

ChE-460

Project in biotechnology

Profs divers *

| Cursus | Sem. | Type |
|---------------------|------|------|
| Biotechnology minor | E, H | Opt. |

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|----------------------|--------------------------------|
| Language of teaching | English |
| Credits | 10 |
| Withdrawal Session | Unauthorized Winter, Summer |
| Semester Exam | Fall During the semester |
| Workload | 300h |
| Weeks | 14 |
| Hours | 12 weekly |
| Project | 12 weekly |
| Number of positions | |

It is not allowed to withdraw from this subject after the registration deadline.

Remark

Uniquement pour le mineur en Biotechnologie

Summary

Completing a project in biotechnology in a research lab of choice.

Content

The research projects aim at improving the practical laboratory skills. Furthermore, students learn to plan and design scientific experiments, and to develop advanced written and verbal communication skills.

Keywords

Bioprocess development, cell engineering, immuno-engineering, tissue engineering, engineering of biomaterials, biomedical engineering, environmental biotechnology, microbial biotechnology, microalgae biotechnology, etc.

Learning Outcomes

By the end of the course, the student must be able to:

- Manage an individual research project
- Apply the competences to a specific subject
- Design research
- Assess / Evaluate the results critically
- Compose the project in written form in a scientific report
- Expound the project in oral form for a scientific audience
- Develop expertise in a specific area of research
- Present data coherently and effectively

Transversal skills

- Communicate effectively, being understood, including across different languages and cultures.
- Write a literature review which assesses the state of the art.

- Summarize an article or a technical report.
- Assess progress against the plan, and adapt the plan as appropriate.
- Collect data.
- Access and evaluate appropriate sources of information.

Expected student activities

Planning, designing and performing research in a lab
Choosing and critical reading of scientific literature relevant to the research project
Evaluation of research data, and writing a scientific report
Oral presentation of the research project

Assessment methods

The research project requirements includes a written report and an oral presentation.

Supervision

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|--------------|-----|
| Office hours | Yes |
| Assistants | Yes |