



Biochemical Engineering

Downstream Processing for Engineers (BENG0012)

Description

The recovery, purification and formulation of biological products from complex sources such as fermentation or cell broths represents the major challenge to the provision of safe and effective materials e.g. for therapeutic use. The course emphasis is on the integrated design and control of whole bioprocess sequences. The theoretical material is supported and integrated with practical learning. Students undertake a series of short laboratory practical sessions throughout the year and attend 2 week-long problem-based scenarios (Ultra Scale-down tools scenario for speeding the therapy supply and pilot plant week).

Upon completion of the course, a student should be able to:

- Learn the principles of design, selection and operation of units operations for the processing of biological products and their subsequent configuration as process sequences operated under control
- Understand how practical performance of bioprocess operations and sequences will differ from real-life behavior as determined by live, hands-on experimentation.
- Experience how projects are planned and managed to deliver specific research goals.
- Familiarise with advanced analytical techniques for the generation of process design information using miniaturized experimental formats.

Key information

Year	2018/19
Credit value	30 (300 study hours)
Delivery	UG L5, Campus-based
Reading List	View on UCL website
Tutor	Prof Ajoy Velayudhan
Term	Terms 1 and 2
Timetable	View on UCL website

Assessment



- Written examination (main exam period): 50%
- Oral examination (departmentally managed): 25%
- Coursework: 25%

Find out more

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