

**REGULATIONS FOR THE CONTROL OF THE STUDIES OF THE SECTION OF COMPUTER SCIENCE 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 Computer Science section

*stop:*

### **Article 1 - Scope of Application**

The present regulation establishes the rules of application for the control of bachelor and master studies of the Computer Science section which refer to 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 propaedeutic cycle is common with the Communication Systems section.
  - the two-year Bachelor's program, which requires 120 credits to enter the Master's program.
- 2 The master's degree at EPFL 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 the master's project.
  - the Master's project, lasting 17 weeks at EPFL or 25 weeks outside EPFL (industry or other university), and which, if successfully completed, will result in the acquisition of 30 credits. It is placed under the responsibility of a professor or MER affiliated with the Computer Science or Communication Systems section.

### **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 31 coefficients and "Specific" subjects with 29 coefficients, distributed equally over two blocks.
- 2 The first block of branches corresponds to 38 coefficients and the second block of branches corresponds to 22 coefficients.
- 3 The propaedeutic examination is passed when:
  - the student has obtained, at the end of the winter semester, an average of 3.50 or more in the first block, which is a requirement for entry into the spring semester, and
  - that, at the end of the summer session, he/she has obtained an average of 4.00 or more in each of the two blocks, 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 grade equal to or higher than 4.00.

## **Chapter 2: Bachelor's Degree**

### **Art. 5 - Organization**

- 1 The Bachelor's courses are divided into five blocks, the "project" group, the "options" group and the SHS transversal block.
- 2 The "options" group consists of all the elective subjects listed in the Grade 2<sup>ème</sup> and Grade 3<sup>ème</sup> curriculum. 28 credits must be earned individually in the "options" group, including 5 credits in the 2-year options. The credits taken in addition to the 5 required 2-year credits can be validated as 3-year elective credits.

3 In the third year, courses counting for a maximum of 10 credits in total may be chosen from outside the list in the study plan. Courses taken outside of this list must be approved in advance by the section director.

4 The student remains subject to the study plan of the Bachelor's program in effect at the time of entry into the second year.

#### **Art. 6 - 2<sup>ème</sup> year examination**

1 The **14 credits** of the study plan are obtained when block A is passed.

2 The **17 credits** of the study plan are obtained when Block B is passed.

3 The **20 credits** of the study plan are obtained when block C is passed.

4 The **5 credits of the 2<sup>nd</sup> year of the "options" group** are acquired independently, by individual success in each branch.

#### **Art. 7 - 3<sup>rd</sup> year examination**

1 The **credits 17** of the study plan are obtained when block D is passed.

2 The **credits 8** of the study plan are obtained when block E is passed.

3 The **8 credits** of the "project" group are earned independently, by individual success in the project.

4 The **23 credits of the 3<sup>rd</sup> year of the "options" group** are acquired independently, by individual success in each branch.

#### **Art. 8 - 2<sup>ème</sup> and 3<sup>ème</sup> year examination**

The "SHS and MGT transversal" block is passed when the **8 credits** of the study plan are obtained.

### **Chapter 3: Master Cycle**

#### **Art. 9 - Admission requirements**

1. Students with a Bachelor's degree in Computer Science and Communication Systems are automatically admitted.

2. Students from the Bachelor in Communication Systems who have not taken the prerequisite courses during their Bachelor's cycle must take them in parallel with their Master's cycle.

3. For other students, admission is by application.

#### **Art. 10 - Organization**

1 The courses in the Master's program are divided into a "Projects + SHS" block and two groups whose credits must be obtained independently. They can lead to a specialization or a minor.

2 The "Projects + SHS" block is composed of a 12-credit project and SHS teaching.

3 Group 1 "Core courses" is composed of the courses listed in the study plan under "Master".

4 Group 2 "Options" is composed of  
- courses from the list of group 2 "options" in the study plan under the heading "Master";  
- Supernumerary credits earned in Group 1 "Core courses";  
- an optional project of 8 credits as per paragraph 5;  
- of courses outside the study plan according to paragraph 6 ;  
- courses related to a specialization or a minor according to art.13,

5 The project of the "Projects and SHS" block and the optional project of group 2 "Options" cannot be done in the same semester.

