

ChE-459

Process development project

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Cursus	Sem.	Type
Biotechnology minor	E	Opt.
Ing.-chim.	MA2, MA4	Obl.

Language of teaching	English
Credits	6
Withdrawal Session	Unauthorized Summer
Semester Exam	Spring During the semester
Workload	180h
Weeks	14
Hours	6 weekly
Project	6 weekly
Number of positions	
It is not allowed to withdraw from this subject after the registration deadline.	

Summary

Development project of a real lab process to industrial scale.

Content

- Integrated process development of a simple process from lab to industrial scale.
- Production costs estimation.
- Feasibility study with respect to economic and EHS compliance.
- Safety concepts application.

Learning Outcomes

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

Transversal skills

- Assess progress against the plan, and adapt the plan as appropriate.
- Set objectives and design an action plan to reach those objectives.

Resources**Ressources en bibliothèque**

- [Ullmann's Encyclopedia of Industrial Chemistry](#)
- [Systematic Methods of Chemical Process Design / Biegler](#)
- [Scale up in Chemical Engineering / Zlokarnik](#)
- [Process Development / Vogel](#)

Websites

- http://scgc.epfl.ch/telechargement_cours_chimie

