BIO-501

Lab immersion I

Profs divers *

Cursus	Sem.	Type
Bioengineering	MA3, MA4	Opt.
Life Sciences Engineering	MA1, MA2, MA3, MA4	Opt.
Sciences du vivant	MA3, MA4	Opt.

Language of teaching	English
Credits	8
Withdrawal	Unauthorized
Session	Winter, Summer
Semester	Fall
Exam	During the semester
Workload	240h
Weeks	14
Hours	**8 weekly**
TP	8 weekly
Number of positions	

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

Summary

The student will engage in a laboratory-based project in the field of life sciences engineering. Student projects will emphasize acquisition of practical skills in experimentation and data analysis.

Content

A typical project will involve "hands-on" wetlab experimentation and data analysis, although theoretical and computationally-oriented projects are also possible. The projects are available on the web sites of SV laboratories (including core facilities) or discussed directly with a potential head of lab.
The students are confronted with the realization of a laboratory-based project integrating specific aspects of life sciences engineering.
This project will allow them to apply, to concrete problems, skills of domain and transversal skills acquired during their studies.
Projects have to be done in an EPFL lab.

Expected student activities

Students will focus on hands-on experimentation, which may be wetlab-based or computer-based, depending on the project. Students will read and discuss assigned papers from the original cientific literature. As part of the evaluation process, students may be required to submit a written report or to give an oral presentation that summarizes and interprets their results.
Total workload: 16h/week during 14 weeks or 5-6 weeks full time (42h/week)
Can be done during the autumn or spring semster or in between two semesters.

Assessment methods

Continuous control
The mode of evaluation must be clearly defined and agreed between the student and the project mentor in advance. Typically the mode of evaluation will include a written report and /or an oral presentation prepared and delivered by the student.

Supervision

Others: Typically, the student will be matched with a secondary mentor (this will usually be a senior PhD student or a Postdoctoral Fellow) who will take responsibility for the day-to-day supervision and training of the student.