Electronics is so prevalent in today's world that opportunities for electronic engineering graduates exist across a vast range of industrial sectors. Medicine, aviation, communications, transport, space exploration, industrial automation, crime prevention, science, entertainment, music, gaming and environmental monitoring have all been revolutionised by electronics.

Electronics is also a vibrant, multidisciplinary academic field. This is particularly the case at Leeds, where our teaching and research draw on a range of other disciplines such as music, mechanical engineering, physics, business and computing. It is this broad experience that makes our graduates especially valuable in both industry and academia.

**OUR REPUTATION**

The School of Electronic and Electrical Engineering is globally renowned for teaching and research. We’re ranked top ten in the UK for Electronic and Electrical Engineering by both the Guardian university league tables 2017 and the Times and Sunday Times University League Table 2016. We also achieved 92% overall student satisfaction in the 2015 National Student Survey (NSS).

We are ranked top five in the UK for our electronics research, with 100% of our research activity rated as either ‘world-leading’ or ‘internationally excellent’ (Research Excellence Framework, 2014).

To view all undergraduate degrees offered by the Faculty of Engineering visit engineering.leeds.ac.uk
Learning and teaching

Our groundbreaking research is an important feature of our courses and feeds directly into our teaching. You will be taught by academics who are leaders in their fields and engaged in the active research environment. Through our research and the funding it attracts, we are able to invest in world-class facilities and staff who will enthuse and inspire you.

INDUSTRY-RELEVANT COURSES
Our engagement with industry is one of the main reasons our graduates are so highly valued. The School has an active Industrial Advisory Committee, which helps ensure our courses are up to date with the modern practices and techniques that will enable you to succeed in industry upon graduation.

Our staff work with numerous companies on a variety of research and consultancy projects. We also organise industrial visits and offer additional seminars delivered by practising engineers and other professionals. This means that you will have direct contact with industry and potential employers from an early stage in your course.

FLEXIBLE DEGREES
Our core electronic and electrical engineering degrees share a common first two years. This means you have the freedom to switch courses up until the end of your second year.

All our courses have a modular structure where you will be required to study 120 credits per year. A standard module is typically worth 20 credits.

You have the option of extending your studies by taking an industrial placement year option. If you’re on the MEng you can also choose to spend the third year at one of our specially selected partner universities overseas. Visit our ‘Careers and employability’ section on page 07 to find out more about these options.

INTEGRATED MASTERS (MEng, BEng)
All our courses (except for BSc Music, Multimedia and Electronics) are Integrated Masters (MEng, BEng) degrees, providing you with great breadth and depth of study.

If you study for four years, you can graduate with an MEng – the preferred engineering qualification, which fulfils the academic requirements en route to Chartered Engineer status. This course offers you the opportunity to work on a wider range of projects with a high level of industrial involvement. Should you wish to graduate early, you may decide at any point until the middle of the third year to graduate after three years with a BEng.

If you are sure from the start that you only want to study for three years, for example if you are an international student, it is also possible to apply for the BEng version of our courses. The BEng is identical to the first three years of the MEng course and has the same entry requirements.

STUDENT SUPPORT
When you start your course, you will receive a welcome pack to support your academic studies and project work. This package includes tools, development kits, electronic components and hundreds of e-books.

Our personal tutorial system will provide you with academic and pastoral support. You will have a designated personal tutor throughout your studies. You will have weekly academic tutorials with your tutor throughout your first year, in your tutor group (of typically five students), as well as one-to-one meetings twice per semester.

In addition, our excellent Student Support team is based close to where you’ll work and study to help with anything from academic advice to timetabling and project submission enquiries.

The web-based student portal will enable you to access the University’s student services and information, while our Virtual Learning Environment (VLE) will allow you access to your personal timetables, course materials, academic and social groups, and much more.

FACILITIES
You will have access to our practical electronics teaching areas, including the ARM-sponsored embedded systems laboratory and the Keysight Technologies wireless communications laboratory, featuring professional-standard equipment such as signal generators and X-series oscilloscopes.

You will also have access to a range of research facilities for your final-year projects, such as the best terahertz electronics facility in Europe and a cleanroom for nanotechnology research.

