



BEng (Honours) Electronic Engineering

UCAS code: H610

UCAS may change course codes - please check in your UCAS Handbook before applying.

Attendance

Four years full-time (including one year work placement) or three years full-time

Admissions office

For more information or to check the progress of your application phone 0114 225 5555, fax 0114 255 2167, e-mail admissions@shu.ac.uk

International students see www.shu.ac.uk/international for more information

Fees

International students

Typically £9,720 a year

International students next year

Typically £10,080 a year

About this course

All organisations, from hospitals and factories to banks, offices and small industrial concerns, increasingly depend on electronic technology. This technology is used in everything from production to administration and financial control. This degree develops the specialised technical skills needed by employers in these fields.

You study computing and electronic systems, while concentrating on the principles of electronic engineering. You also gain an appreciation of company structure and quality control.

The course includes specifics about systems applications, and software and hardware technologies. Other studies include computer modelling and mathematics for electronic engineering.

You learn the principal themes of • digital and analogue electronics • electronic systems design • signal processing • engineering analysis. These themes support further study of specialist applications

of electronics to computer, communication and control systems. You can also design and build working devices, and evaluate commercial electronic products.

The course is vocational and produces engineers who can meet the needs of the wide range of industries that use new technology. The ever developing application of technology means there is a growing demand for engineering graduates.

All students take the first year core modules. These provide a common foundation of engineering principles, knowledge and key skills, while addressing the areas of engineering applications and personal skills development. This also allows you to change your mind about which course you want to study at the end of the first year.

Mature students with relevant work experience and international students normally take the three year route.

You work in our electronic laboratories designing hardware and developing your practical skills.

Associated careers

There is a demand for engineers with a sound knowledge of engineering applications based on microprocessor systems and information networks.

Our graduates have found careers with companies such as • Raytheon Systems (Defence Hardware) • Intel Systems • Reuters • IBM • Vodafone.

You may also continue your studies at postgraduate level on our [MSc/PgDip/PgCert Electronics and Information Technology](#).

Assessment

- coursework • project • examination

Professional recognition

This course is accredited by the [Institution of Engineering and Technology](#) and is the first step to becoming an incorporated engineer.

Entry requirements

Normally four GCSEs at grade C or above including English language and mathematics, plus one of the following

- 160 points from at least two GCE/VCE A levels taken at one sitting or BTEC National qualifications, including mathematics
- Foundation pass from the [Extended Degree in Engineering](#), dependent on academic performance

- Access an Access to HE Diploma with at least 45 credits at level 3 from a QAA-recognised Access to HE course, or an equivalent Access to HE certificate

If English is not your first language you need an IELTS score of at least 6.0.

We will make an offer to all applicants who are likely to achieve or better these entry requirements.

We welcome applications from people of any age. We may be flexible in our normal offer if you can show a commitment to succeed and have the relevant skills and experience. This must show that you will benefit from and finish the course successfully.

Course content

Year one modules

- electrical and electronic principles • electronic engineering • engineering practice • computing for engineers • introduction to programming • engineering mathematics • engineering technology and the environment

Year two modules

- digital electronics • analogue electronics • microprocessor-based systems • computer networks and communication systems • digital signal processing • mathematics for electronic engineers • control systems • business and management for engineers • integrative product analysis and design

Year three

- optional work placement

Final year modules

- personal project • electronic engineering • digital signal processing and mobile communications • optoelectronics and microelectronic systems applications • optical fibre communications • project management

The University's terms and conditions apply to all offers of places to study at the University.