Ecole Polytechnique Fédérale de Lausanne

EPFL

School of Computer and Communication Sciences IC
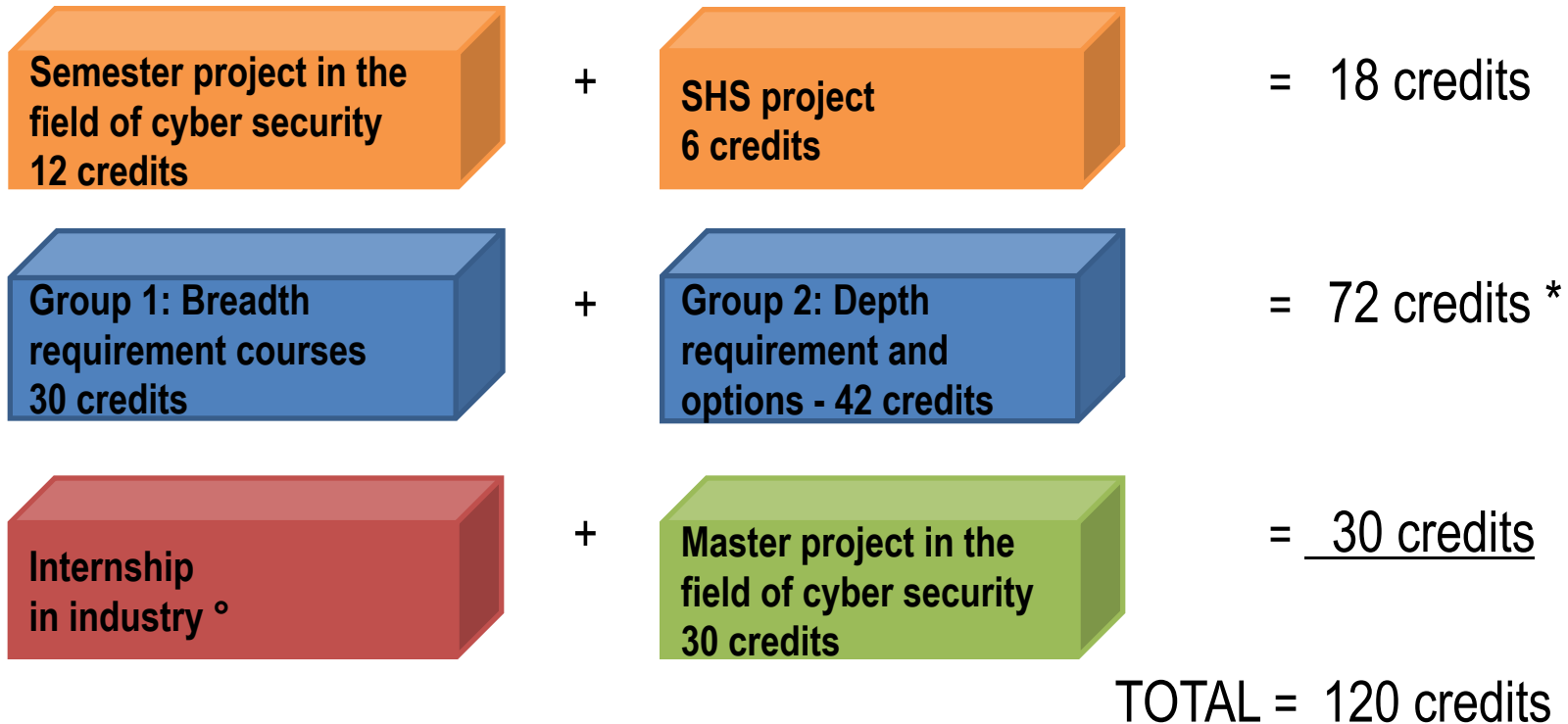
WELCOME
to the new
Master program
in
Computer Science - Cyber Security (IN-CS)
A joint-degree program
In collaboration with ETH Zürich

AGENDA

- Program structure

- Switching program

- Study plan

- Registration to courses and exams

- Mobility semester in Zürich

- Mandatory Internship

- Master Project

- Contacts

- Questions

PROGRAM STRUCTURE

COURSES, PROJECTS, AND INTERNSHIPS

| Semester project in the field of cyber security 12 credits | + | SHS project 6 credits | = 18 credits |

| Group 1: Breadth requirement courses 30 credits | + | Group 2: Depth requirement and options - 42 credits | = 72 credits * |

| Internship in industry ° | + | Master project in the field of cyber security 30 credits | = 30 credits |

TOTAL = 120 credits

* The condition «depth requirement» is completed when 30 credits of courses named «depth requirement» in the course list are obtained.

° Can be part of a Master project in the industry

MASTER IN CYBER SECURITY

WHAT IS MANDATORY ?