Visit our ‘Careers and employability’ section on page 07 to find out more about these options.
Hands-on learning

Laboratory classes and project work allow you to gain hands-on experience, investigating and applying material from your lectures and tutorials to real-life work situations.

They provide an excellent opportunity for you to develop essential skills such as problem-solving, communication and teamwork, all vital to success in your chosen career. All our courses include at least one significant project in every year of study.

YEAR ONE
You’ll work as part of a team to design, build and test an autonomous robot or radio-controlled vehicle to steer around a track. The project ends in a competition to see which team has the most innovative, longest-running and fun design.

YEAR TWO
You will work on two challenging semester-long projects: developing an iPhone application and designing and building a microcontroller-based embedded system. Both will test your creativity and ingenuity, as well as enhancing your electronics and programming skills.

YEAR THREE
A significant proportion of your third year is dedicated to project work. Depending on your programme of study, you’ll either do a major individual project in your third year, or you’ll do a group design project in your third year and an individual project in your fourth year.

GO ONLINE TO WATCH OUR PROJECT WORK VIDEOS
engineering.leeds.ac.uk/electronic/projects

“ As part of our third-year Group Design Project, we designed and built an interactive persistence of vision globe. The surface of the globe, centred in red-blue-green LEDs, spins round at 300 rpm and the phenomenon known as persistence of vision (POV) makes your brain interpret this moving ring of light as a solid, spherical surface. The project pushed the boundaries of our existing knowledge and helped us learn new skills: networking, mechanical CAD design and image processing among many others. However, the real key to our success was a great team dynamic. We each worked on different parts of the globe, but we collaborated to make sure all the components worked together and to seek help when we needed it.”

THOMAS CARPENTER MEng Electronic and Electrical Engineering
LAURENCE BIRD MEng Electronic Engineering
ADAM CLARKSON MEng Electronic Engineering
OLIVER PEEL MEng Electronic Engineering

YEAR FOUR (MEng)
You’ll carry out a substantial research or development-type project. These projects are normally based in one of the School’s research groups. While using the knowledge and skills obtained in previous years of study, you’ll also gain experience of investigating a problem; using available resources to develop a solution; using technical literature; and project management skills including time planning, managing risk and identifying realistic options.

Recent third- and fourth-year projects have included:
• Autonomous search-and-rescue robot
• 5G mobile system simulation
• Aviation flight tracking receiver
• Remote robotics using Microsoft Kinect
• Interactive dancefloor
• Quadrocopter surveillance drone

Careers and employability

A degree from the University of Leeds and the wider experience you’ll gain while you’re studying here will help you stand out from the crowd and secure that all-important graduate job.

REWARDING CAREERS
Over 85% of our recent graduates have successfully secured a professional or managerial role or gone on to further study within six months of graduating (latest Destinations of Leavers from Higher Education (DLHE) survey). Salaries vary from company to company, with some sectors attracting higher salaries owing to strong demand. However, typical starting salaries for newly graduated electrical/electronic engineers are in the range of £21,000 to £29,000, with professionally qualified electronics engineers earning between £30,000 and £45,000. Highly experienced engineers can earn in excess of £65,000 (Prospects 2016).

CAREERS SUPPORT
Throughout your time with us our award-winning faculty Employability team is here to support, guide and advise you. In addition to specialist face-to-face meetings, you’ll benefit from:
• timetabled employability sessions
• ongoing support to find internships and placements
• presentations and workshops delivered by employers.

Our Employability team also organises an annual Engineering Careers Fair, which will give you the opportunity to meet over 50 graduate recruiters to gain an insight into graduate jobs and to explore work experience and internship opportunities.

STRENGTHS INDUSTRIAL LINKS
We have close links with some of the top graduate recruiters in the industry, including Keysight Technologies, ARM, BAE Systems, Boeing, BP, BT, Ericsson, ESA, Fujitsu, GSK, IBM, Intel, Motorola, Nokia Solutions, Go, Pace Micro, NVP, QinetiQ, Siemens, Sony, TestView and Total Motion Controls Ltd.

