



PARTNERS ACADEMIC SUMMER SCHOOL 2024

Syllabus for Chemical Engineering

Subject Area

This syllabus is for PARTNERS applicants seeking to progress to the degrees of:

1. Chemical Engineering BEng Honours, H810
 2. Chemical Engineering MEng Honours, H813
 3. Chemical Engineering with Industry MEng Honours, H815
 4. Chemical Engineering with Foundation Year BEng Honours, H814,
 5. Chemical Engineering with Foundation Year MEng Honours, H815
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Aims

To allow students to demonstrate their potential to succeed in specified degree programmes by showing a grasp of entry-level subject-specific knowledge, understanding, cognitive and subject-specific skills.

Learning Outcomes

A good knowledge and understanding of ...

- how chemical engineering unit operations fit together to form a process
- number of chemical engineering principals
- different flow diagrams as the most effective way of communicating information about a chemical process.
- Converting a word description of the chemical process into a simple Block Flow Diagram (BFD)
- basic mass balance for unit operation and the whole processes based on BFD

The ability to apply this knowledge and critical understanding to...

- Summarise information into clear chemical engineering flow diagrams (block flow diagram)
- Formulate and solve basic mass balance based on a word description and/or block flow diagram (BFD)

Competence in...

- Basic chemical engineering principles
 - Basic chemical engineering diagrams
 - Simple mass balance calculations
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Summer School Syllabus

Please see subject timetable for more information

Online Teaching:

Monday 1st , Tuesday 2nd July

On-Campus Teaching:

Wednesday 3rd (PM), Thursday 4th & Friday 5th July

Formative Assessment Details

Canvas quizzes: on ability to understand, create simple block flow diagrams for the process and use it to solve mass balances for the unit and whole process

Hand-in Method

Digital

Assessment deadline

Friday 12th July