EPFL	The first semester in Lausanne
ETHZ	One semester in Zürich Minimum 20 credits Maximum 35 credits List of courses given by Mr Jean-Luc Benz

LENGTH OF THE MASTER PROGRAM

Maximum length of the Master program (120 credits)

➢ Maximum duration for the Master cycle (before the Master project):
6 semesters to get 90 credits

➢ Maximum duration for the Master program (including the Master project):
8 semesters

➢ The internship is not counted in the duration

SWITCHING PROGRAM

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In order to switch program

1- Advise of your interest in switching program by Tuesday, February 26th 2019 (please inform Ms Khadidja Zrelli khadidja.zrelli@epfl.ch)

2- A form will be sent to you by email. Final enrolment will be done by return of the form duly completed by Wednesday, July 31st 2019 latest

STUDY PLAN

COURSES TO BE TAKEN DURING THE SPRING 2019 SEMESTER

Priority should be given to courses that are marked by the «Depth Requirement» star, as well as those related to «security». We therefore recommend the following courses :

Depth requirement :
- COM-402 Information security and privacy, Prof. Hubaux, Oechslin & Troncoso
- COM-501 Advanced cryptography, Prof. Vaudenay
- CS-412 Software security, Prof. Payer

Security oriented :
- MATH-409 Algebraic curves in cryptography, Prof. Jetchev
- EE-552 Media security, Prof. Ebrahimi
- COM-506 Student seminar : security protocols and applications, Prof. Oechslin & Vaudenay

SEMESTER PROJECT

In addition, we suggest that you conduct your mandatory semester project in the field of security
(E.g., Ford, Troncoso, Payer, Hubaux, Vaudenay, Lenstra, Guerraoui,…)

CYBER SECURITY STUDY PLAN

➢ Please follow this link : **https://sac.epfl.ch/study-plans-regulations**

➢ And click on <u>Study plan Computer Science-Cybersecurity 19-20 (work in progress)</u>

➢ For the ETHZ courses, please contact Mr Jean-Luc Benz **jean-luc.benz@epfl.ch**

COURSES OUTSIDE THE STUDY PLAN

- 15 credits maximum are allowed for the whole Master program. Out of these 15 credits, 12 credits maximum of "non-technical" courses (HEC, MTE) are allowed.

- However, please note that you cannot register for courses <u>with limited attendance</u>, as they are not available for students who do not have these courses in their study plan (i.e. many MTE courses).

- Authorization must be requested to take these courses <u>BEFORE</u> registering for the courses in IS-Academia.

- Send <u>request</u> by e-mail to the section

CHOICE OF COURSES

Please submit your course choice to Ms Sylviane Dal Mas- office INN 130- **during the office hours** as from **Tuesday, February 26th 2019**.

REGISTRATION TO COURSES AND EXAMS

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- **Deadline** for registration to courses and exams**: Friday, March 1st 2019.**

- Registration for courses and projects is **<u>MANDATORY</u>** in order to be able to take the exams.

- **Latest withdrawal from exams** (for all forms of examination – oral, written and continuous control): **<u>Friday, May 3rd 2019</u>**, except for:

    ➢EE-593   Social Media (for IN-SC students),
    ➢ENG-466 Distributed intelligent systems (for IN-SC-DS students),
    ➢EE-490h Lab in Data science (for DS students),

    which have «unauthorized withdrawal» after Friday, March 1st 2019

ACADEMIC CALENDAR

Important deadlines and information are available on :

https://memento.epfl.ch/academic-calendar/

MOBILITY SEMESTER IN ZURICH

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➢ A mobility semester is required in Autumn 2019 or in Spring 2020

MOBILITY SCHOLARSHIP

➢ Students will receive an allowance of CHF 2'500.– for their mobility semester (CHF 500.– per month)

HOUSING IN ZURICH

➢ ETHZ has reserved some housing for this purpose starting Spring 2020

➢ Students will have to pay a rent

MANDATORY INTERNSHIP

MANDATORY INTERNSHIP

You can do your mandatory internship in one of the following forms:

- Short internship (min. 8 weeks during summer)
- Long internship (6 months) – "sabbatical leave"
- Integrated in the Master project in industry (6 months)

MASTER PROJECT

MASTER PROJECT

In the field of Cyber security

- Options
  - ➢ Within the EPFL – 4 months
  - ➢ Out of EPFL – 6 months

- 4 possibilities
  - ➢ At EPFL, proposals from labs.
  - ➢ At EPFL, your own proposal to a Professor.
  - ➢ In industry
  - ➢ In other Universities

CONTACTS

Computer Science – Cybersecurity (IN-CS)

- *Head of the Program:*   Prof. Mark Pauly

- *Study Advisor*:   Prof. Martin Odersky

- *Deputy Head, BS/MS Programs*: Ms Sylviane Dal Mas

- *Mobility coordinator*:   Mr Jean-Luc Benz

- *Master Program assistant IN-CS:* Ms Khadidja Zrelli

- *Internship Program assistant*:   Ms Patricia Galhardo

ANY QUESTION?

Thank you for your attention

Author:
School of Computer and Communication Sciences IC
Computer Science and Communication Systems programs