WELCOME

Key Points for your Master's Studies
Cyber Security

Contents

Introduction

This quick guide contains information to help you successfully complete the EPFL-ETH Zürich joint Master's program in Computer Science - Cyber Security. Students are advised to review this document and refer to it throughout their studies to ensure they meet program requirements. For any questions, please reach out to the relevant administrative contacts listed at the end of this document.

1. Master's program structure

The Master's program in Computer Science – Cyber Security consists of two main components: the Master's cycle (90 ECTS), followed by a one-semester Master's project (30 ECTS), totalling 120 ECTS.
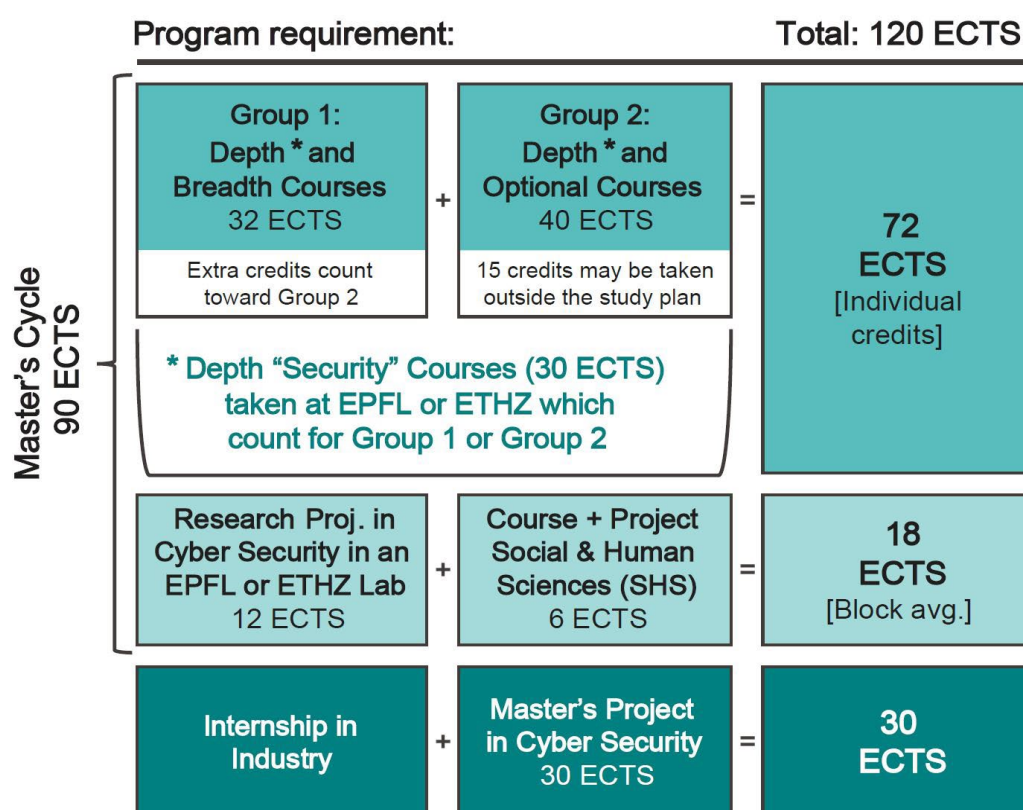
Important

- Students must complete **a mandatory exchange semester at ETH Zürich**, during which they must take a minimum of 20 ECTS and a maximum of 35 ECTS in depth, breadth, or optional courses to fulfill Group 1 and Group 2 requirements.
- The program includes a **mandatory internship in industry** of eight weeks during the summer, or six months during a semester. The internship may also be combined with the Master's project at the end of the Master's cycle.
- The program specializes in cyber security, with **NO minors or specializations** offered.

1.1 Duration

The maximum duration of the Master's cycle is six semesters, comprising 90 ECTS of courses and project work. However, students are encouraged to take an average of 30 ECTS per semester to complete the Master's cycle in three semesters, prior to beginning their Master's project (PDM).

