Electrical Engineering (Years 1 and 2) (in conjunction with Heriot-Watt University)

Forth Valley College

Venues

Falkirk Campus

Content

Electrical engineering is a very diverse subject and offers huge job opportunities in a variety of engineering sectors.

This programme combines the HND Electrical Engineering programme based at Forth Valley College's new state-of-the-art Falkirk Campus, with guaranteed progression to Heriot-Watt University.

Our Electrical and Electronic Engineering programme provides you with a broad-based education in the subject, and develops your critical understanding of the core theories, principles and concepts relating to the use of engineering and computer technology. You'll integrate engineering principles with the knowledge and understanding of mathematics, science, and management to adopt a holistic approach to solve current and emerging electrical engineering problems.

The undergraduate programme will make you aware of the range of functions a qualified engineer can fulfil, whilst exploring industry-specific design techniques and software packages. You'll analyse economic and commercial aspects of business, and develop the skills to create solutions to the current and emerging general and specialist problems in electrical engineering.

Years 1 and 2
You will study:
Transformers; Power Systems; Electrical Motor Drive; Electrical Machine Principles; Power Electronics; Transmission Lines and Complex Waves; Digital Electronics; Mathematics; Electrical Installation Skills; Business Awareness and Continuing Professional Development; Programmable Logical Controllers; Analogue Electronics; Electrical Standby Systems; Utilisation of Electrical Energy in Buildings; Engineering Maths.

Year 3
Students transfer into the third year of the degree at Heriot-Watt and the subjects studied include:
Energy Systems; Analogue Electronics; Electromagnetics; Physical Electronics; Communications.

A quarter of the year is spent working on a large team-based project, incorporating Digital and Software Design, Mechanics and Management

Year 4
Students work on an individual honours project and select taught topics from a list that includes:
Embedded Systems; Sustainable Energy and Power Systems; Communications; Image Processing; RF

Communications; Analogue Electronics; Microwave Techniques.

Start Date

August

Qualification

Degree

Study Method

Full time

Award Title

BEng/MEng

Course Length

2 years

Department

Engineering

Entry Requirements

3 Highers at BBC including Maths and a science or technological subject; or Foundation Apprenticeship Engineering plus Higher Physics and Maths at BB or BC; or NC Electrical Engineering (Level 6). Entry subject to interview and group task.

SCQF Level

8

SCQF Points

«SCQFPoints»

Progression Routes

Year 3 MEng Electrical Engineering at Heriot-Watt University.

Combination Courses

«htmlCombinationCourse» «htmlCombinationUCASCode»

Address

Grangemouth Road
Falkirk
FK2 9AD

Website

www.forthvalley.ac.uk