INDUSTRIAL PLACEMENT YEAR
An industrial placement year is a great way to help you decide what kind of career you might like when you graduate. As well as giving you the opportunity to develop your own skills, you’ll gain a real insight into working life in a particular company or sector.

All our degrees allow you to undertake a placement year alongside your degree (either in the third year of the BEng or the third or fourth year of the MEng). If you decide to undertake a placement year, this will extend your degree by 12 months. On successfully completing your placement year, you will be awarded the ‘industrial’ variant in your degree title to demonstrate your unique expertise to future employers.

My role at Siemens Rail-IT was varied and there was no typical day. I gained practical experience working with engineers undertaking testing and maintenance, and was involved in the design stage of the biggest construction project in Europe, London’s new underground line, Crossrail.

STEPHEN AGYEMAN-KUMA
BEng Electronic and Electrical Engineering (Industrial)

If you’re interested in finding out more about what engineering careers look like, you can watch some videos on our website. Alternatively, take a look at the videos below.

Our students can currently be found on placement at companies including:
• ARM
• Amp
• Dolby
• Intel
• Music Group Research Ltd
• Pace Pic
• Parker Hannifin
• Renishaw

STUDY ABROAD
You have the option of taking an integrated study abroad year, enabling you to experience another culture. This will involve you spending the third year of your MEng at one of our specially selected partner universities overseas, studying modules similar to those taught at Leeds.

Visit our website to find out more about these and other opportunities at www.engineering.leeds.ac.uk/electronic/undergraduate
Our four core courses listed here offer a broad foundation in modern electronic engineering and a range of specialist options for those aiming for careers in the rapidly expanding areas of information technology, computer networks, communications systems, embedded systems and renewable energy.

During the first two years, you will gain a thorough understanding of the fundamental topics in the electronic engineering discipline and develop the key practical skills required. In the third and fourth years, you may specialise in the areas that interest you the most by choosing optional modules delivered by staff internationally recognised for research amongst their peers. It is this choice of options that determines your final degree title. You may change between these degrees until the end of the second year, giving you flexibility and the opportunity to sample different topics before you make your choice.

**ELECTRONIC ENGINEERING (MEng, BEng)**
This course allows you to study advanced electronic design, including system-on-chip design, embedded systems engineering and integrated circuit design and layout. Core modules will develop your knowledge and skills across a range of key topics in electronic engineering, as well as giving you a foundation in the key mathematical and physical principles that underpin it. You'll also choose from a range of specialist options, from high-frequency and microwave engineering, as well as key topics like circuit design and communications networks. Specialist modules will allow you to build on this foundation in areas like power electronics, energy conversion, control circuits and electric drives.

**ELECTRONIC AND COMMUNICATIONS ENGINEERING (MEng, BEng)**
If you're looking for a career in the communications industries, this course is for you. You'll gain a broad foundation in modern electronic engineering and the mathematical and scientific principles that underpin it. You'll also choose from a range of specialist options, from high-frequency and microwave engineering, as well as key topics like circuit design and communications links – to medical electronics.

**ELECTRONIC AND RENEWABLE ENERGY SYSTEMS (MEng, BEng)**
This course allows you to study electronic engineering alongside specialist topics in the field of renewable energy systems to meet these challenges head-on. You'll gain a foundation in the mathematical and scientific principles that underpin electronic engineering and core topics like circuit theory and communications systems. Then you'll build your knowledge of areas such as power systems, smart grid systems, power electronics for renewable systems control and energy conversion.

**REWARDING CAREERS**
Graduates have gone on to work as instrument engineers, electronics, electrical and project engineers, as well as software engineers and developers. Recent graduates have secured positions including:
- Electronic Designer, Agilbi Global
- Graduate Engineer, ARM Holdings
- Electronic Engineer, Babcock International
- Graduate Hardware Engineer, BAE Systems
- Instrument Engineer, BP
- Software Engineer, BT
- Electronic Programmer, EnQtient
- Research Engineer, Georgia Tech
- Software Developer, Imagination Technologies
- RF Filter Specialist, Radio Design
- Graduate Engineer, Transport for London

These are typical modules/components studied and may change from time to time.

