Chemical Engineering

Process Systems Modelling and Design (CENG0025)

Description

Aims:
The module aims to develop modelling concepts and simulation skills to consider complex process design in the context of safety and sustainable process plant development.

Learning Outcomes:
On completion of this module, the students will be expected to be:

- able to develop computational models for complex plant items;
- able to use contemporary simulation tools to modelling process behaviour;
- able to make informed decisions on process design based on conflicting and missing information in the context of safety and sustainable process plant development.

Synopsis:
The following issues will be considered:

- process systems engineering
- process modelling
- process design
- process optimisation
- dynamic simulation
- uncertainty analysis
- model validation

Lectures, tutorials and e-learning resources will provide training in the techniques and tools required to carry out design projects applying advanced design concepts and computational tools.

Key information

Year: 2020/21
Credit value: 15 (150 study hours)
Delivery: UGM L7, Campus-based
Reading List: View on UCL website
Tutor: Dr Federico Galvanin
Term: Term 1
Timetable: View on UCL website

Assessment

- Coursework: 100.0%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of March 2020. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.