# School of Computing and Technology

We offer employment-focused education and research in computing, the built environment and engineering, which gives our students industry-relevant skills and knowledge.

# Enhancing learning with top facilities

The School of Computing and Technology has dedicated labs for computer-aided design and networks, engineering, built environments and audio. These support your learning with the practical experience employers value so much.

# Career-conscious courses

All our courses are developed with industry and employer needs in mind, so you'll enjoy a highly relevant education that prepares you for the career path you choose. Most of our teaching staff bring extensive professional experience to their teaching.

# Industry links

We have excellent connections with key businesses like Hewlett Packard, CISCO and Siemens, so you'll have access to superb standards of research, knowledge transfer, consultancy and training. We also have links with the British Computer Society, which invites students to its annual meeting at the University.

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Courses	
BSc (Hons) Computing	
and Information Systems	104
BSc (Hons) Computing Science	105
	106
and Mobile Computing	107
BSc (Hons) Applied Sound Engineering	108
BSc (Hons) Built Environment –	
Architectural Technology	109
BSc (Hons) Built Environment –	
Construction Management	110
BEng (Hons) Civil and	
Environmental Engineering	
BEng (Hons) Electronics Engineering	
BEng (Hons) Electrical	
and Electronic Engineering	
BSc (Hons) – Top-up Engineering	

# BSc (Hons) Computing and Information Systems

97% of students studying computing at the University of West London were satisfied with their whole experience (NSS, 2011\*).





### **Course overview**

If you want to succeed in computing then there's no better place to do this than on our Computing and Information Systems course. By giving you the knowledge and skills, the tools, the techniques and the experience needed, this course provides you with a real foot in the door of this competitive world.

Computers are everywhere that we work, shop and play. In the world of work, computers manage the information that is vital to plan and develop the vision of the organisation for the future. This course will provide you with the theory, practice and application of computing and information systems in relation to the changing environment. You will gain a grounded understanding and develop industry relevant skills in a number of areas including management information, e-commerce, databases and networking.

In your final year, you will have the option to select a specialist project within the field of computing and information systems and under supervision, complete a substantial piece of independent research and development.

Whilst no specific prior knowledge of information systems is required, you should be comfortable working in both a technical and business oriented discipline. Some prior interest in computer applications would be useful. We encourage you to take part in any related work experience alongside your studies to provide you with an enriched learning experience. This experience can be in the form of an internship, a sandwich year, part-time or voluntary work. We aim to help every student gain this experience whilst studying our courses.

### Entry requirements

200 UCAS points or equivalent normally in a minimum of two subjects, plus GCSE English and Mathematics A\*-C grade or equivalent.

For detailed information on international equivalences and alternative entry qualifications, please refer to page 145.

### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

### What our students say

# Simon Donnelly, third year Computing and Information Systems student

"I've enjoyed the opportunities I've been presented with. The tutors try their best to push you as hard as they can if they see you have the capability".

#### CAREER OPTIONS

On completion of the course students will be in a position to apply for various appointments in computing, including, Systems Analyst, Software Developer/Programmer, Database Specialist, User Support and Usability Engineer.



Scan the QR code above for more course information or visit: uwl.ac.uk/GG45

# BSc (Hons) Computing Science

 $94\,\%$  of students studying computing at the University of West London were satisfied with the learning resources (NSS, 2011\*).





### **Course overview**

If you want to succeed in computing then you need to learn about the fundamentals and science behind computing and there is no better place to do this than on our Computing Science course here at the University of West London. By giving you the knowledge and skills, the tools, the techniques and the experience needed this three year course provides you with a real foot in the door of this competitive world.

Although the range of jobs within the IT industry has diversified greatly in recent years, there remains a core knowledge base that is central to many specialist areas within the field of computing. The underpinning discipline of computing science has itself evolved over the years, but remains a major route into the profession, particularly for those seeking a technical orientation.

This course will provide you with a key set of skills in the theory, practice and efficient application of computers in relation to the changing and challenging environment. This course will enable you to gain a grounded understanding and develop industry relevant skills in a variety of different programming languages and approaches, together with skills in computer hardware, systems modelling, humancomputer interaction and artificial intelligence through a study of knowledge-based systems.