Students must complete their first semester at EPFL. After that, one semester of their choice—counting toward the six-semester limit—must be completed at ETH Zürich.

If students wish to take a break for a semester for personal reasons during the Master's cycle, they can request to be placed "on leave". However, the six-semester limit for the Master's cycle will not be extended. For more information: go.epfl.ch/interruption-studies-master

1.2 Master's cycle (90 ECTS)

The 90 ECTS of courses and project work in the Master's cycle build foundational knowledge ("breadth"), develops specialized expertise in core security principles ("depth"), and offers flexibility through elective options. The coursework is organized into three categories: (i) depth and breadth courses, (ii) depth and optional courses, and (iii) a block consisting of a research project carried out in an EPFL lab (or at ETH Zürich during the mandatory exchange semester) and a course + project in the social and human sciences (SHS).

- **32 ECTS** must be chosen from **specialized security courses ("depth")** and related **areas of computer science ("breadth")** – *Group 1*.
- **40 ECTS** must be selected from a broad set of **specialized ("depth")** and **optional courses** – *Group 2*. Any additional credits earned in Group 1 count toward Group 2.
- **12 ECTS** must be completed through a mandatory **research project**. An optional second research project may be undertaken in an EPFL lab for an additional 8 ECTS, which will count toward the 40 ECTS in Group 2.
- **6 ECTS** must be earned through a course focusing on transversal competencies in the social and human sciences, including a project component.

1.2.1 Depth requirement

A key requirement of the program is the completion of 30 ECTS in "depth" security courses, which must be taken at either EPFL or ETH Zürich. This requirement underscores the program's focus on core cyber security principles and ensures that students benefit from the combined expertise of both institutions.

Depth courses may count towards either Group 1 or Group 2 and are selected from those tagged "depth" in the EPFL cyber security study plan or the ETH Zürich course list.

Only one seminar and one lab may be counted toward the "depth" requirement across all EPFL and ETH Zürich courses.

1.2.2 SHS Course + Project

Students must earn 6 ECTS in transversal competencies in the social and human sciences (SHS). The SHS course is offered only in the Autumn semester and must be followed by a project in the subsequent Spring semester. The first semester (Autumn) introduces the chosen subject and is worth 3 ECTS. In the following semester (Spring), students carry out a project—individually or in groups—based on the themes explored during the course. This is not an IC School-specific rule; it is a requirement from the SHS program and applies to all Master's students at EPFL.

If students have difficulty finding an SHS course + project, particularly in English, they can contact the SHS administrative team: scienceshumaines@epfl.ch, for assistance.

Depending on their exchange semester plans, students may complete 3 or 6 ECTS of social and human sciences courses at ETH Zürich. Equivalent courses can be found in the ETH Zürich study catalog under the Science in Perspective (GUESS) program: www.vvz.ethz.ch

1.2.3 Courses outside the study plan

Students may earn a maximum of 15 ECTS outside of their study plan during their Master's studies, excluding bachelor-level courses (with a few exceptions). Among these 15 ECTS, the students may take doctoral (PhD) courses. For more information: go.epfl.ch/IC-courses-outside-study-plan

1.2.4 Research project

New external master's students are not required to complete the mandatory research project (12 ECTS) in their first semester. For international students, it is recommended that they first familiarize themselves with EPFL, the faculty and the labs. The research project can be carried out in either the Autumn or Spring semester during the Master's cycle but must be completed before the Master's project.

Students are encouraged to begin searching for a project at the end of the preceding semester. Project listings available on lab websites are often non-exhaustive; additional opportunities may be found by contacting labs of interest directly. Students are advised to meet with the supervising professor or assistant to define the project objectives and expected deliverables before enrolling in a research project.

The topic of the mandatory research project must be in the field of cyber security.

The research project must be carried out at EPFL or at ETH Zürich during the mandatory exchange semester. If the project is conducted at EPFL, it must be supervised by an EPFL cyber security authorized professor; if conducted at ETH Zürich, it must be supervised by an ETH Zürich cyber security authorized professor.

