

Research Project – Guidelines

The study plans of the Bachelor's and Master's programs in Computer Science and Communication Systems and the Master's programs in Data Science and Cyber Security include the following research projects:

- **Project I (Bachelor's level)**¹: to be selected between a mandatory research project or the course "COM-304 Communications project" (only for Communication Systems students). The project can be carried out during the 5th or 6th semester, depending on the student's choice, and is worth 8 ECTS² credits.
- **Project II (Master's level)**: the project must be carried out during MA1, MA2, MA3 or MA4, depending on the student's choice, and is worth 12 ECTS². Note that students in the Cyber Security Master's program must conduct their project in the field of cyber security.

A project may be done in pairs: two students per project. This option is either offered by the labs or can be requested by the students.

Bachelor's students in Computer Science who started their Bachelor's cycle after fall 2022 can choose to do an optional research project, worth 8 ECTS.

Master's students in Computer Science, Communication Systems, Data Science, and Cyber Security can choose to complete an additional research project, called an optional project, worth 8 ECTS².

The mandatory research project and the optional research project cannot be done in parallel in the same semester.

According to EPFL rules, ECTS credited research projects cannot be remunerated.

The Computer Science and Communication Systems sections solicit projects from the labs in April for the fall semester (5th semester, MA1 and MA3) and in October for the spring semester (6th semester, MA2 and MA4). Students are then notified by email that the list of projects on the lab websites is up to date and that they can proceed with selecting a project. They will also receive all relevant registration information.

Procedure and duration of research projects

- > Computer Science, Communication Systems, Data Science and Cyber Security
- Project I (Bachelor level)¹ can be done during the 5th or 6th semester, but must begin no
 later than the beginning of the last semester of the Bachelor 's Cycle. The working hours are
 determined together with the project supervisor(s).

School of Computer and Communication Sciences

¹ Computer Science Bachelor students who began their studies before the fall 2022 semester and Communication Systems Bachelor students who began their studies before the fall 2023 semester must still complete a mandatory research project in their 5th or 6th semester.

² One ECTS credit corresponds to approximately 30 hours of work, including homework and preparation for exams or presentations.



Section of Computer Science Section of Communication Systems

• **Project II (Master's level)** can be carried out during MA1, MA2, MA3 or MA4, but must start no later than the beginning of the last semester of the Master's Cycle. The working hours will be determined together with the project supervisor(s). Students in the Cyber Security Master's program may choose to conduct their research project during their mandatory semester at ETHZ. In this case, the project must be supervised by a professor on the <u>ETHZ cyber security</u> faculty list.

The duration of the research project is 14 weeks. The student must begin the project on the official start date of the beginning of the semester, according to the academic calendar. No exceptions will be granted without the approval of the section.

The student must submit a written report to the lab by the official deadlines listed on the following web pages: <u>Bachelor</u> // <u>Master</u>.

The project supervisor provides information about the format and the content of the report. General guidelines for the report can be found <u>here</u>.

The submission of the report is followed by an oral defence organised by the lab.

If the student does not meet the deadlines, it will be considered a failure (NA in the transcript).

Conditions for passing

> Computer Science, Communication Systems, Data Science and Cyber Security

Project II (Master's level) must be passed in order for the student to proceed with the Master's thesis. In case of failure, a second attempt in another lab is possible, provided that the maximum duration of the Master's cycle has not yet been reached.

A student who has chosen a project on a specific topic and abandons it cannot repeat the same project in the following semester.

Changing projects during the semester is the exception. The student must first send an email to the professor responsible for the project and the section explaining the reasons for the request. If the request is justified, the section will give its approval.

A research project may be abandoned during the semester for exceptional reasons and in agreement with the professor in charge and the section.

Abandonment of a project by the student after the exam withdrawal deadline will be considered a failure.

Finding a project

Students are advised to look for their project at the end of the previous semester by browsing through the lists of supervisors / labs **accredited** by the Computer Science or Communication Systems section:





- Computer Science IN
- <u>Communication Systems</u> SC
- Data Science DS
- Cyber Security Cyber

Note: If a student wants to do a project with a lab that is **not accredited** by the Computer Science or Communication Systems section, they must email the Bachelor programs: <u>Cecilia Bigler</u> (IN) or <u>Martine Emery</u> (SC) and for the Master's programs: <u>Antonella Veltro</u> (IN), <u>Jasmine Locatelli</u> (Cyber) or <u>Carole Dauphin</u> (SC/DS), the following information:

- Name of the lab
- Name of the professor responsible for the project
- Abstract (and project link if applicable)

After reviewing the request, the student will receive a reply via email.

Registration on IS-Academia

Once students have received approval from the lab supervisor, and/or the section (if applicable), they must register for the project on IS-Academia during the official course registration period.

Extension of the project

Exceptionally, an extension of time may be granted if unforeseen circumstances, illness, or problems arise during the semester beyond the student's control. In the case of illness, a medical certificate must be provided.

A two-week extension may be granted by the section at the request of the professor supervising the project, if justified by a valid reason.

*** Deadlines set by sections must be met ***

