

**REGULATIONS FOR THE CONTROL OF THE
STUDIES OF THE SECTION
OF MICROTECHNOLOGY
for the 2021-2022 academic year
May 26 2021**

*The management of the Swiss Federal Institute of
Technology Lausanne*

Having regard to the ordinance on education leading to the bachelor's and master's degrees of the EPFL of June 14, 2004,
Having regard to the ordinance on the control of studies leading to the bachelor's and master's degrees at EPFL of June 30, 2015,
having regard to the study plan of the microtechnology section

stop:

Art. 1 - Scope of application

The present regulation establishes the rules of application for the supervision of bachelor's and master's studies in the Microengineering Section for the academic year 2021-2022.

Art. 2 - Training stages

1 The bachelor's degree is composed of two successive stages of training:
- the one-year propaedeutic cycle, the successful completion of which results in 60 ECTS credits acquired at once, a condition for entry into the bachelor's cycle.
- the two-year Bachelor's program, which requires 120 credits to enter the Master's program.

2 The master's degree is composed of two successive stages of training:
- the Master's program, which lasts 3 semesters and requires the acquisition of 90 credits, a condition for completing the Master's project. This cycle may include a minor of 30 credits.
- the Master's project, lasting 17 weeks if carried out at EPFL or 25 weeks if carried out outside EPFL, the successful completion of which results in the acquisition of 30 credits.

Art. 3 - Examination sessions

1 Sessional courses are examined during the winter or summer sessions. They are mentioned in the study plan with the mention H or E.
2 Semester courses are taken in the fall or spring semester. They are indicated in the syllabus as sem A or sem P.

3 An annual branch, i.e., one that is titled on a single line in the study plan, is examined as a whole during the summer session (E).

4 For the sessional branches, the written or oral form of the examination indicated for the session may be supplemented by written or oral tests of knowledge during the semester, as indicated by the instructor.

Chapter 1: Preparatory Cycle

Art. 4 - Preliminary examination

1 The propaedeutic examination includes "Polytechnic" subjects with 38 coefficients and "Specific" subjects with 22 coefficients, distributed equally over two blocks.

2 The first block of branches corresponds to 40 coefficients and the second block of branches corresponds to 20 coefficients.

3 The propaedeutic examination is passed when:
- the student has obtained, at the end of the winter semester, a grade point average equal to or greater than 3.50 in the first block, which is a requirement for entry into the spring semester, and
- they have obtained, at the end of the summer session, an average of 4.00 or more in each of the two blocks, which is a condition for entry into the bachelor's program.

4 A student who fails the propaedeutic examination will not be allowed to repeat the following year the semester branches for which he/she has obtained a mark equal to or higher than 4,00.

Chapter 2: Bachelor's Degree

Art. 5 - Organization

The courses of the Bachelor cycle are divided into 6 blocks.

Art. 6 - 3^{ème} year prerequisite

Compulsory and elective courses may require prerequisites that are mentioned in the course description. The prerequisite course is validated if the corresponding credits have been acquired for the course or by block average.

Art. 7 - 2^{ème} year examination

1 Block 1 "Basic Sciences" is passed when the credits of the **20 credits** of the study plan are obtained.

2 Block 2 "Microtechnical Sciences" is passed when the **credits36** of the study plan are obtained.

Art. 8 - 3^{ème} year examination

1 Block 3 "Systems and Control" is passed when the **credits21** of the study plan are obtained.

2 Block 4 "Electronics and Photonics" is passed when the **credits17** of the study plan are obtained.

5 Block 5 "Products and Production" is passed when the **credits18** of the study plan are obtained.

Art. 9 - 2^{ème} and 3^{ème} year examination

Block 6 "SHS and Cross-Curricular MGT" is passed when the **8 credits** of the study plan are obtained.

Art. 10 - Machining course

1 To obtain the bachelor's degree, the student must have completed a machining internship validated by the section.

2 Internship guidelines are subject to internal sectional provisions.

Chapter 3: Master Cycle

Art. 11 - Organization

1 The master's degree courses are divided into :
- Block 1
- Block 2
- Group 3 "Options"

2 The student chooses a set of courses for a minimum of 15 credits from the courses offered in the block

3 The student completes his or her training with a set of optional subjects according to the study plan for a minimum of 49 credits. In addition, they may choose to complete one of the proposed minors (see Art. 12).

4 Microtechnology projects I and II are carried out during the 2nd and 3rd master semesters, at the rate of one project per semester. When the student chooses to

do a minor including a semester project, it replaces the microtechnical project II. Unless the section agrees otherwise, the projects may not be carried out under the direction of the same teacher. Registration for projects I and II is governed by guidelines specific to the Microtechnology Section.

5 The choice of an option not explicitly listed in the recommended options must have the prior written approval of the study advisor.

Art. 12 - Minors

1 In order to deepen a particular aspect of his or her training or to develop an interface with other sections of EPFL, the student may choose to follow the training offered in the framework of a minor included in the EPFL offer.

2 The student announces the choice of minor to his or her section when registering for the first semester of master's studies.

3 The minor is included in the "Options" group.

4 The set of courses forming the minor is completed by branches listed in the "Options" list to reach a minimum of 49 credits, including the 30 credits of the minor.

5 The choice of courses that make up the minor is made with the microtechnology section and with the person in charge of the minor. The "Microtechnology" minor cannot be chosen.

6 A minor is successful when a minimum of 30 credits are earned from the endorsed branches.

7 If the minor is dropped during the course, the Microengineering section determines the number of validated credits to be transferred to the "Options" group.

Art. 13 - Examination of the master cycle

1 Block 1 is passed when the **26 credits** of the study plan are obtained.

2 Block 2 is passed when all **15 credits** are obtained.

4 Group 3 "Options" is passed when all **49 credits** are obtained.

Art. 14 - SHS Education

The two SHS branches are each worth 3 credits. The fall semester course introduces the spring semester project. The College of Humanities and Social Sciences may depart from this organization if it considers that the reason is justified. It may also authorize a student to carry out his or her project in a semester that does not immediately follow the semester in which the introductory teaching takes place.

Chapter 4: Internship and master project

Art. 15 - Engineering internship

1 During their Master's degree, students must complete an engineering internship lasting a minimum of 8 weeks and a maximum of 6 months. However, the completion of a 25-week master's project in a company exempts students from this obligation.

2 As a general rule, the internship is carried out at the earliest after two semesters of the master's cycle but before the master's project. At the student's request, the section may authorize the student to complete the internship before the firstst semester of the master's cycle.

3 The section's internship supervisor evaluates the internship with a "successful" or "unsuccessful" assessment. Successful completion is a condition for admission to the Master project. If the internship is not successful, it can be repeated once, usually in another company.

4 It is validated with the 30 credits of the master project.

5 The organization of the internship and the criteria for its validation are the subject of an internal directive of the section.

Chapter 5: Mobility

Art. 16 - Authorized periods of mobility

The students of the microtechnology section can carry out a mobility stay in the 3rd year of their bachelor's degree and/or as part of the master's project.

Art. 17 - Conditions

1 For a mobility in the 3rd year of the Bachelor program, the student must have passed the propaedeutic exam with a minimum average of 4,5 and not be behind

in the acquisition of the 60 credits of the 2nd year of the Bachelor program.

2 For a mobility to the master project, the student can be conditionally admitted if he/she has no more than 8 missing credits in the master cycle.

3 Specific conditions exist depending on the destination, the agreement of the mobility delegate is necessary to go on a mobility stay.

On behalf of the EPFL management

The President, M. Vetterli
Vice President for Education, J. S. Hesthaven

Lausanne, May 26, 2021