The duration of the research project is 14 weeks. Students carrying out the project at ETH Zürich must agree on this duration with their ETH Zürich supervisor at the beginning of their exchange semester.

Students may also undertake an optional 8-ECTS research project at EPFL, in collaboration with an IC-authorized lab. These credits count toward Group 2 – options. Unlike the mandatory project, the

optional research project is not limited to the field of cyber security. Please note that the optional research project is not available at ETH Zürich.

Students may not carry out a 12 ECTS mandatory research project and the 8 ECTS optional research project in the same semester.

Students will receive an email from the Section by the end of the preceding semester with the details about the registration procedure.

Full details about registration, authorized labs, and additional information can be found at: go.epfl.ch/IC-master-semester-projects

1.3 Internship / Master's project (PDM)

An internship in industry is mandatory and must be approved in advance by the Section. There are three possible types of internships:

- **Short internship in industry** (8 weeks)
  Takes place during the summer and only after the student has completed the exam session. The student must be back on campus in time to begin the Spring semester. For students on a Spring semester exchange at ETH Zürich, the internship must take place between the end of courses and before the August exam session.

- **Long internship in industry** (6 months)
  Carried out during a semester in which the academic clock for the Master's cycle is suspended. No courses may be taken in parallel.

- **Integrated internship with a Master's project in industry** (6 months > 26 weeks)
  A long internship that also fulfils the Master's project requirement, carried out in an industrial setting.

The Master's project (worth 30 ECTS), which may also be integrated with the internship in industry, is always carried out at the end of the Master's cycle. It must be in the field of cyber security and supervised by an EPFL cyber security authorized professor: go.epfl.ch/IC-projects-labs-Cyber

The Master's project can also be carried out in an EPFL lab (duration: 18 weeks) or at another university (26 weeks, including ETH Zürich). In such cases, students must have completed and validated either a short or long validated internship in industry beforehand.

Students intending to pursue a PhD at EPFL or another institution are advised to carry out their Master's project ideally in lab at EPFL (duration: 18 weeks) or at another university (duration: 26 weeks), ideally in the field they wish to orient their doctoral studies. A short or long internship in industry must have been completed and validated beforehand.

Students should begin the internship search process 4-5 months in advance. An information session is held at the start of each semester, giving students time to prepare and plan accordingly.

International master's students must complete one full year before being able to undertake an internship. Earliest possible start date: **summer/autumn 2026.**

For more information:

- go.epfl.ch/IC-internships
- go.epfl.ch/IC-master-thesis

1.4 Course book and personal study plan

The EPFL study plan for the current academic year is available here: go.epfl.ch/MS-cybersecurity-courselist

Courses at ETH Zürich can be selected from this list: go.epfl.ch/cyber-ethz-study-plan. For full course details, the ETH Zürich course catalog is published here: www.vvz.ethz.ch.

Students are encouraged to establish their personal study plan at the beginning of the Master's program to help structure their studies and ensure that all program requirements are met. To support this process, a Learning Agreement template is available here.

2. Mandatory semester at ETH Zürich

Students enrolled at EPFL must begin the Master's programme in Lausanne. During the program, they are required to spend one semester at ETH Zürich, during which they must validate a minimum of 20 ECTS and a maximum of 35 ECTS of coursework.

Every semester, the Section defines an approved course list for the exchange semester: go.epfl.ch/cyber-ethz-study-plan

In addition to this list, all Master-level courses from the Department of Computer Science at ETH Zürich may count as optional courses (Group 2), but do not count toward the "depth" requirement. Equivalent courses can be taken either at EPFL or ETH Zürich, but credits cannot count for both.

Credits from language courses do not count toward the Master's degree.

All students are contacted by the Section in April (for the Autumn semester) and October (for the Spring semester) to register for the exchange semester. A Learning Agreement must be submitted to the Section for validation, and any changes communicated no later than the end of the second week of the semester, in line with the student's actual course registration at ETH Zürich.