**Our courses are accredited by the IET (Institution of Engineering and Technology).**

The first two years of these four degree courses share the same set of compulsory modules and in years three and four you will undertake specialist modules according to your chosen degree course. For full module descriptions please visit our website.

### Year 1
**Compulsory modules:**
- Circuit Analysis and Design
- Circuit Theory
- Communications Systems
- Communications Networks and Signals
- Digital Electronics and Microcontrollers
- Further Engineering Mathematics
- Physical Electronics 1
- Physical Electronics 2

**Prescribed modules:**
- Engineering Mathematics*
- Introduction to Engineering Mathematics**
- Algorithms and Numerical Mathematics*

* Requires A-level Mathematics as a prerequisite.
** Students with alternative qualifications (including BTEC and foundation year courses) are required to take the Introduction to Engineering Mathematics module.

### Year 2
**Compulsory modules:**
- Electronic Circuit Design
- Power Electronics
- High-frequency Electronics
- Control Systems

These are typical modules/components studied and may change from time to time.

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I work at Radio Design as a RF Filter Specialist. My day-to-day work often draws upon the specialist skills taught during my time at the University of Leeds in the detailed design and specification of highly technical components and products. The research-driven course material provided me with the ability and confidence necessary to thrive in a demanding role. In addition to technical competency, the challenging content of the taught modules gave me valuable experience in managing and prioritising my workload and the opportunity to work with a variety of talented people.

MICHAEL GUESS
BEng Electronic and Communications Engineering
## Year 3

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<td>Digital Media Engineering</td>
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<td>Smart Grid Systems</td>
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Choose one optional module

Choose one optional module

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## Year 4

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<td>Control Systems Design</td>
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<td>Power Electronics and Drives</td>
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<td>Data Communications and Network Security</td>
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<td>FPGA Design for System-on-Chip</td>
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<td>Medical Electronics and E-Health</td>
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<td>Micro- and Nano-electromechanical Systems</td>
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<td>Next-generation Silicon Technologies</td>
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<td>Wireless Communications Systems Design</td>
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<td>Communications Network Design</td>
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<td>Digital Signal Processing</td>
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<td>Digital Wireless Communications Principles</td>
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<td>Embedded Microprocessor System Design</td>
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<td>Grid-connected Microgeneration Systems</td>
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<td>High-speed Internet Architecture</td>
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<td>Micro-Grid Laboratory</td>
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<tr>
<td>Optical Communications Networks</td>
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Choose four optional modules

Choose two from o1 optional modules and three from o2 optional modules

Choose four optional modules

Choose three optional modules

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*These are typical modules/components studied and may change from time to time.*
Electronics and Computer Engineering
(MEng, BEng)

Communications, information, visualisation and sensing technologies are increasingly being integrated in smartphones, advanced manufacturing, electronic healthcare and other areas. As a result, the interface between electronics and computing is a key growth area for the technology industry.

Taught by the School of Electronic and Electrical Engineering alongside the School of Computing, this course has been designed to meet this need. You’ll study the foundations of electronics and computing, from programming languages to electronic circuit design, and learn how the whole hierarchy of digital electronics and software fits together.

You’ll study the foundations of electronics and computing in your first two years, including electronic circuit design, communications systems, computer program design and programming languages. You’ll also learn more about the hierarchy of digital electronics and software, from individual components to billion-transistor chips, and on to full computer systems, data routing and software applications.

This learning will provide the basis for your studies in year three, when you’ll take more specialised modules in fields like digital communications and embedded systems. You’ll also have the chance to select optional modules that suit your interests and career ambitions, on topics such as secure computing, mobile computing and artificial intelligence.

HANDS-ON LEARNING

Potential student projects cover a very wide range because modern electronics and computing engineering are so intertwined. Student projects vary from a hardware focus, where computer engineering expertise can allow high functionality, to software-focused projects using highly flexible processors such as powerful computers.

Project examples include:
• The performance of TCP over wireless links
• Implementation of a high-resolution surface-penetrating detection system
• Quantum computing cryptography.

The speed at which technology develops has always interested me. I’ve always wanted to know what the next big technological development will be, and how it will affect us in our everyday life. This interest, coupled with my creative and academic qualities, drove me towards a computer science degree.