In your final year, you will have the option to select a specialist project within the field of computer science

and under supervision, complete a substantial piece of independent research and development.

We encourage you to take part in any related work experience alongside your studies to provide you with an enriched learning experience. This experience can be in the form of an internship, a sandwich year, part-time, or voluntary work. We aim to help every student gain this experience whilst studying our courses.

### **Entry requirements**

200 UCAS points or equivalent normally in a minimum of two subjects, plus GCSE English and Mathematics  $A^*-C$  grade or equivalent.

## English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For detailed information on international equivalences and alternative entry qualifications, please refer to page 145.

# What our students say

# Oliver Farnan, BSc (Hons) Computing Science

"I've really enjoyed studying here. The course material very accurately covers the range of skills a computing graduate needs and the lecturers are always willing to give help when it's required".

## **CAREER OPTIONS**

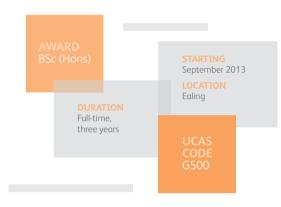
On completion of the course, students will be in a position to apply for various appointments in computing, including Software/Systems/ Network Engineer and Programmer/ Software Developer.



Scan the QR code above for more course information or visit: uwl.ac.uk/G401

# BSc (Hons) Information Systems for Business

91% of students studying computing at the University of West London were satisfied with the teaching on their course (NSS, 2011\*).





### Course overview

Information systems are a key business enabler for most companies in the 21st century and if you want to learn about how they help a business to operate there's no better place to do this than on our Information Systems for Business course. By giving you the information, the tools, the techniques and the experience needed to devise creative solutions to a full range of information system problems in the business world; this course gives you a real foot in the door of this competitive world.

To any business, high quality information, processes and systems to manage or control data are critical. Without information, a business would find it impossible to plan and develop a vision for the future. Developing computer-based systems to manage this information is a vital business process, and it is this challenge that forms the basis of this course.

On this course, you will gain a solid understanding of the theory, practice and applications of information systems and how they work in an ever-changing way within a variety of businesses and organisations. You will develop all the relevant skills in business, management information, e-commerce, databases and networking that the industry requires.

Whilst no specific prior knowledge of information systems is required, you should at least be comfortable working in both a technical and business oriented discipline. We encourage you to take part in any related work experience alongside your studies to provide you with an enriched learning experience. This experience can be in the form of an internship, a sandwich year, part-time or voluntary work.

### Entry requirements

200 UCAS points or equivalent normally in a minimum of two subjects, plus GCSE English and Mathematics A\*–C grades pr equivalent.

#### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For detailed information on international equivalences and alternative entry qualifications, please refer to page 145.

### What our students say

# Jamie Heath, third year Information Systems for Business student

"My experiences have on the whole been extremely good, the subject is well taught, extra help is there if I have ever needed it and the lecturers and fellow students are very approachable and friendly".

### CAREER OPTIONS

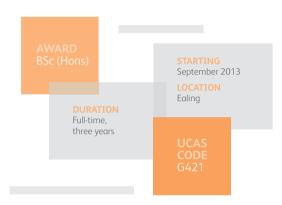
On completion of the course, students will be in a position to apply for various appointments in computing, including Business Analyst, Analyst/Programmer, User Support Specialist, Database Designer and IS Strategy.



Scan the QR code above for more course information or visit: uwl.ac.uk/G500

# BSc (Hons) Networking and Mobile Computing

100% of students studying the course Networking and Mobile Computing at the University of West London were satisfied with their overall experience (NSS, 2011\*).





### Course overview

If you want to succeed in computer networking and mobile computing then there's no better place to do this than on our Network and Mobile Computing course. By giving you the information, the tools, the techniques and the experience, this course gives you a real foot in the door of this competitive world.

The internet and mobile technologies have become a revolutionary force in all our lives. They have redefined the way we communicate, work, shop, and play. Within organisations, network and mobile technologies are now a critical part of effective business operations, so now, more than ever before, network administrators and designers are essential to the success of almost all businesses.

