



Biochemical Engineering

Synthetic Biology (BENG0045)

Description

This module introduces students to the new areas that make up Synthetic Biology, including molecular biology, microbial physiology, biochemical pathways, pathway engineering, DNA design, bioinformatics, engineering principles, mathematical modelling, biochemical engineering and chemistry. In addition to academic learning, the students will learn how to design specific elements in Synthetic Biology through individual design work and will practice how to present their ideas to others.

Intended learning outcomes

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

- Have in-depth knowledge of molecular biology, microbial physiology, biochemical pathways and bioinformatics
- Design specific elements in Synthetic Biology by linking information from different areas
- Use the new knowledge to build new elements, pathways, cells and systems
- Appreciate bioethics, societal issues and patenting related to the field
- Understand the scale translation of complex biological material

Key information

Year	2019/20
Credit value	30 (300 study hours)
Delivery	PGT L7, Campus-based
Reading List	View on UCL website
Tutor	Prof John Ward
Term	Terms 1 and 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