COMPUTER AND NETWORK ENGINEERING

As a computer and network engineering undergraduate at the University of Westminster, you will benefit from some of the best teaching and facilities available, with more than £30 million invested in creating state-of-the-art facilities and resources. These include two dedicated CISCO labs fitted with the latest networking hardware and technologies as well as access to the school’s numerous laboratories offering access to Windows, Linux and Mac OS X platforms, running industry-standard, computer-aided analysis and design applications, all supported by specialist technicians.

Teaching and learning
You will learn the fundamental principles of computing and network engineering, and be encouraged to use initiative and confidence in approaching engineering problems, investigating solutions using a blend of analytical and practical skills. Teaching methods include lectures and seminars, laboratories and computer-aided engineering, group and individual projects, and online learning. Students specialise in networking, security, communications, system and network programming as well as interfacing hardware and software. Our aim is to develop graduates with the right skill-set in computer systems and networking for today’s job market.

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 appropriate professional bodies, the Institution of Engineering and Technology (IET), the Engineering Council, and British Computer Society (BCS) – the Chartered Institute for IT, enabling you to become Chartered and Incorporated Engineers after gaining professional experience. Our graduates have gone on to work for BT, British Aerospace, CITRIX Systems, KDDI Global, Nokia, O2 Communications, Ping Networks and smaller private companies. Some have started up their own businesses in manufacturing or consultancy.

Foundation pathway
We offer Foundations as a route onto some of our undergraduate programmes. For module information and any further details, please visit: westminster.ac.uk/foundation-courses

See also: Computer Science and Software Engineering p80 • Digital Media and Games Computing p88
COMPUTER NETWORK SECURITY
BSc Honours

Length of course: Three years full-time; four years full-time with industrial placement
UCAS code: G425
Campus: Central London (see map p206)
Entry requirements: A levels – CDD/CDD; International Baccalaureate – 27 points including 5 in a Higher Level technical subject; BTEC Extended Diploma – DMM/DDM; BTEC Diploma – D*D/D*D in Engineering, ICT or Computing, to include Maths at Level 3. Overseas students require IELTS of 6.0 overall, with 5.5 in each component. See also p198.

For full and most up-to-date information, see course web page: westminster.ac.uk/computer-and-network-engineering

Security is a vital aspect of any networked system, especially as the dependency on network infrastructures has grown over the past few decades. This course has been designed to meet the demand for graduates with application-oriented engineering skills and knowledge, particularly in relation to local, wide and wireless area networks and network security. The course focuses on three main aspects – communication, network design and implementation, and security.

The course emphasis is on hands-on work at every level, with a focus on ‘learning by doing’ which enhances the development of your engineering skills. It will equip you with knowledge and understanding of current technologies applied to network security, of modern computer and embedded microprocessors, as well as embracing their structure, design and efficient operation.

Our degree courses with Foundation year offer the opportunity to prepare you for advanced study before you progress onto a full honours degree at the University of Westminster. Whether you do not feel ready for degree-level study, don’t have the right qualifications, want to change your subject specialism or return to study after an absence from education, we aim to encourage a broad range of students to undertake our Foundation year in order to progress onto their full honours degree with us.

The Foundation year is designed to give you the opportunity to explore new ideas, opening up new perspectives on the key debates within your chosen field. Core modules accelerate your academic and professional development, bringing together like-minded students to think about the ‘big ideas’ within your discipline. You will also take modules from areas closely related to your chosen field, giving you the chance to develop a cross-disciplinary perspective on your course.

On successful completion of the Foundation year, you will be able to move on to the first year of your chosen undergraduate degree.

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

COMPUTER SYSTEMS ENGINEERING
BSc Honours

Length of course: Three years full-time; four years full-time with placement year
UCAS code: H657
Campus: Central London (see map p206)
Entry requirements: A levels – BCC/ABB; International Baccalaureate – 27 points including 5 in a Higher Level technical subject; BTEC Extended Diploma – DM/DDM; BTEC Diploma – D*D/D*D in Engineering, ICT or Computing, to include Maths at Level 3. Overseas students require IELTS of 6.0 overall, with 5.5 in each component. See also p198.

For full and most up-to-date information, see course web page: westminster.ac.uk/computer-and-network-engineering

Computer systems engineering is a growing market in today’s computer industry. Embedded systems have become widespread in industry and can be found in almost all modern consumer devices, from washing machines to cars. This course aims to develop your skills as a strong computer-based engineer, in demand in both industry and research. It will equip you with the necessary knowledge and engineering skills related to modern-day computer and embedded microprocessors, as well as embracing their structure, design and efficient operation.

This course focuses on three main areas – the computer system, embedded systems and operating systems – and you will gain the technical expertise and knowledge to take a good idea from conception through to a viable product, a key characteristic for many employers.

"The things I like most about my course are the meetings with knowledgeable lecturers who are willing to answer all the questions, the practical lab sessions, and the great facilities inside the University.”

Chris Galazka
Computer Network Security BSc Honours, graduate