On this course, you will gain a solid understanding of the principles and practice of designing, building and maintaining network and mobile computer systems, capable of supporting local, national and global organisations. You will also develop all the industry-relevant skills needed in software development, the Internet, networking and security.

You will have the opportunity to gain the industry standard CISCO Certified Networking Associate (CCNA) status. CISCO certification is recognised as the gold standard in the networking industry and this course enables you to build upon theory and obtain hands-on experience in how to solve real-life problems. We encourage you to take part in any related work experience alongside your studies to provide you with an enriched learning experience. This experience can be in the form of an internship, a sandwich year, part-time, or voluntary work. We aim to help every student gain this experience whilst studying our courses.

### **Entry requirements**

200 UCAS points or equivalent normally in a minimum of two subjects, plus GCSE English and Mathematics  $A^*-C$  grades or equivalent.

### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For detailed information on international equivalences and alternative entry qualifications, please refer to page 145.

#### What our students say

Mohammad Ally Rehaz Puttaroo, third year Networking and Mobile Computing student

"One of the most important advantages obtained at the university was the focus on job requirements from the first year and the excellent careers service".

# **CAREER OPTIONS**

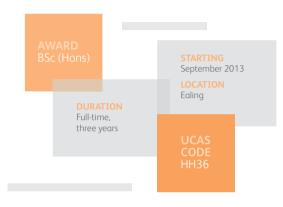
On completion of the course, students will be in a position to apply for various appointments in computing, including Network Engineer, Mobile Applications Programmer and Security Administrator.



Scan the QR code above for more course information or visit: uwl.ac.uk/G421

# BSc (Hons) Applied Sound Engineering

A course that provides a broad range of knowledge and skills combined with state-of-the-art facilities for students wanting to work in any area of sound engineering.



### Course overview

Our course delivers both a solid understanding of sound engineering concepts as well as vocational skills for design, appliance and maintenance tasks within the audio and communications industries. You will develop skills for production using music technology systems throughout the course.

The course exposes you to the latest developments in practice and ensures that you receive comprehensive theoretical knowledge and related academic instruction in the technical and scientific elements of sound and music technology.

Today's audio industry now requires you to have a broader academic background and a wider skill set than ever before. The applied sound engineering course will introduce the necessary theoretical and vocational skills in sound engineering, electronic principles and sound production..

The music technology elements of the course focus on the use of contemporary music technology systems. You will develop practical skills, as well as an informed technical understanding of how these systems work and how they are used in the production of today's music.

## **Entry requirements**

240 UCAS points normally in a minimum of two subject areas, plus GCSE English and Mathematics grade A\*–C or equivalent.

### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

#### Interview and portfolio

Applicants may be required to attend an interview and provide a portfolio of work.

For international equivalences and alternative entry qualifications, please refer to page 145.

What our students say Liam Watson, first year Applied Sound Engineering student

"The Applied Sound Engineering course, to me, is wholesome and broad. It will give you knowledge of many more topics than you might expect. If you've got a head for physics, mathematics, music technology or just audio in general, this is the course for you!"

### **CAREER OPTIONS**

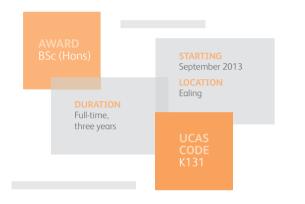
On graduation you will be able to continue your studies at Masters Level, choosing from a range of courses, including MA Advanced Music Technology and Record Production. You will also be equipped with the knowledge and practical skills to work in the audio and communications industries in a range of roles, including sound system designer, engineer and production.



Scan the QR code above for more course information or visit: uwl.ac.uk/HH36

# BSc (Hons) Built Environment – Architectural Technology

Our course in Built Environment – Architectural Technology is accredited by the Chartered Institute of Architectural Technologies (CIAT) ensuring you receive a professional focused industry related start to your career.





### **Course overview**

Architectural technology is a practically focused technical design course. You will be trained and will study with the aim of taking on a professional role during the course. The skills you acquire are transferable to other design areas of built environment.

Architectural technologists use their technological knowledge to make sure building designs work as intended in real life. They work on domestic, commercial and industrial projects. Design and development is an increasingly complex issue. Reconciling the needs of the client, the community and the environment, the formation of design proposals and detailed decision-making are challenging tasks, which require expert and professional judgment.

