

SMA Master Project

DIRECTIVES intended for students, EPFL professors and companies/universities, which host students for their master project.

Goal of the master project

The master project is a student achievement, which involves a work of analysis, conception and implementation, aiming to prove the scientific capacities of the student. It can be performed in a chair of mathematics or in exchange at a hosting university. The master project takes place after the Master cycle during the period mentioned in the academic calendar.

Project director (EPFL Professor or MER)

The director commits himself to ensure that the student performs a work of sufficient analysis and conception. The director evaluates the student's capacities. In particular:

- Officially supervises the project and chairs the jury during the evaluation.
- Checks **the level of the project** and follows regularly the work progress.
- Instructs the partner (if any) on the requirements of the EPFL.
- Intervenes in case of problems.

External project supervisor

In the case of a master project outside the EPFL, the external supervisor commits himself to ensure that the student performs a work of sufficient analysis and conception to allow the EPFL director to evaluate the student's scientific capacities.

Framework

The EPFL master project must be supervised by an SMA professor or a professor affiliated to the CSE program (*Project director*)¹. He is responsible for the follow up and evaluation of the project. In the external institution, a person (*External project supervisor*) is responsible for the supervision of the student and will also be the preferred contact of the *director*.

Project selection

The master project subject can be proposed by:

- A chair of the SMA or affiliated to the CSE program
- The student

The director of the project has to approve the subject and the goals of the master project, as well as the host institution if the project does not take place in his laboratory.

Student

- Can freely choose the project director with whom she/he wishes to work for her/his master project as long as there are enough places available.
The project director is a Professor or MER attached to the SMA section or affiliated to CSE if the student is in the CSE program
- Contacts the project director and defines precisely the project's goals
- Registers, officially, on IS-Academia, asks the director to sign the registration form and hands it in to the SMA.

¹ An EPFL Professor expert in Mathematics or CSE can also be the project director, the SMA needs to approve. Please contact the deputy director.

Project director

- Chooses the project subjects in a discipline linked to the section and in which his expertise allows him to judge the abilities of the student to perform research work
- Assesses the propositions of external master projects and **validates the topics** he wishes to supervise.

Length of the Project

The Master project **lasts 17 weeks when it's achieved at EPFL.**

During the Project

Student

During his master project, the student remains registered as an EPFL student and is subject to the rules of the host laboratory or host company: schedule, absence, confidentiality, seminar, etc.

Project director or external supervisor

- Welcomes the student on the first day of the project and gives him the directives
- Guides the candidate

Project director

- Guides the candidate
- In order to evaluate the capacities of the student and the project's direction, asks the student for an intermediate report/oral presentation
- Reserves the right to re-aim the work
- Chooses an external expert to evaluate the master project. In case of a project outside EPFL, the expert is often the *External Project supervisor*
- Plans and organizes the oral evaluation of the master project

Expenses

Expenditure incurred by the master project (such as software, travels, conferences, printing of the report) is assumed by the hosting laboratory.

Report writing

The student will write a report, which will contain:

- The title
- The student's name
- The name of the EPFL laboratory or the host institution
- The name of the EPFL professor in charge
- The name of the person in charge in the host company
- The name of a co-supervisor, if any
- The results of the work with a summary in French and in English

This report should be representative of the work done in order to enable to judge the capacities of the student.

End of the project

Compulsory:

- Put the PDM PDF in ISA
- Make the iThenticate similarity analysis in ISA.
- Send an e-mail to the teacher and the expert, copying the section and attaching the PDF file of the PDM.

Presentation

- The student prepares an oral presentation for his master project. The duration is decided by the director, usually 45 minutes: (20 min) presentation, (20min) questions, (5min) deliberation.
- He makes a poster with the principal results of the master project and give it to the section. It will then be displayed during the Master projects exhibition in October.

Project director

- Assesses the work with the external expert with regards to:
 - a) the quality of the work,
 - b) the quality of the report,
 - c) the quality of the oral presentation
- Submits the grade directly to the SAC.

Confidentiality

During the master project, some data used can be confidential. If so, the host institution must send a written request to the SMA section to establish a confidentiality contract between the different parts. In this case, the master project report can be classified as “confidential” and be returned to the institution after evaluation of the project.