During the exchange semester, students are subject to ETH Zürich regulations and deadlines. Important: Exam registration must be completed separately on the ETH Zürich's study platform.

A stipend is provided to Cyber Security Master's students to cover additional expenses in case of relocation for the exchange semester. For the Spring semester, the ETH International Students Office also offers pre-booked accommodation. For the Autumn

semester, no housing offer is provided. Additional logistical details and instructions will be communicated by the Section after enrolment in the exchange semester.

If a student fails to obtain the minimum required 20 ECTS during the exchange semester, they must make up the missing credits remotely in a subsequent semester, while remaining enrolled at EPFL with a 'Present' status in IS-Academia.

3. About Master's studies

3.1 Conditional admission to the Master's program

In their admission letter, students may have been assigned a number of additional credits that must be acquired during the first year of the Master's program. These credits must be prioritized, as admission to the Master's program is conditional upon acquisition of these credits. These credits do not count towards the Master's degree.

The final list of required courses will be determined upon receipt of the student's official Bachelor's transcripts, which must be submitted directly to the Office of the Registrar according to the instructions outlined in the admission letter.

Once the documents are reviewed, the Registrar will send the student the official decision titled *"Supplement to the decision regarding admission to the Master's program",* along with all relevant details. The procedure for registering for these courses will be communicated by the Registrar's Office once the student receives the official form.

3.2 Course types, registration and assessment rules at EPFL

EPFL courses fall into two main categories:

- **Courses examined during the semester**
  The final grade is based on continuous assessments such as quizzes, labs, projects, reports, presentations, posters, etc., conducted throughout the semester.

- **Courses examined in the exam session (Winter or Summer)**
  The final grade is based, at least in part, on a written or oral exam that takes place during the official exam session. For these courses, it is imperative to be present at EPFL during the exam session.

- **Course registration periods**
  - **Autumn semester**: From August until Friday of the second week of the semester
  - **Spring semester**: From January until Friday of the second week of the semester

- **Exam registration**
  At EPFL, exam registration is automatic, based on your course registration—regardless of whether the course is assessed during the semester or in the exam session. Important: If a student forgets

to withdraw and has submitted any coursework or assessments—whether during the semester or the exam session—they will receive a grade, which will appear on their transcript.

- **Course and exam withdrawal deadlines**
  Withdrawals must be made through your secure access to IS-Academia.

  - **Autumn semester**: From October until Friday of the 10th week of the semester
  - **Spring semester**: From March until Friday of the 10th week of the semester

  After these deadlines, withdrawal is no longer possible.

  Note: Some courses cannot be dropped after the registration deadline. These are marked "*sans retrait*" in the study plans and flagged with an alert in the registration tab in IS-Academia. Students registering for such courses are expected to fully commit to completing them.

- **Missed assessments – Justification required**
  Absences from any assessment—whether during the semester or during the exam session—must be justified with official documentation (e.g., medical certificate, birth or death certificate, or a training certificate for elite athletes).

  - **For continuous assessments during the semester (e.g., midterms, quizzes, homework)**:
    Students must notify the teacher as soon as possible and submit justification within three days. A substitute assessment may be offered at the teacher's discretion, but it is not guaranteed.

  - **For exams during the official exam session**: students must inform the teacher immediately and submit justification to Student Services within three days of the exam date, copying the teacher. Deferred exams are not available, even for justified absences.

  In both cases, the student will receive a grade of "M" and may re-register for the course and retake the missed assessment the following academic year. The grading scheme cannot be adjusted, and the missed assessment cannot be excluded from the final grade. Note: If the course evaluation method changes, the student must complete all assessments—not just the one originally missed.

- **Grading**
  The final grade for a course reflects the performance across all assessments (e.g., graded homework, exercises, quizzes, midterm exam, final exam, etc.). If a student completes only part of the assessments without providing an official justification (such as a medical certificate), they will receive a score of "0" for each missed component. The final grade will be calculated as the weighted average of all assessments.