This course enables you to appreciate the inter-relationships and multidisciplinary nature of built environment and gain a broad understanding of the work of fellow professionals in neighbouring disciplines. It also reinforces the attainment of sustainable design and construction.

### Entry requirements

200 UCAS points normally in a minimum of two subject areas, plus GCSE English and Mathematics grade A\*–C or equivalent.

#### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For international equivalences and alternative entry qualifications, please refer to page 145.

#### CAREER OPTIONS

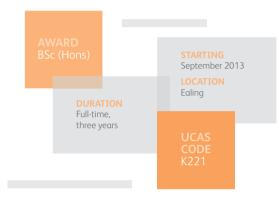
Once you have completed this course you will be able to pursue a career as an architectural technologist in the construction industry. You will also be equipped with the skills required for this role; however, you will also learn skills that are transferable to other design roles within the field of built environment.



Scan the QR code above for more course information or visit: uwl.ac.uk/K131

# BSc (Hons) Built Environment – Construction Management

Our course in Built Environment – Construction Management is accredited by the Chartered Institute of Building (CIOB) and is also recognised by the Royal Institution of Chartered Surveyors (RICS) ensuring you receive a professional focused industry related start to your career.





#### **Course overview**

Construction management is a vocationally orientated commercial and technical course. You will be trained for the professional role of construction or site manager. With a set of project management skills, a construction manager supervises and directs operations on a construction project, to ensure it is completed safely, on time and within budget. With sole responsibility for the whole project, the construction manager is the first point of contact for the subcontractors and the public. This course enables you to develop an insight into various construction processes and techniques, as well as resource management and quality control.

#### **Entry requirements**

200 UCAS points normally in a minimum of two subject areas, plus GCSE English and Mathematics grade A\*–C or equivalent.

#### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For international equivalences and alternative entry qualifications, please refer to page 145.

#### CAREER OPTIONS

Once you have graduated from this course you could work in construction management, but many also follow careers in project management, financial management and property development. Contractors, developers, professional consultancies, client organisations, central government and local authorities are common employers of construction management arriduates

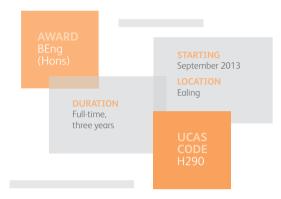


Scan the QR code above for more course information or visit: uwl.ac.uk/K221

110 University of West London • Undergraduate Prospectus 2013

# BEng (Hons) Civil and Environmental Engineering

Our course is accredited by the Institution of Civil Engineers (ICE), the Institution of Structural Engineers (IStructE), the Chartered Institution of Highways and Transportation (CIHT) and the Institute of Highway Engineers (IHE).





### **Course overview**

Civil and environmental engineering is a vocationally orientated commercial and technical course and you will be trained for the technical role of civil or environmental engineer. Civil engineers are involved in the planning, design and construction of large and small infrastructure and construction projects from roads, rail and bridges to flood defences, dams and buildings.

Our course is designed to give you the technical and management skills required to fulfil various roles within the industry. On successful completion of the course, you will be able to seek Incorporated Engineer status.

### Entry requirements

240 UCAS points including Mathematics or Physics at A level, plus GCSE Mathematics and English grade  $A^*-C$  or equivalent.

### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For international equivalences and alternative entry qualifications, please refer to page 145.

#### **CAREER OPTIONS**

On graduation you will be equipped with the skills required for this role; however you will also learn skills that are transferable to other roles within the field of engineering.

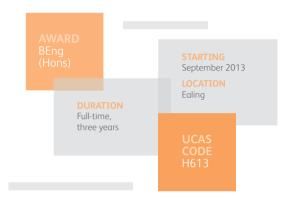
Typically, graduates work in civil engineering and environmental engineering; however their skills are commonly used in project management by contractors, developers, professional consultancies, water companies and client organisations.



Scan the QR code above for more course information or visit: uwl.ac.uk/H290

# BEng (Hons) Electronics Engineering

An electronics engineer may design a circuit but he or she need the scientific, materials and processing knowledge of a range of other specialists to bring about the functional realisation of their design. The course emphasises the commonality of approach in the various forms of engineering.





