

Welcome Day 14.09.2018 – Information session to the new Master students

WELCOME
to the
Master programs
in
Computer Science (IN),
Communication Systems (SC)
and Data Science (DS)

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TODAY'S SPEAKERS

- **Prof. Pascal Fua:** Former Director of the Computer science program
- **Ms Marguerite Delcourt (SC & DS), Mr Christian Mouchet (IN) and Mr Mladen Dimovski (IN):** Initial study advisors
- **Mr R. Grolimund:** Information specialist at EPFL library



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3

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AGENDA

- CURRICULUM
 - Overview
 - Specializations and Minors
 - Courses outside the study plan
 - Registration to courses and exams
- PROJECTS
- PDM - MASTER PROJECT
- MANDATORY INTERNSHIP
- CONTACTS



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WHO WE ARE

- 45+ Faculty
- International composition
- Core + interdisciplinary science
 - Collaborations with Life Sciences, Mathematics, Microengineering, Electrical Engineering, etc.



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5

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IC RESEARCH AREAS

- Algorithms & Theoretical Computer Science
- Artificial Intelligence & Machine Learning
- Computational Biology
- Computer Architecture & Integrated Systems
- Data Management & Information Retrieval
- Graphics & Vision
- Human-Computer Interaction
- Information & Communication Theory
- Networking
- Programming Languages & Formal Methods
- Security & Cryptography
- Signal & Image Processing
- Systems



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6

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CURRICULUM



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7

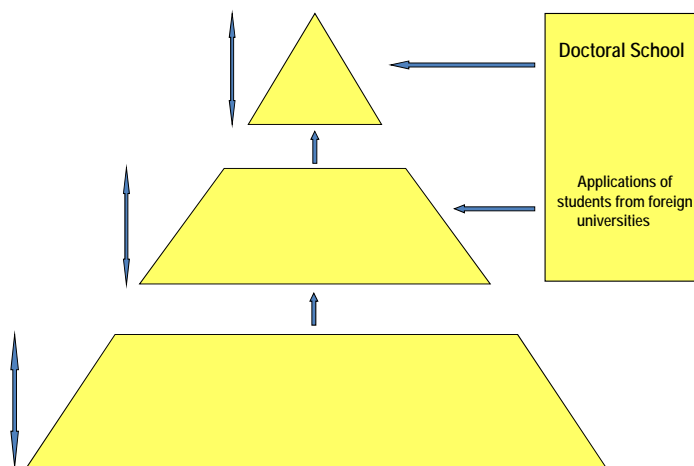
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BACHELOR / MASTER / PHD

PhD
3/4 years

MASTER
2 years /120 ECTS

BACHELOR
3 years/180 ECTS



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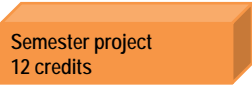


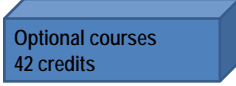


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8

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COURSES, PROJECTS, AND INTERNSHIPS

 <p>Semester project 12 credits</p>	+	 <p>SHS project 6 credits</p>	=	18 credits
 <p>Core courses 30 credits</p>	+	 <p>Optional courses 42 credits</p>	=	72 credits
 <p>Internship in industry*</p>	+	 <p>Master project 30 credits</p>	=	<u>30 credits</u>
TOTAL				= 120 credits

* Can be part of a Master project in the industry

IN & SC: specialization or minor possible (30 credits included in the 72 credits of courses)



DS: minor possible, no specialization available (30 credits included in the 72 credits of courses)

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CHOICE AND LENGTH OF THE MASTER PROGRAM

- Enrollment to the Master program
 - You have been admitted to a specific Master program, and you have enrolled in it. Therefore you cannot decide to change for another program at the beginning of the Master or after one semester (i.e. IN -> DS or SC -> DS).
- 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.

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IN & SC SPECIALIZATIONS

- A. COMPUTER ENGINEERING - Prof. P. lenne
- B. DATA ANALYTICS - Prof. M. Grossglauser & Prof. P. Thiran
- C. FOUNDATIONS OF SOFTWARE - Prof. M. Odersky
- D. CYBER SECURITY-SP - Prof. C. Troncoso
- E. NETWORKING AND MOBILITY - Prof. J.-Y. Le Boudec
- F. SIGNALS, IMAGES, AND INTERFACES - Prof. M. Vetterli
- G. SOFTWARE SYSTEMS - Prof. G. Candea
- H. WIRELESS COMMUNICATIONS - Prof. E. Telatar
- I. COMPUTER SCIENCE THEORY - Prof. N. Vishnoi
- J. INTERNET INFORMATION SYSTEMS - Prof. B. Faltings & Prof. K. Aberer