However, when I came across the Electronics and Computer Engineering course at Leeds, and visited the department on an open day, I found myself not only wanting to write software but also work with electronics and hardware. This newfound interest, and the University’s outstanding reputation, made Leeds the clear choice for me.”

CALLUM BOUSTEAD
BEng Electronics and Computer Engineering

The University of Leeds
Faculty of Engineering
School of Electronic and Electrical Engineering

Communication and Computer Engineering
(MEng, BEng)

Year 1

Compulsory modules:
- Procedural Programming
- Introduction to Discrete Mathematics
- Computer Processors
- Object-oriented Programming
- Programming Project
- Circuit Analysis and Design
- Communications Systems
- Communication Design
- Digital Electronics and Microcontrollers
- Engineering Mathematics

Year 2

Compulsory modules:
- Formal Languages and Finite Automata
- Algorithms and Data Structures
- User Interfaces
- Software Engineering
- Electronic Circuit Design
- Communications Theory
- Embedded Systems Theory
- Gates to PC

Year 3

Compulsory modules:
- Professional Studies
- Digital Communications
- Embedded Systems
- Individual Engineering Project
- Distributed Systems
- Parallel Computation
- Mobile Application Development
- Cryptography
- Machine Learning
- Digital Media Engineering
- Computer Graphics

Year 4 (MEng)

Compulsory modules:
- Industry Dissertation
- MEng Individual Project
- Advanced Distributed Systems
- Mobile Application Development
- Embedded Microprocessor System Design
- High-Speed Internet Architecture
- FPGA Design for System-on-Chip
- Medical Electronics and E-Health

These are typical modules/components studied and may change from time to time.
Mechatronics and Robotics
(MEng, BEng)

Mechatronics integrates electronics with mechanical design to create intelligent systems. The transport, health, entertainment and service industries are among many that are benefiting from advances in this field.

This unique multidisciplinary course offers you the opportunity to study the most exciting aspects of electronics, mechanical design and artificial intelligence and apply them to the design and manufacture of sophisticated intelligent systems.

It’s delivered jointly by the schools of Electronic and Electrical Engineering, Mechanical Engineering, and Computing, building on the cutting-edge research being carried out in the EPSRC National Facility for Innovative Robotic Systems, which we host on campus. You’ll use industry-standard software and lab facilities and undertake project work in every year of study; recent examples include:

- Robotic systems for volcanic exploration
- Robotic hands
- Design of a wall-climbing robot
- Design of underwater propulsion systems
- Mechatronic modelling of the spinal column
- Design of a heat-sensing robot
- Simulation and design of VTOL aircraft simulator
- Robotic orthotics for assisting walking for disabled people
- Artificial upper and lower limbs
- Swarm robotics
- Kinect-controlled industrial robot arms
- Pipe inspection robots.

REWARDING CAREERS

Our graduates are in great demand, with career opportunities in an exceptionally wide range of industries. You could focus on automotive driveline engineering, machine learning, electric drives or medical robotics, among others. You’ll also develop your understanding of the industry through a dissertation and complete a substantial team project.

You’ll study a wide variety of core modules in your first two years, giving you a solid foundation across different disciplines. You’ll also see how mechanics, electronics, computer engineering and intelligent control can come together in the development of mechatronics and robotic systems.

In year three you’ll develop this knowledge in a more specialised direction. You’ll study embedded systems and key issues in robotics and machine intelligence, as well as choosing from optional modules that apply your knowledge to areas such as computer vision or biomedical engineering design. An individual project will allow you to focus on an engineering problem in depth.

MEng students will be introduced to different applications of robotics and mechatronics and benefit from an even broader choice of optional modules. You could focus on automotive driveline engineering, machine learning, electric drives or medical robotics, among others. You’ll also develop your understanding of the industry through a dissertation and complete a substantial team project.

HANDS-ON LEARNING

Project work is an important part of the course and you will undertake a project in every year of study; recent examples include:

- Robotic systems for volcanic exploration
- Robotic hands
- Design of a wall-climbing robot
- Design of underwater propulsion systems
- Mechatronic modelling of the spinal column
- Design of a heat-sensing robot
- Simulation and design of VTOL aircraft simulator
- Robotic orthotics for assisting walking for disabled people
- Artificial upper and lower limbs
- Swarm robotics
- Kinect-controlled industrial robot arms
- Pipe inspection robots.

