Process Design Principles (CENG0013)

Description

Aims:
1. To provide an introduction to process design, bringing together elements of process analysis and detailed process phenomena and preparing the students for the 3rd year design project;
2. To develop skills in the use of computational modelling and optimisation tools;

Learning Outcomes:

Upon completion of this module students should:
- understand what design entails and how to apply this to both new and existing process designs;
- understand the use of modelling, simulation and optimisation tools in design;
- understand the connection between the technologies, the phenomena and overall processes;

Synopsis:

Introduction to design:
processes, economics, flowsheeting;

Flowsheet design:
heuristic, algorithmic;
Heat exchanger network design;

Case studies:
reactor system design, separation sequencing, recycles;

Key information

Year 2018/19
Credit value 7 (75 study hours)
Delivery UG L5, Campus-based
Reading List View on UCL website
Tutor Prof Eric Fraga
Term Term 2
Timetable View on UCL website

Assessment

- Coursework: 60%
- Coursework: 40%

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 December 2018. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
Chemical Engineering

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