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Electrical and Energy Engineering MEng

Details

Feedback from the National Student Survey shows that 95% of our graduates from this four-year accredited programme were employed six months after graduating, with 95% of those finding graduate-level jobs and earning salaries in the region of £23-£27,000 per annum.

The Electrical Engineers of the future face a big challenge. How do we incorporate renewable energy sources like wind and solar power into our electricity distribution systems? How do we design machines and infrastructures with sustainable energy issues in mind? Electrical & Energy Engineering is one of a suite of interdisciplinary energy-themed engineering degree programmes. It includes an integrated set of modules addressing a breadth of energy issues, as well as highlighting important interactions with the other relevant engineering disciplines. One third of this degree programme consists of specialist, energy-themed modules, and you'll also study all the energy engineering topics that are naturally built into an electrical engineering degree.

First and second years

You'll learn the theoretical and practical skills you need to design, construct, program and test circuit building blocks and complex systems. You'll study in depth the underlying mathematical and physical principles of electronic and electrical engineering, and develop skills in computer programming and computer-aided design. You also have the option to study a foreign language, or other modules outside your main discipline.

Third and fourth years

You study your chosen specialist options in greater depth, and undertake a major individual project in a research-led environment. In the third year you also undertake a group project, as a member of a team of seven to ten students.

Year abroad

A year abroad is available in the third year of a four-year MEng programme, provided it is taken at an approved overseas university.

- **Electrical and Energy Engineering module details (BEng and MEng) pdf (/Documents/college-eps/eece/modules/electrical-energy.pdf)**

Related links

- **Undergraduate degree programmes - Electronic, Electrical and Computer Engineering (/schools/eece/undergraduate/index.aspx)**
- **Scholarships and awards - Electronic, Electrical and Computer Engineering (/schools/eece/undergraduate/scholarships.aspx)**

Why study this course

At Birmingham, we provide diverse, yet balanced, courses, enabling our graduates to gain employment in a wide range of industries. Teaching is provided by lecturers who are global experts in their field, with multi-million pound investment providing leading-edge teaching facilities and laboratories.

We produce graduates who can function in today's fast-changing marketplace, and your career prospects will be excellent. Your Birmingham degree is evidence of your ability to succeed in a demanding academic environment.

Employers target Birmingham students for their drive, diversity, communication and problem-solving skills, their team-working abilities and cultural awareness, and our graduate employment statistics have continued to climb at a rate well above national trends.

Housed in the refurbished Gisbert Kapp building with its dedicated state-of-the-art teaching and research facilities. We have three well-equipped computer laboratories and an agreement with Microsoft, through the MSDNAA, providing student access to key computing software. These labs are open until midnight every day. We also boast modern laboratories to support the teaching of electronic and electrical engineering, together with specialised labs that students can use for their individual projects. Students can also take advantage of the extensive facilities for embedded systems with microcontrollers, FPGAs, and DSP kits, or work with internationally leading research groups on projects in communications engineering, applied computing and novel electronic devices.

Our degree programmes equip our graduates with a firm understanding of the discipline, from the fundamental science and maths which underpins it to practical applications. It is this understanding, combined with the distinction of a good degree from Birmingham, which means many of our BEng/MEng graduates hold a graduate job offer before completing their study!

Because career progression for many engineers can lead to senior management roles we offer the opportunity to study engineering with business management. The business management modules, which make up one third of each year, are delivered by our colleagues in the internationally recognised Birmingham Business School.

All of our Undergraduate BEng/MEng and Postgraduate courses are accredited by the Institution of Engineering and Technology (IET), allowing you to take the first steps towards professional Chartered Engineer status. This ensures that studying at Birmingham will provide you with a professionally recognised degree, and one which has a great reputation within the industry.

Modules

- **Electrical and Energy Engineering module details (BEng and MEng) pdf (/Documents/college-eps/eece/modules/electrical-energy.pdf)**

Fees and funding

Standard fees (http://www.birmingham.ac.uk/students/ug/courses/fees/standard) apply
Learn more about **fees and funding (/undergraduate/fees/loans.aspx)**

Scholarships

- Please see the **Electronic, Electrical and Computer Engineering scholarships and awards page (/schools/eece/undergraduate/scholarships.aspx)** for information on available scholarships
- Learn more about the University of Birmingham's **scholarships and awards (/undergraduate/fees/funding/index.aspx)**

Entry requirements

Number of A levels required: 3

Typical offer: AAA

Required subjects and grades: Mathematics A level grade B and at least one physical science A level

General Studies: not normally accepted as one of the three A levels, but a good performance may be taken into account if you fail to meet the conditions of an offer marginally

Additional information:

Other qualifications are considered – learn more about **entry requirements (http://www.birmingham.ac.uk/students/ug/requirements)**

International students:

International Baccalaureate Diploma: 36 points, including both Mathematics and at least one physical science at HL

Standard English language requirements apply (/undergraduate/requirements/international/index.aspx) Learn more about **international entry requirements (http://www.birmingham.ac.uk/students/ug/requirements/international)**

Depending on your chosen course of study, you may also be interested in the Birmingham Foundation Academy, a specially structured programme for international students whose qualifications are not accepted for direct entry to UK universities. Further details can be found on the **foundation academy web pages (http://www.birmingham.ac.uk/students/foundation-academy/Pathways/index.aspx)** .

How to apply

Apply through UCAS at **www.ucas.com (http://www.ucas.com/)**
Learn more about **applying (http://www.birmingham.ac.uk/students/ug/courses/apply)**

Key Information Set (KIS)

Key Information Sets (KIS) are comparable sets of information about full- or part-time undergraduate courses and are designed to meet the information needs of prospective students.

All KIS information has been published on the Unistats website and can also be accessed via the small advert, or 'widget', below. On the **Unistats website (http://unistats.direct.gov.uk)** you are able to compare all the KIS data for each course with data for other courses.

The development of Key Information Sets (KIS) formed part of HEFCE's work to enhance the information that is available about higher education. They give you access to reliable and comparable information in order to help you make informed decisions about what and where to study.

The KIS contains information which prospective students have identified as useful, such as student satisfaction, graduate outcomes, learning and teaching activities, assessment methods, tuition fees and student finance, accommodation and professional accreditation.

Related links

Undergraduate degree programmes - Electronic, Electrical and Computer Engineering (/schools/eece/undergraduate/index.aspx)

Scholarships and awards - Electronic, Electrical and Computer Engineering (/schools/eece/undergraduate/scholarships.aspx)

Electronic, Electrical and Computer Engineering Course Brochure (PDF 1MB) (/Documents/college-eps/eece/brochures/eece-brochure.pdf)

Electrical and Energy Engineering module details (/Documents/college-eps/eece/modules/electrical-energy.pdf)

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