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MINORS FOR IN, SC, and DS STUDENTS

Recommended minors :

- **Biocomputing** (offered by the Computer Science Program)
- **Biomedical Technologies** (offered by the Microengineering Program)
- **Computational Science & Engineering** (offered by the Mathematics Program)
- **Spacial Technologies** (offered by the Electrical Engineering Program)
- **Technology Management and Entrepreneurship** (offered by the Management of Technology Program)



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MINORS

- It is possible to prepare other minor degrees, see :
http://sac.epfl.ch/study_plans (under «Minors with specific courses»).
- For a minor not listed, the student must contact Ms Sylviane Dal Mas, Deputy Head, and also ask for the approval of the Minor program's Director.
- Some minors, like *Technology Management and Entrepreneurship*, have courses limited to their own students => Take this element into account when deciding to register for a minor.
- In this case, once they have enrolled to it, students are authorized to register for courses of the minor only on the 1st day of the semester, provided that there are still enough places available for those courses.



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RULES AND REGISTRATION PROCEDURE FOR SPECIALIZATIONS AND MINORS

- For IN: <http://ic.epfl.ch/page-97562-en.html>
- For SC: <https://ic.epfl.ch/communication-systems-minors>
- For DS: <https://ic.epfl.ch/data-science-minors>

Please do not register to a specialization or a minor now!

Registration deadline:

- For Minors: **end of the 1st semester of Master studies**
- For Specializations: **beginning of the 3rd semester of Master studies**



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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 with limited attendance, 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 BEFORE registering for the courses in IS-Academia.

Request to be sent by e-mail to:

IN students => **Antonella Veltro**
 SC & DS students => **Carole Dauphin**



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BACHELOR COURSES

- Bachelor courses cannot be taken during the Master program.

Exceptions

- Can be taken if they are a missing prerequisite for a Master course but **no** credits towards the Master will be given.
- For IN students, the course **Signal Processing for Communications** can also be taken, but the credits will be counted for the Master only if the student registers for the Signals, Images and Interfaces specialization.



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DOCTORAL SCHOOL COURSES

- Courses from the IC Doctoral School (EDIC) can be taken during the Master program.
- The list of the Doctoral School courses and their prerequisites can be found on <http://phd.epfl.ch/edic/courseoffering> for IN, SC & DS.
- Make sure that you have the prerequisites for the courses you plan to attend.



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INTERNATIONAL BACHELOR STUDENTS' STUDY PLAN

Before registering for courses in IS-Academia, please submit your choice of courses by e-mail to Ms Sylviane Dal Mas: sylviane.dalmas@epfl.ch

Don't forget to mention **your Section** :
Computer science, Communication systems,
or Data science !!!

Deadline: 24th September 2018



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REGISTRATION TO COURSES AND EXAMS

- Deadline for registration for courses and exams: **28th September 2018**
- Registration for courses and projects is **MANDATORY** in order to be able to take the exams.
- **Latest withdrawal from exams** (for all forms of examination – oral, written and continuous control): **23rd November 2018**, 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 28th September 2018.



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ACADEMIC CALENDAR

Important deadlines and information are available on :

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



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EXAMS

- Exams sessions: January/February and June/July.
- In case of failure of an exam, **you have to take the course again** the following year **or replace it by another course** the following semester.

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PROJECTS

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SEMESTER PROJECT

- The semester project (12 credits) can be done during the autumn or the spring semester, whenever you want during the Master, but before the Master project.
- If you want to do it during the autumn 2018 semester, please contact a laboratory immediately and register to the project in IS-Academia **now !**
- Details can be found on the following webpages:
 IN: http://ic.epfl.ch/semester_project
 SC: <http://ic.epfl.ch/page-29175-en.html>
 DS: <https://ic.epfl.ch/data-science-semester-project>



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OPTIONAL PROJECT

- You have the opportunity to do an optional project (8 credits).
- The optional project and the semester project cannot be done during the same semester.
- If you decide to carry out the optional project, we recommend you to do it once you have completed the semester project (mandatory project).



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SHS PROJECT

The SHS project (“humanities”) **must be done:**

- Over two semesters, starting only in autumn
- Individually or in groups

You are strongly encouraged to start now!

However, if the student plans to do an internship during the spring semester, the section will find an arrangement with the Registrar’s Office and SHS.



