

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

Forth Valley College

### Venues

Falkirk Campus

### Content

Chemical engineering is an exciting and challenging area of study. Chemical engineers take a raw material and turn it into a useful product as cost effectively as possible. By applying for the combined HND Chemical Process Technology programme at Forth Valley College with guaranteed progression to Heriot-Watt University, students have taken the first step towards a dynamic and rewarding career in chemical engineering.

Years 1 and 2:

The course is delivered for the first two years at Forth Valley College (Falkirk Campus), studying the fundamental principles of chemical engineering and chemistry.

Topics of study include:

Chemical Engineering Principles; Heat Transfer; Fluid Mechanics; Mathematics; Chemistry; Unit Operations; Equipment Design; Process Safety.

Year 3:

Provides opportunities to analyse key operations in the industry, particularly the processing and separation of gases and liquids. In parallel, there are subjects looking at chemical reactor theory, how processes are controlled and the prediction of physical behaviour. Topics on Safety, Environment and Economics are consolidated in a group-based project.

Year 4:

A central theme is the advanced analysis of key processing operations and their control. Specialist topics include: Processing Solids; Energy Efficiency; and Developing Sustainable Processes. A group-based design project and individual research project are also undertaken.

Year 5:

Specialist and core chemical engineering subjects are studied in this year, along with the extensive research project. A central theme is the enhanced design project, where students have the opportunity to demonstrate their skills in process design and commercial awareness.

### 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 Chemistry; or Foundation Apprenticeship Engineering or Scientific Technologies (Laboratory Skills) plus Higher Maths and Chemistry at BB or BC. Entry subject to interview and group task.

## SCQF Level

8

## SCQF Points

«SCQFPoints»

## Progression Routes

Year 3 MEng Chemical Engineering at Heriot-Watt Univeristy

## Combination Courses

«htmlCombinationCourse»

«htmlCombinationUCASCode»

## Address

Grangemouth Road  
Falkirk  
FK2 9AD

## Website

[www.forthvalley.ac.uk](http://www.forthvalley.ac.uk)