

Biosystems and Biomaterials Engineering

Basic information

Code: CHEM3036

Extent: 20–25 cr

Language: English

Professor in charge: Alexander Frey

Administrative contact: Planning officer Annu Westerberg

Target group: Students from Masters' programme in Life Science Technologies, Master's Programme in Chemical, Biochemical and Materials Engineering and other Master students with sufficient prerequisites

Application procedure: Open for all students of Aalto University.

Quotas and restrictions: Please note, that in some courses the number of participants can be limited.

Prerequisite knowledge: Attendance of the minor in Biosystems and Biomaterials Engineering presupposes basic knowledge and competences in Biology. Also while making your studyplan, you should verify that you have the prerequisites needed for the courses.

Objectives

The minor provides an overview on biological phenomena and cellular systems. It provides students a sound understanding of biological phenomena from the single molecule level to the complexity of cellular organisms. A central topic is how cells can be analyzed and reprogrammed.

Content and structure of the minor

The minor includes 20–25 credits of studies. Suitable courses can be selected from the list.

Structure of the minor

Code	Name	Credits	Period
Mandatory courses		5	
CHEM-E8120	Cell Biology	5	II
Elective courses (select courses to fulfill the 20-25 credit requirement)		15-20	
CHEM-E3150	Biophysical Chemistry	5	III
CHEM-E3120	Microbiology	5	I
CHEM-E8115	Cell Factory	5	III
CHEM-E8125	Synthetic Biology	5	I V - V

