

## EPFL – Internships Mechanical Engineering

- General context
- Administrative procedures



# The internship: Excellent Opportunity !!!



## □ Students

- **A Great incentive to ask oneself the right questions !**
- Familiarize with working life
- Immerse into Industry practice
- Future Hiring opportunity



## □ Companies

- Benefit from highly qualified students
- A new insight on current issues, innovate !
- Evaluate futur employees

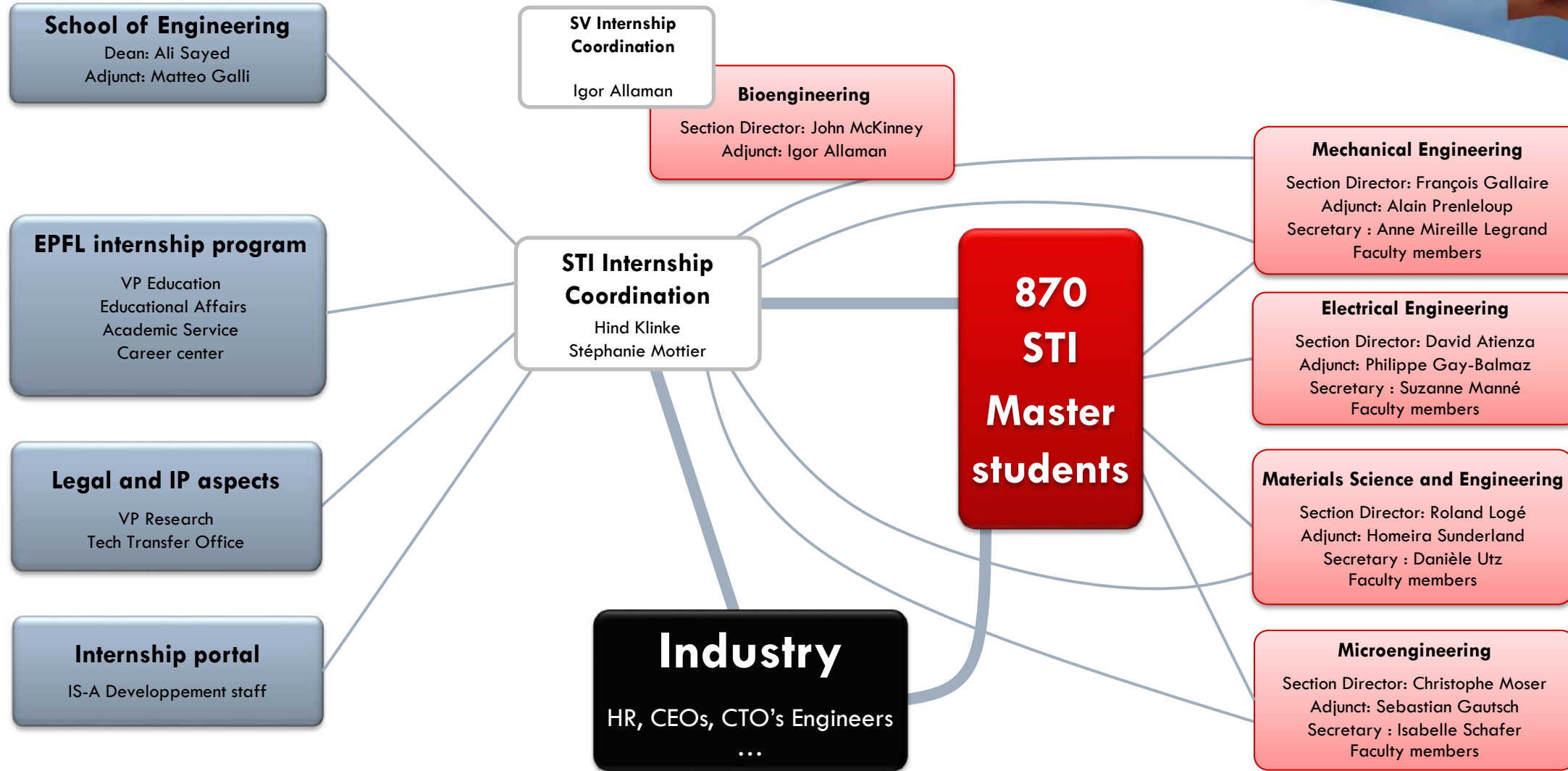
**EPFL**

## □ EPFL

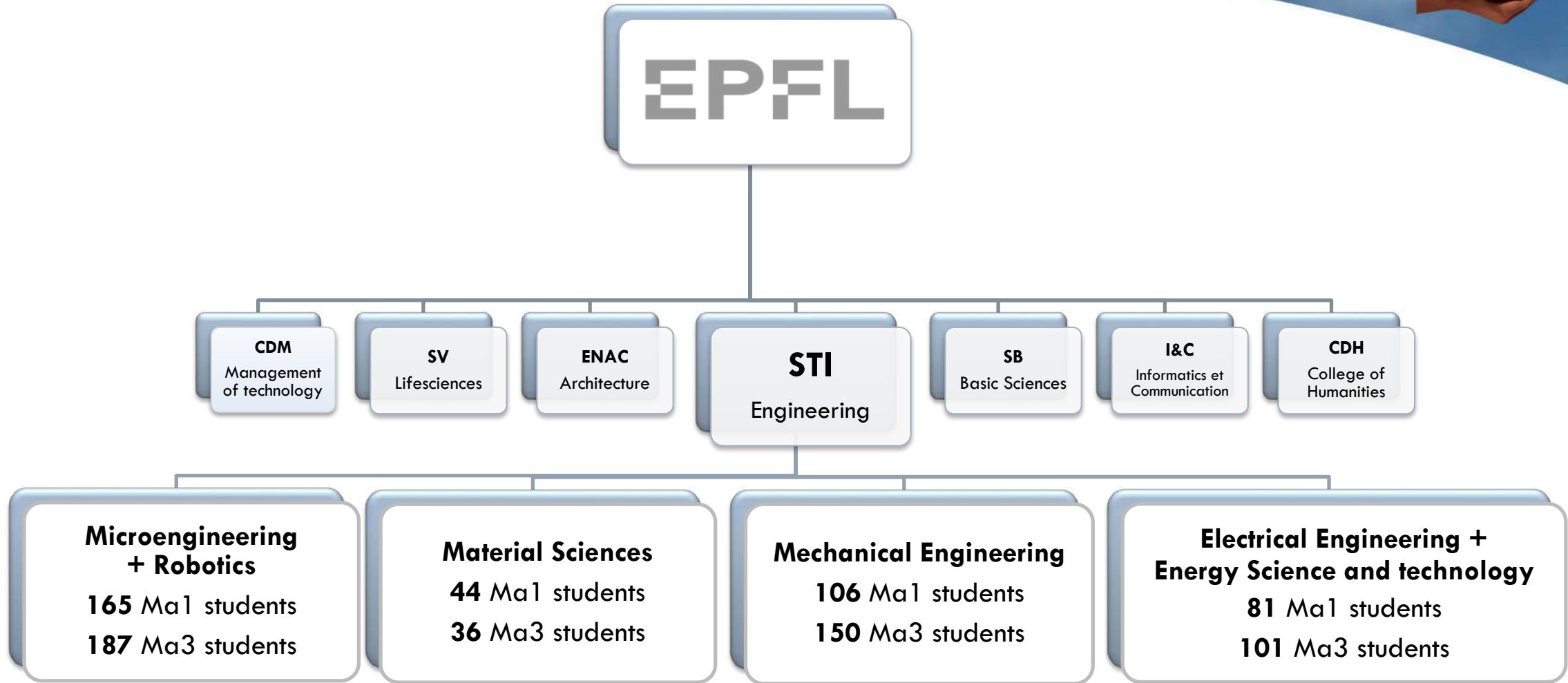
- A direct link to industry
- A new platform to start collaborations on the research level
- Feedback from industry to improve the education of our students



# STI Internship Coordination



# STI Internship Coordination



# Internship obligation



- ❑ The Internship in industry is a mandatory step of the Master degree
- ❑ Possible formats to validate this obligation

## Models :

STAP : Detached internship but credited with the master's project

PDME : Master project in industry

	Models	Duration	Periods	Contact information
