

Microbiology and biocatalysis for industry



ECTS
12 crédits



Hourly volume
300h

Introducing

Enzyme kinetic.

Description

Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts) :

- High cell density microbial cultures for industrial production, integrating the physiological constraints
- Modelling the biological reaction
- Controlling the fermentation process
- The design of an industrial process
- Applied enzyme catalysis

The student will be able to:

- design and simulate models describing the microbial productions
- design and implement microbial cultures for high performance reactors
- apply enzyme engineering techniques

Practical info

Location(s)

 Toulouse

Necessary prerequisites

Structural and metabolic biochemistry - Microbiology - Microbiological engineering -Bioreactor engineering-