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PDM MASTER PROJECT



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PDM – MASTER PROJECT

IN, SC, and DS	
EPFL	4 months
Industry / Other University	6 months



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PDM – MASTER THESIS PROJECT

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





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MANDATORY INTERNSHIP



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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)

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MANDATORY INTERNSHIP

- Some companies, in the USA exclusively, offer 12-16 weeks' internships during the summer: **Facebook, Google, LinkedIn, Yahoo, Twitter**, only.
- You will be **exceptionally** allowed to be absent during the autumn semester, so that you can complete this 12-16 weeks internship.
- You will have to start the internship by 15th July.



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MANDATORY INTERNSHIP

International Bachelor students are required to complete a full year before being allowed to do an internship. Therefore, internship is possible in **summer / autumn 2019** at earliest for them.



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If you intend to continue to pursue Phd, we recommend you to do the internship in industry and then the Master project in a lab at EPFL.



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- A project done in a lab may give you the opportunity to write a paper related to it.
- If you have the opportunity to attend a scientific conference to present your work, the registration, travel and accomodation expenses can be paid by the section and the lab (50%-50%).
- Your paper will then be mentioned on the Students achievements webpage <https://ic.epfl.ch/students-successes>.



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CONTACTS

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INITIAL STUDY ADVISORS FOR INTERNATIONAL BACHELOR STUDENTS

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INTERNATIONAL BACHELOR STUDENTS:

- To ensure consistency between your Bachelor and Master studies, curriculum counselling is available during the transition period.
- So that you can have a personal discussion about your choice of courses, you have received an email invitation from your initial study advisor: **Ms Marguerite Delcourt (SC & DS)**, **Mr Christian Mouchet (IN)** and **Mr Mladen Dimovski (IN)**.



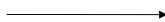
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INITIAL STUDY ADVISORS

- for DS & SC:
Marguerite Delcourt, PhD student



- for IN:
Christian Mouchet, PhD student



Mladen Dimovski, PhD student



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INTERNATIONAL BACHELOR STUDENTS:

- Please bring for the discussion:
 - your preliminary plan for the first semester
 - a list of questions
- You will discuss course content rather than rules






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PERMANENT STUDY ADVISORS



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ADVISORY STUDY PROFESSORS, CLASS 18/19

- for IN:
Prof. Martin Odersky
 LAMP1: Programming Methods Laboratory 1

- for SC:
Prof. Amin Shokrollahi
 ALGO: Algorithmics Laboratory

- for DS:
Prof. Rachid Guerraoui
 DCL: Distributed Computing Laboratory


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ADMINISTRATIVE CONTACTS

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IN

- *Head of the Program:*
Prof. Mark Pauly
- *Study Advisor:*
Prof. Martin Odersky
- *Master Program assistant:*
Ms Antonella Veltro

SC & DS

- *Head of the Programs:*
Prof. Michael Gastpar
- *Study Advisors:*
SC: Prof. Amin Shokrollahi
DS: Prof. Rachid Guerraoui
- *Master Program assistant:*
Ms Carole Dauphin

- *Deputy Head, BS/MS Programs:* Ms Sylviane Dal Mas
- *Internship Program assistant:* Ms Patricia Galhardo
- *Initial study advisors:* Ms Marguerite Delcourt (SC & DS),
Mr Christian Mouchet (IN) and Mr Mladen Dimovski (IN)



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REGISTRAR'S OFFICE – SAC

Please read carefully the e-mails sent by the Registrar's office - SAC, especially from:
Mr L. Ramelet and Mr A. Bianchi.

They will be sending you relevant information regarding your studies at EPFL as well as important deadlines.



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- Our websites
 - for IN: <https://ic.epfl.ch/computer-science/master>
 - for SC: <https://ic.epfl.ch/communication-systems/master>
 - for DS: <https://ic.epfl.ch/data-science>

You will find plenty of relevant information regarding our programs and rules.

- Your e-mail. This is the only way we can contact you !

**Welcome Day 14.09.2018 – Information session to the new Master students****BE CAREFUL...**

- It's your responsibility to read and understand the rules and regulations pertaining to your studies at EPFL.
- It's also your responsibility to read your emails and to attend the information meetings that will be held for you.



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AND LAST BUT NOT LEAST...

=> Presentation of the EPFL Library

* * * * *

=> TEA TIME at 15:30 at the BC's Cafeteria

IC School offers you an afternoon snack



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ANY QUESTION?





Thank you for your attention

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

