

**Master Thesis Project SIN & SSC
REGULATIONS**

(for the attention of the students, IC professors and
companies/universities hosting graduating students)

▶ GOAL OF THE MASTER THESIS PROJECT

The master thesis is a student project that implies analysis, conception and implementation work with the purpose of proving the student's ability to be an engineer. This project is to be done once the Master's credits have been acquired, according to the conditions stated in the Ordinance on the evaluation of the studies at EPFL.

When the master thesis is done in a company, the student works on a project given by the company itself. The person in charge of the company must ensure that the student is allowed to do sufficient analysis and conception work to allow the IC professor to evaluate the student's engineering ability.

The master thesis includes a written thesis and an oral defense which are both graded.

The master thesis project is to be done once the Master's credits have been acquired, according to the conditions stated in the Ordinance on the evaluation of the studies at EPFL. It is usually done during the fourth master semester. If the student does a 6-month internship (working experience outside of EPFL), the thesis is postponed.

The subject of the master thesis can be suggested by:

1. The EPFL
2. The student
3. A company
4. Another university (if the internship has already been done by the student)

The IC Professor supervisor has to approve the master thesis subject. The student is responsible for getting the approval and for his/her registration to the section.

▶ SUPERVISION

The master thesis must be supervised by an IC professor who will be in charge of the follow-up and the assessment of the project. A teacher affiliated to another section or a scientific collaborator can also supervise the project with the approval of the Section Director. A person will be responsible for the student's supervision within the company. This person will also be the contact person for the IC professor in charge.

▶ LENGTH OF THE PROJECT

For both sections, the duration of the master thesis is as follows:

EPFL: 4 months (17 weeks)

Company or foreign university: 6 months (25 weeks)

▶ STUDENTS' STATUS IN THE COMPANY

Although the student remains registered as such at the EPFL, when he/she does his/her master thesis in a company and is paid by the company, he/she is subject to the company's rules and regulations, i.e. salary, timetable, absence, confidentiality, etc.

The contractual tie between the student and the company does not link the EPFL and the company.

▶ ASSESSMENT

In order to evaluate the student's ability and the direction the project is taking, it is important for the IC professor to be involved in the progression of the project. The professor can ask the student to give an intermediary presentation. If no presentation is requested, the student is responsible for asking for it.

The IC professor is allowed to re-orient the work that is being done, in agreement with the company, in order to ensure that the project fulfills the Master thesis requirements that prove the student's ability to be an engineer.

The master thesis includes a written report. The student must plan the necessary time to write this report.

▶ REPORT

The student must write a report that contains the following items:

- The title
- The student's contact details (surname, first name, address)
- The name of the IC laboratory, the name of the company or the name of the other university in which the master thesis is being done
- The name of the responsible IC professor
- The results of the thesis (analysis, conception and implementation)

The report must be representative of the student's work in order to be able to judge the student's ability to be an engineer. The project will be archived within the sections and, in general, in the laboratory of the IC professor. The report must not contain any confidential information, except in exceptional cases.

▶ DEFENSE AND JURY

The defense of the Master thesis consists of the evaluation of its final presentation followed by an oral interrogation in front of the teacher who directed the thesis and **an external expert to the EPFL indicated by the teacher in agreement with the director of section**. These two people make the jury.

The jury will assess the student's written report as well as his/her presentation. If the report is not confidential, the presentation will not be confidential either. In the exceptional cases where the report is confidential, the company contact person will inform the IC professor at the beginning of the master thesis. A solution will be found between the IC professor and the company.

The jury will consider the following elements:

1. The undertaking of the project, i.e. the way the student defined his/her subject, how he/she analyzed the different stages, how he/she evaluated his/her work at regular intervals (particularly by communicating regularly with his/her professor) and how he/she managed unexpected incidents (changes in the subject, deadlines, etc)
2. The content of the academic part of the master thesis, i.e. analytical, formal and bibliographical approach to the subject
3. The quality of the written report (presentation of the report, clarity, precision, references, language)
4. The quality of the oral defense (quality of the slides, ability to synthesize, elocution, pertinence of the possible demonstrations)

▶ SUCCESS CONDITIONS

The master thesis project is considered as successful when the student has first of all handed in his/her master thesis report within the given deadline and has then obtained at the exam a grade of minimum 4.0.

▶ EXTENSION

If the written report is judged as being insufficient, the IC professor can request the student to make it up within the two weeks that follow the oral defense with the agreement of the section. The modifications must be done on the form and not the contents.

▶ WITHDRAWAL

A master thesis can not be abandoned during the project, except for exceptional reasons and with the approval of the IC professor and/or the company contact person. The section must be informed immediately.

A withdrawal is considered as a failure. In case of failure, a second master thesis project can be presented. A second failure is disqualifying.

Last update in 2019

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Annex 1

PROCEDURE

Supervision

The subject of the master thesis project is used to determine which IC professor will supervise the project.

Role of the IC professor

- He/she validates the subject of the master thesis project by signing either the “Master’s project – Registration form” that the student has completed together with the company or “Master thesis – EPFL” form.
- He/she ensures the smooth progression of the master thesis project whether it takes place in an IC laboratory, in a company or in another university.
- He/she organizes the follow-up and/or an intermediary presentation of the project.
- He/she evaluates the report of the master thesis project.
- He/she organizes the oral defense of the master thesis project by inviting an external expert. In general, the company contact person is the external expert.
- He/she gives a grade for the master thesis project.

Role of the student

- If the master thesis project is going to be done at EPFL, the student gets the approval of the IC professor who will follow him/her for the project and has the professor sign the “Master thesis – EPFL” form.
- If the master thesis project is going to be done in a company or another university, he/she fills in the “Master’s project – Validation of the Topic” form (1st page of the form) and submits it to the section for approval.
- The student must find an IC professor who will supervise the project. The IC professor will be chosen according to the subject of the project.
- The student fills in the “Master’s project – Registration form” (2nd page of the form) and has it sign by the IC professor and by the company / other university supervisor.
- The student returns this form to the SIN or SSC section.
- If the master thesis project is being done in a company or another university, the student must confirm his/her arrival in the company or university and the start of his/her master thesis project by sending an e-mail to the SIN or SSC section.
- Accordingly with the Professor, the student makes him once a month a report on the progress of the master thesis project.
- At the end of the master thesis project, the student must hand in to the SIN or SSC section 2 bound paper copies and 1 electronic copy of the master thesis project.
- The student must prepare an oral defense of his/her master thesis project.