

# 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 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.

Topics focus on a wide range of core skills and engineering skills in electrical and electronics engineering. This is the first step towards a dynamic and rewarding career 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