These are typical modules/components studied and may change from time to time.

Institution of Engineering and
Institution of Mechanical Engineers (IET).
Music, Multimedia and Electronics (BSc)

This innovative course pairs music technology with electronic engineering, allowing you to specialise in designing electronic systems both for creative practice and scientific research in music.

Core modules will give you a solid base in both disciplines, and you’ll gain an understanding of circuit analysis, audio signal processing, the sciences of music, and the technologies available for sound recording and the development of computer music. You’ll also study digital media engineering and embedded systems, and you’ll have the option to compose your own pieces in every year. Project work in each year will help to equip you with the skills for professional life.

Taught by both the School of Electronic and Electrical Engineering and the School of Music, this degree builds on the research of our Interdisciplinary Centre for Scientific Research in Music, giving you access to cutting-edge research alongside the knowledge and skills to prepare you for a variety of exciting careers.

Our specialist facilities include a state-of-the-art recording studio suite in the School of Music and the music acoustics and Apple digital media laboratories in the School of Electronic and Electronic Engineering. Music creation and production tools, including Logic, Pro Tools and Cubase, are also available to use.

HANDS-ON LEARNING
Recent projects include:
• Innovative musical interface design to explore interactions between musicians, analogue/digital electronics and software
• Educational tools – for example a device which aids the user in monitoring vocal intonation
• Microphone configurations which identify information about sound localisation and translate this into on-screen visualisations
• Active loudspeaker design and characterisation
• Development of musical applications for iPad and iPhone.

REWARDING CAREERS
The degree is designed to equip you with skills and knowledge for a range of careers, including digital media, software programming, audio and consumer electronics, broadcasting, studio engineering, music editing and production.

You could consider a variety of roles in fields such as:
• Innovative music product design, testing and implementation
• Software and programming for music apps and general IT applications
• Audio hardware design
• Innovative musical performances and/or composition
• Music-related career routes such as composition
• Music production and music education
• Work in the electronics/industry in the areas of embedded systems and hardware/software interfacing
• Academic research.

This unique course equips you with a diverse set of skills, from analogue circuitry and programming to music technology and research, allowing for specialisation in specific fields. The most interesting projects I have worked on have been those which have integrated the electronics with musical design. This includes the mobile applications module where I designed an iPhone application which acted as a musical interface.”

HELENA BISBY
BSc Music, Multimedia and Electronics

These are typical modules/components studied and may change from time to time.

| Year 1 |
| Compulsory modules: | Optional modules: |
| Circuit Analysis and Design | Engineering Mathematics* |
| Digital Electronics and Microcontrollers | Introduction to Engineering Mathematics** |
| Electronic Music Creation and Production | Introduction to Electronic Music Production and Creation |
| Introduction to the Sciences of Music | Music Research Skills |
| Communications Networks and Signals | Understanding Music |
| *Requires A-level Mathematics as a prerequisite |
| **Students with alternative qualifications (including BTEC and foundation year courses) are required to take the Introduction to Engineering Mathematics module |

| Year 2 |
| Compulsory modules: | Optional modules (choose one): |
| Embedded Systems Project | Music in Practice |
| Mobile Applications Project | Composition |
| Audio Signal Processing | |
| Electronic Music Creation and Production 2 | |
| Music Technology Skills and Techniques | |

| Year 3 |
| Compulsory modules: | Optional modules (choose one): |
| Digital Media Engineering | Music Technology |
| Embedded Systems | Composition |
| Music, Multimedia and Electronics Project | |

This is a unique course that equips you with a diverse set of skills, from analogue circuitry and programming to music technology and research, allowing for specialisation in specific fields. The most interesting projects I have worked on have been those which have integrated the electronics with musical design. This includes the mobile applications module where I designed an iPhone application which acted as a musical interface.”

