/D*D* in Engineering with Merit in Maths Level 3; Plus GCSE Maths and English at Grade C or above (Functional Skills qualifications are not accepted). See also entry requirements on p201.



Biomedical engineering is an interdisciplinary area with ever-growing job opportunities. This degree aims to create graduates who will play a vital role in the design and manufacture of electronic equipment for healthcare.

The course is targeted towards the rapidly growing and changing healthcare industries, and focuses on interdisciplinary specialisation in electronics and computer engineering expertise for prominent biomedical applications. The course provides a solid understanding of the fundamentals of biomedical electronic principles and computing, to provide solutions for issues related but not limited to the design and development of various diagnostic and therapeutic medical devices. The project-based modules which are an integral part of this degree provide you with the opportunity to develop your teamwork and project management skills.

For module information and further details, please visit: westminster.ac.uk/electronic-engineering



ELECTRONIC AND ELECTRICAL ENGINEERING BEng HONOURS

Length of course: Three years full-time; four years full-time with industrial placement or Foundation UCAS code: H600; with Foundation: H602

Campus: Cavendish (See p22)

Anticipated offer for 2017: A Levels – BBB to include Maths; International Baccalaureate – 30 points to include 5 in Higher Level Maths; Pearson BTEC Level 3 Extended National Diploma – DDM in Engineering with Distinction in Maths Level 3; Plus GCSE Maths and English at Grade C or above (Functional Skills qualifications are not accepted). See also entry requirements on p201.



This course develops engineers with a firm grounding in the fundamentals of solid-state power electronic circuits, modern electrical systems, and embedded control and computer systems. It aims to provide a transformative, inspiring and engaging learning experience by exploring the design, analysis, modelling, evaluation and maintenance of a wide range of electronic and electrical systems.

The course focuses on machines and their control in applications as diverse as electric vehicles, modern railway transportation systems, industrial robotics and intelligent buildings. The underpinning knowledge base includes power electronics, real-time embedded systems, control systems, and robotics, as well as analog and digital electronics. The course will provide the know-how to specify, design and evaluate energy-efficient mature power systems. The flexible structures of our courses allow transfer between the different BEng degrees at the end of Year 1.

For module information and further details, please visit: westminster.ac.uk/electronic-engineering



ELECTRONIC ENGINEERING BEng HONOURS

 $\mbox{Length of course:}$ Three years full-time; four years full-time with industrial placement or Foundation

UCAS code: H610; with Foundation: H608 Campus: Cavendish (See p22)

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Typical offer for September 2017: A Levels – BBB to include Maths; International Baccalaureate – 30 points to include 5 in Maths at Higher Level; Pearson BTEC Level 3 Extended National Diploma – DDM in Engineering with D in Maths Level 3. Plus GCSE Maths and English at Grade C or above (Functional Skills qualifications are not accepted). See also entry requirements on p201.



Electronic systems have become prevalent in modern society. The strong mathematical and theoretical teaching approach of the Electronic Engineering BEng Honours course, coupled with its practical project work, will equip you with the know-how to become a system designer, researcher, and several other roles within the industry. The project-based modules, which include a voice-over amplifier and the robotics maze-solving competition projects, form an integral part of the degree and are designed to develop your teamwork and project management skills.

The course is structured to give you a strong focus on the design of electronic systems, with the emphasis on systems rather than component devices. Depending on your interests, you can tailor your curriculum from several diverse areas of study such as embedded systems, digital communications, microelectronic systems and wireless systems. The flexible structures of our courses allow transfer between the different BEng degrees at the end of Year 1.

For module information and further details, please visit: westminster.ac.uk/electronic-engineering



The Institution of

Engineering Council accredited degree



BSc HONOURS

ELECTRONIC ENGINEERING

 $\mbox{Length}\ \mbox{of course:}$ Three years full-time; four years full-time with industrial placement or Foundation

UCAS code: H601; with Foundation H607

Campus: Cavendish (See p22)

Typical offer for September 2017: A Levels – BCC/A*A to include at least one technical subject; International Baccalaureate – 26 points with at least one technical subject at Higher Level; Pearson BTEC Level 3 Extended National Diploma/National Diploma – DMM/D*D* in Engineering with M in Maths Level 3. Plus GCSE Maths and English at Grade C [Functional Skills qualifications are not accepted]. See also entry requirements on p201.



This course gives you a solid grounding in the fundamentals of electronics and communications, including digital and analog processing, computing, embedded systems, project work, design, and management. It aims to provide an exciting, enjoyable and rewarding learning experience, serving as a solid foundation for a professional engineering career in electronics, telecommunications or related fields.

The course covers a similar area to the Electronic Engineering BEng Honours, but emphasises the more practical and less analytical aspects of electronics design. In particular, it is targeted towards the rapidly growing and changing industries involving electronic and telecommunications systems. Because of the interest in these technologies among students without the traditional engineering background of advanced mathematics and physics, the course includes the teaching of these underpinning skills.

For module information and further details, please visit: westminster.ac.uk/electronic-engineering

ENGINEERING FOUNDATION

Length of course: One year full-time as the first year of a four-year, full-time Honours degree UCAS code: See p96-97 and p84-85 Campus: Cavendish (See p22)

Typical offer for 2017: A Levels – CCD/AB; International Baccalaureate – 24 points; Pearson BTEC Level 3 Extended National Diploma – MWW; Access to HE Diploma – Pass with 45 credits at Level 3 with a minimum of 18 Level 3 credits at Merit or Distinction. Plus GCSE Maths and English at Grade C or above (Functional Skills qualifications are not accepted). See also entry requirements on p201.

This course is well suited for applicants who have aspirations to pursue a career in engineering and technology, but lack the appropriate entry qualifications. It is a well-established course and was the first of its kind in the UK in the late 1980s. The course provides a thorough grounding in both the theoretical and practical aspects of engineering, including electronics, computer programming, communications and network engineering as well as mathematics, thereby preparing you for subsequent BEng and BSc study. The subject modules are embedded with a lot of practical content to enhance your understanding and engineering problem skills.

Good performance on the Foundation guarantees you a place on the Computer & Network Engineering BSc/BEng courses (p84-85) or the Electronic Engineering BSc/BEng courses (p96-97) at the University of Westminster.

For module information and further details, please visit: westminster.ac.uk/electronic-engineering