  - If the final grade is below 1.00, the student receives an "NA" (Not Acquired).
  - A grade of NA does not count toward the GPA.

- **Course retake**
  - Students who fail a course (grade below 4.0) may retake the same course the following year.
  - The grade for the second attempt replaces the grade from the first attempt. If the course is not retaken, the failing grade remains on the transcript.

- Once a student has taken an exam or submitted an assessment, they cannot retroactively cancel the result by submitting a medical certificate or any other documentation. If unsure about their ability to complete an assessment—whether during the semester or during the exam session—students should consult a doctor in advance.

For more information:

- go.epfl.ch/registering-courses-exams
- go.epfl.ch/withdrawing_subjects_tests
- go.epfl.ch/master-pass-conditions

3.4 Exam sessions, academic calendar, special arrangements

- **Exam sessions**
  - January/February
  - June/July

- Academic calendar and important deadlines: go.epfl.ch/academic-calendar

- Special arrangements for students with disabilities (courses and/or exams): go.epfl.ch/arrangements-courses-exams

- Medical certificates: go.epfl.ch/medical_certificate

3.5 Conditional admission to the Master's project

Students may be conditionally admitted to the Master's project if they are missing no more than 8 ECTS from their Master's cycle, provided the following conditions are met:

- The student is not at the end of the maximum duration of the Master's cycle (i.e., 6 semesters of courses).
- The mandatory research project (12 ECTS) must be completed prior to starting the Master's project
- If the Master's project is not carried out at EPFL or near Lausanne, the possibility of taking a course remotely in parallel must be discussed with the Section beforehand.

3.6 Leave of absence after the Master's cycle and before the Master's project

Students may request a one-semester leave of absence, which may be extended by an additional semester, after completing the Master's cycle, provided they have not exceeded the maximum duration of six semesters for the Master's cycle. The deadline for the Master's project will be adjusted accordingly. However, leave is not permitted during the Master's project or between project attempts.

3.7 Master's degree and graduation

Upon completion of the Master's program in Cyber Security at EPFL, graduates are awarded a Master of Science (MSc) in Computer Science – Cyber Security, jointly delivered by EPFL and ETH Zürich.

The final official transcripts confirm program completion and serve as a provisional diploma until the official diploma is awarded at the graduation ceremony, held on the first Saturday of October.

The GPA is calculated as the weighted average of all subjects for which a grade between 1 and 6 has been attributed.

Graduates also receive a Diploma Supplement, which outlines the courses completed and the skills acquired throughout the program.

3.8 Other useful links

- go.epfl.ch/IC-FAQ-Cyber
- go.epfl.ch/SAC-rules-and-procedures

IC Student Association - CLIC

Don't hesitate to join the **Telegram channel for IC students**, run by our student association **CLIC** to meet other IC students and exchange about courses, life on campus, or any other topics.

https://go.epfl.ch/ic-ma

4. Contacts

The Administrative Specialist of your Master's program is your first point of contact for all queries about your study plan, courses and program rules.

Jasmine Locatelli
jasmine.locatelli@epfl.ch

Office hours – INN 112
Morning: Monday, Tuesday, Thursday: 10:00 > 12:00
Afternoon: Monday, Thursday: 14:00 > 16:00

- **Deputy Head, Bachelor's and Master's programs**
  Eileen Hazboun

- **Internships and Master's Project Coordinator**
  Patricia Genet

- **Program Director, Computer Science & Cyber Security**
  Prof. Mathias Payer

EPFL Student Services

The Student Services desk is the contact point for general queries about matriculation, campus services, official documents, special arrangements and social consultation.

From Monday to Friday

- **In-person**
  09:00 > 17:00
  Building BP 1229

- **Phone**
  Morning: 09:00 > 12:00
  Afternoon: 13:30 > 17:00
  +41 (0)21 693 4345

  student.services@epfl.ch