HELENA BISBY
BSc Music, Multimedia and Electronics

These are typical modules/components studied and may change from time to time.
Entry requirements and how to apply

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<th>Degree title</th>
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<th>A-level</th>
<th>BTEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEng, BEng Electronic Engineering</td>
<td>H610</td>
<td>3/4</td>
<td>AAA including Mathematics and excluding General Studies</td>
<td>D*DD including D in Further Mathematics plus an interview and diagnostic Maths test.</td>
</tr>
<tr>
<td>BEng Electronic Engineering</td>
<td>H615</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEng, BEng Electronic and Electrical Engineering</td>
<td>H600</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEng Electronic and Electrical Engineering</td>
<td>H605</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEng, BEng Electronic Communications Engineering</td>
<td>H640</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEng Electronic Communications Engineering</td>
<td>H645</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEng, BEng Electronics and Renewable Energy Systems</td>
<td>H631</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEng Electronics and Renewable Energy Systems</td>
<td>H636</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEng, BEng Electronics and Computer Engineering</td>
<td>H688</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEng Electronics and Computer Engineering</td>
<td>H687</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEng, BEng Mechatronics and Robotics</td>
<td>HH36</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEng Mechatronics and Robotics</td>
<td>HH41</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSc Music, Multimedia and Electronics</td>
<td>WGH4</td>
<td>3</td>
<td>AAB including Mathematics plus evidence of musical literacy, eg ABRSM Theory grade 5 or AAB including Music Technology plus GCSE Mathematics at grade B or higher</td>
<td>BTEC Extended Diploma: DDD including an appropriate amount of level 3 Mathematics with evidence of musical literacy or BTEC in Music Technology: DDD including GCSE Mathematics at grade B or higher</td>
</tr>
</tbody>
</table>

Equivalent qualifications
We welcome students with a range of qualifications and these are listed on our website. Applicants without A-level Mathematics may be required to undertake a diagnostic Maths test to enable us to ensure an appropriate amount of mathematical literacy on our courses.

English language requirements
GCSE English Language grade C (or above) or an equivalent recognised English language qualification, eg IELTS 6.0 overall with no less than 5.5 in each element.

Access to Leeds
The University of Leeds has a policy of welcoming applicants from non-traditional academic backgrounds. If you do not meet our standard entry criteria, you may be eligible via the Access to Leeds scheme.

Foundation courses
If you do not have the formal qualifications for immediate entry to one of our degrees, you may be able to progress through a foundation year.

The University offers a one-year BSc Studies in Science designed to prepare students without a science background at A-level for study on one of our degrees in engineering.

We also offer an interdisciplinary Science Foundation Year for applicants who meet specific widening participation criteria.

International foundation year in engineering
Our International Foundation Year (IFY) is intended for international students who do not yet have the formal qualifications required for entry to year one of our degree courses. IFY is not available for those studying the BSc Music, Multimedia and Electronics.

Scholarships
We offer a number of scholarships within the School, with up to £4,000 available for UK/EU students and £8,000 for international students.

Contact us
If you require any further information prior to making a formal application, please contact our Undergraduate Admissions team.

School of Electronic and Electrical Engineering
University of Leeds
Leeds LS2 9JF, UK
tel: +44 (0)113 343 2012
e-mail: ugelec@leeds.ac.uk

Find us online
To find out more about the University and the School of Electronic and Electrical Engineering visit
engineering.leeds.ac.uk/electronic

Language centre
Our Language Centre provides the Academic English for Undergraduate Studies pre-sessional course, which is designed to help international students develop the necessary language and academic study skills for undergraduate study.

www.leeds.ac.uk/languages

How to apply
All undergraduate applications should be made through the Universities and Colleges Admissions Service (UCAS). Full instructions on how to apply are available at www.ucas.com

Offer process
Suitable applicants will be invited to an applicant day, which gives you the opportunity to meet our students, academic staff and admissions staff, and to find out more about your course. You’ll take part in a hands-on demonstration, a question and answer session and a School tour. The tour of the School’s facilities includes interactive demonstrations of student activities and recent project work.

We like to interview applicants before making an offer, so the applicant day will also include an interview with one of our academics. This will give you the chance to discuss your application in more detail, check that it’s the right course for you and your career plans, have your questions answered and find out more about studying at Leeds.