

**REGULATIONS FOR THE APPLICATION OF
THE STUDY CONTROL OF THE
COMMUNICATION SYSTEMS SECTION FOR
THE MASTER IN DATA SCIENCE for the academic
year 2021-2022
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 Communication Systems section for the Master in Data Science.

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Article 1 - Scope of Application

This regulation establishes the rules of application for the control of the master's studies of the section of communication systems for the master's degree in Data Science that refer to the academic year 2021-2022.

Art. 2 - Training stages

The Master in Data Science 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), which results in the acquisition of 30 credits. It is placed under the responsibility of a professor or MER affiliated with the Communication Systems or Computer Science section.

Art 3 - Examination sessions

1. The examination subjects are examined in writing or orally 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.

Art. 3 - Prerequisites

Some 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. 4 - Admission requirements

1. Students with a Bachelor's degree in Computer Science or Communication Systems are automatically admitted.
2. Students from the Bachelor's degree in Computer Science or Communication Systems who have not taken the prerequisite courses during their Bachelor's degree must take them in parallel with their Master's degree.
3. For other students, admission is by application.

Art. 5 - Organization

1. The courses of the master cycle are divided into two groups and a block whose credits must be obtained independently.
2. The "Projects and SHS" block consists of a 12-credit project and SHS instruction.
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;
 - of courses outside the study plan according to paragraph 6.
5. The Project and SHS block project and the Group 2 elective project cannot be completed in the same semester.
6. Courses, counting for a maximum of 15 credits in total, may be chosen outside the list of courses in the study plan under the heading "Master's". 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. 6 - Examination of the master cycle

1. The "Projects and SHS" block is passed when **18 credits** are earned.
2. The "Core courses and Options" group, consisting of Group 1 "Core courses" and Group 2 "Options" is passed when **72 credits** are obtained.
3. Group 1 "Core courses" is passed when **at least 30 credits** are earned.

Art. 7 - 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. 8 - Minors

1. In order to deepen a particular aspect of his or her training or to develop interfaces with other sections, the student may choose the training offered in a minor included in the EPFL offer.
2. The choice of courses that make up a minor is made with the Communication Systems section and with the minor's chair. The minors "Data Science" "Computer Science" and "Communication Systems" cannot be chosen.
3. 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.
4. A minor is successful when a minimum of 30 credits are earned from the endorsed branches.

Art. 8 - 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 an internship of at least 6 months in a company (in internship status for one semester). During the COVID-19 period, the duration 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^{ème} 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^{er} 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 is a prerequisite for admission to the master project. If the internship is not successful, it can 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.

Art. 9 - Specialization Teaching

1. Students in the Data Science Master's program have the opportunity to pursue a specialization in computer science for teaching.
2. Students admitted to this specialization may not take a 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. 10 - 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 Data Science of the EPFL and meet the conditions for admission to the Teaching Diploma for Secondary Level II set by the Regulation 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.

On behalf of the EPFL management

The President, M. Vetterli
Academic Vice President, J. S. Hesthaven

Lausanne, May 26, 2021