#### Course overview

Engineering is a multi-faceted discipline; no single branch can stand in isolation, and all are intertwined, interacting with each other and the wider environment.

The design of this course reflects this inter-relationship but also illustrates the boundaries within which specialists operate.

You will firstly be exposed to the core themes that permeate engineering: mathematics and mathematical analysis and the scientific approach to investigation. Attention is focused on specialisation in the later stages of the course, by building on the much broader based set of studies in the early stages.

#### **Entry requirements**

240 UCAS points including Mathematics or Physics at A level, plus GCSE Mathematics and English grade A\*–C or equivalent.

#### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For international equivalences and alternative entry qualifications, please refer to page 145.

#### CAREER OPTIONS

Graduates will have a wide range of career options across many industries such as telecommunications, defence, aerospace, embedded systems, robotics, integrated circuit design and production, audio processing, and automotive systems,

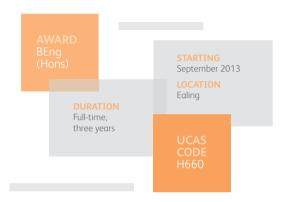


Scan the QR code above for more course information or visit: uwl.ac.uk/H613

112 University of West London • Undergraduate Prospectus 2013

# BEng (Hons) Electrical and Electronic Engineering

Our course in Electrical and Electronic Engineering is accredited by the Institute of Engineering and Technology (IET) ensuring you receive a professional, focused, industry related start to your career.





### **Course overview**

Our course will provide you with cutting edge engineer knowledge in a broad range of industries such as the power, renewable energy, sustainable technology, instrumentation/control, RF electronics radar installations, communication systems and the design of digital systems, with options of specialising in either electrical or electronic engineering.

Creativity and problem-solving is what engineering is about. This course provides you with the opportunity to gain relevant practical skills using state-of-the-art technology to produce practical and innovative solutions to a wide range of engineering problems. The course structure provides you with the opportunity to specialise in the final year. The course has strong industrial links and has strong academic partnerships within the IET and will provide you with opportunities of professional career workshops and employer engagement which will equip you with desirable transferable skills enhancing your employment prospects.

## Entry requirements

240 UCAS points including Mathematics or Physics at A level, plus GCSE Mathematics and English grade A\*-C or equivalent.

### English language requirement

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For international equivalences and alternative entry qualifications, please refer to page 145.

# **CAREER OPTIONS**

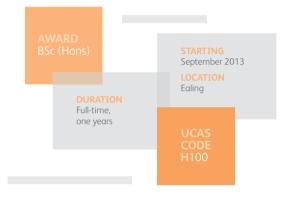
Electrical and electronic engineering is a highly employable career, providing a wide range of opportunities in industries other than main stream engineering such as IT, finance and management. You will be provided with the opportunity to develop essential industry desirable transferable skills such as critical thinking, analysis, problem-solving and IT on this course.



Scan the QR code above for more course information or visit: uwl.ac.uk/H660

# BSc (Hons) – Top-up Engineering

This course has been designed to provide a mixture of theoretical and practical skills, for engineers in the modern mechatronics field.





#### **Course overview**

The course builds on the mechanical and control engineering topics that students have studied at Level 5 and brings in the study of electronics, principally at system level. The combination of mechanical systems controlled by electronics systems is the core of mechatronics, and is typical of robotic and modern production systems.

The design module allows students to undertake research in an area of their choice, so that they can demonstrate their ability to develop a viable solution to a given problem.

#### Entry requirements

A HND/FdSc or equivalent in engineering or a similar relevant subject.

We also welcome applicants with no formal qualifications. These applications will be considered on an individual basis.

#### English language requirements

IELTS 5.5 overall or a minimum of 5.5 for each of the four individual components (reading, writing, speaking and listening).

For international equivalences and alternative entry qualifications, please refer to page 145.

#### CAREER OPTIONS

Graduates will be equipped to pursue either a technical or managerial career within engineering and related industries, developing products requiring mechanical and electrical interfaces



Scan the QR code above for more course information or visit: uwl.ac.uk/H100

