

# Chemical Engineering

Heriot-Watt University

## Venues

Edinburgh Campus

## Content

1st Year: Provides a general introduction to the subject, emphasising the role of basic mathematics and science. Courses introduce basic techniques and principles of chemical engineering including: Mass Balances; Basic Thermodynamics; and Energy Balances. An awareness of professional and personal development forms a critical part of the teaching in this year.

2nd Year: Important themes focus on an understanding of the movement of material, heat and how materials behave. Principal components include Fluid Mechanics; Heat Transfer; Mass Transfer and Thermodynamics. Also includes a mini-design project.

3rd Year: 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.

4th Year: 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.

## Start Date

September

## Qualification

Degree

## Study Method

Full time

## Award Title

BEng Hons

## UCAS Code

H800

## Course Length

4 years

## Faculty

School of Engineering and Physical Sciences

## Department

Chemical Engineering

## Entry Requirements

2021 entry requirements:

Standard entry: 4 Highers at AAAB including Maths and Chemistry at AA plus English at National 5.

Widening access entry: 4 Highers at BBBC including Maths and Chemistry at BB plus English at National 5.

For entry to Level 2 you would require 3 Advanced Highers at AAB including Maths and Chemistry at AA plus 4 Highers at AAAB.

## SCQF Level

10

## Address

Edinburgh  
EH14 4AS

## Website

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