6 Courses, counting for a maximum of 15 credits in total, may be chosen outside the list of courses on the syllabus in the "Master's" section. The choice of these courses must be accepted in advance by the section director who may increase the maximum of 15 credits if the request is justified.

#### **Art. 11 - Examination of the master cycle**

1 The "Projects and SHS" block is passed when **18 credits** are obtained.

2 The "Core courses and Options" group, consisting of Group 1 "Core courses" and Group 2 "Options" is passed when **credits 72** are obtained.

3 Group 1 "Core courses" is passed when **at least 30 credits** are earned.

#### **Art. 12 - 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.

#### **Art. 13 - Minors and specializations**

1 In order to deepen a particular aspect of his training or to develop interfaces with other sections, the student can choose the training offered in the framework of a minor included in the EPFL offer or a specialization of the Computer Science section.

2 The choice of courses that make up a minor is made with the computer science section and the minor's chair. The minors "Data Science", "Cyber security", "Computer science" and "Communication systems" cannot be chosen.

3 The choice of courses that make up a specialization is submitted to the computer science section for consultation.

4 The student announces the choice of a minor to his or her section no later than the end of the first semester of master's studies.

5 The student who chooses a specialization from the list in the study plan registers at the latest at the beginning of the third semester of the Master's studies.

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

### **Chapter 4: Internship and master project**

#### **Art. 14 - Engineering internship**

1 Students beginning their master's degree must complete an engineering internship during their master's degree:

- or a summer internship of minimum 8 weeks
- or a 6-month internship in a company (in internship status for one semester). During the COVID-19 period, the length of the internship can be adapted.
- or a 25-week Master's Project in a company (validates the internship and the Master's Project)

2 As a general rule, for Bachelor IC students, the internship can be done as early as the 2nd<sup>ème</sup> semester of the Master cycle, but before the Master project. On

request, the section can authorize the student to do the internship before or during the first<sup>er</sup> semester of the Master cycle.

3 Students may not take a course/project in conjunction with their internship.

4 The person in charge of the internship of the section evaluates the internship, by the appreciation "successful" or "not successful". Successful completion of the internship will be a condition for admission to the Master's project. If the internship is not successful, it may be repeated once, usually in another company.

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

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

### **Chapter 5: Teaching Specialization**

#### **Art. 15 - Specialization Teaching**

1. Students in the Computer Science Master's program have the opportunity to specialize in computer science for teaching.

2. A student admitted to this specialization may not take a major or minor. The study plan is modified as follows: (i) A new group of 30 ECTS of courses at HEP Vaud is added and the number of ECTS of the Master Cycle is reduced from 60 to 30 ECTS; (ii) the SHS courses are replaced by a course at HEP Vaud; (iii) the Master Project can be spread over two semesters and start after the student has completed the "Projects and SHS" block and the "Core courses" group; (iv) the maximum duration of the studies can not exceed 8 semesters

3. At least 50 ECTS must be obtained to start the specialization.

#### **Art. 16 - Admission procedure**

1. Admission to this specialization is not automatic. To be admitted to the specialization, the candidate must be enrolled in the Master in Computer Science of the EPFL and meet the conditions for admission to the Teaching Diploma for Secondary Level II set by the Regulations for the application of the law on the HEP of June 3, 2009 (RLHEP).

2. The student registers with the HEP Vaud according to the conditions and deadlines of the online application

and sends the documents required by the RLHEP as well as a certificate of registration at the EPFL.

## **Chapter 6: Mobility**

### **Art. 17 - Authorized periods of mobility**

Students of the Computer Science section can carry out a mobility stay during their bachelor year<sup>3<sup>ème</sup></sup> and/or within the framework of their master project.

### **Art. 18 - 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 must have passed 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  
Academic Vice President, J. S. Hesthaven

Lausanne, May 26, 2021