Electrical and electronics engineering	STAP SCS (30 credits) PDME	Min. 8 weeks 4-6 months 25 weeks	After bachelor, after MA2 or MA3 After MA2 During the master project	Web Site EL
Energy Science and Technology	STAP PDME	Min. 8 weeks 25 weeks	After bachelor, after MA2 or MA3 During the master project	Web Site GM
Materials science and engineering	STAP PDME	Min. 8 weeks 25 weeks	After bachelor, after MA2 or MA3 During the master project	Web Site MX
<b>Mechanical engineering</b>	STAP PDME	Min. 8 weeks 25 weeks	After bachelor, after MA2 or MA3 During the master project	Web Site GM
Materials science and engineering	STAP PDME	Min. 8 weeks 25 weeks	After bachelor, after MA2 or MA3 During the master project	Web Site MX
Microengineering and robotics	STAP PDME	Min. 8 weeks 25 weeks	After bachelor, after MA2 or MA3 During the Master project	Web Site MT

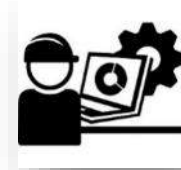


# Mandatory Internship or Master Project in Industry



## □ Internship

- Minimum duration of 2 month, up to 6 months
- Immersion into industry
- Familiarize with company processes
- Acquire specific competences
- Apply transversal skills
- Evaluation report by student and industry supervisor

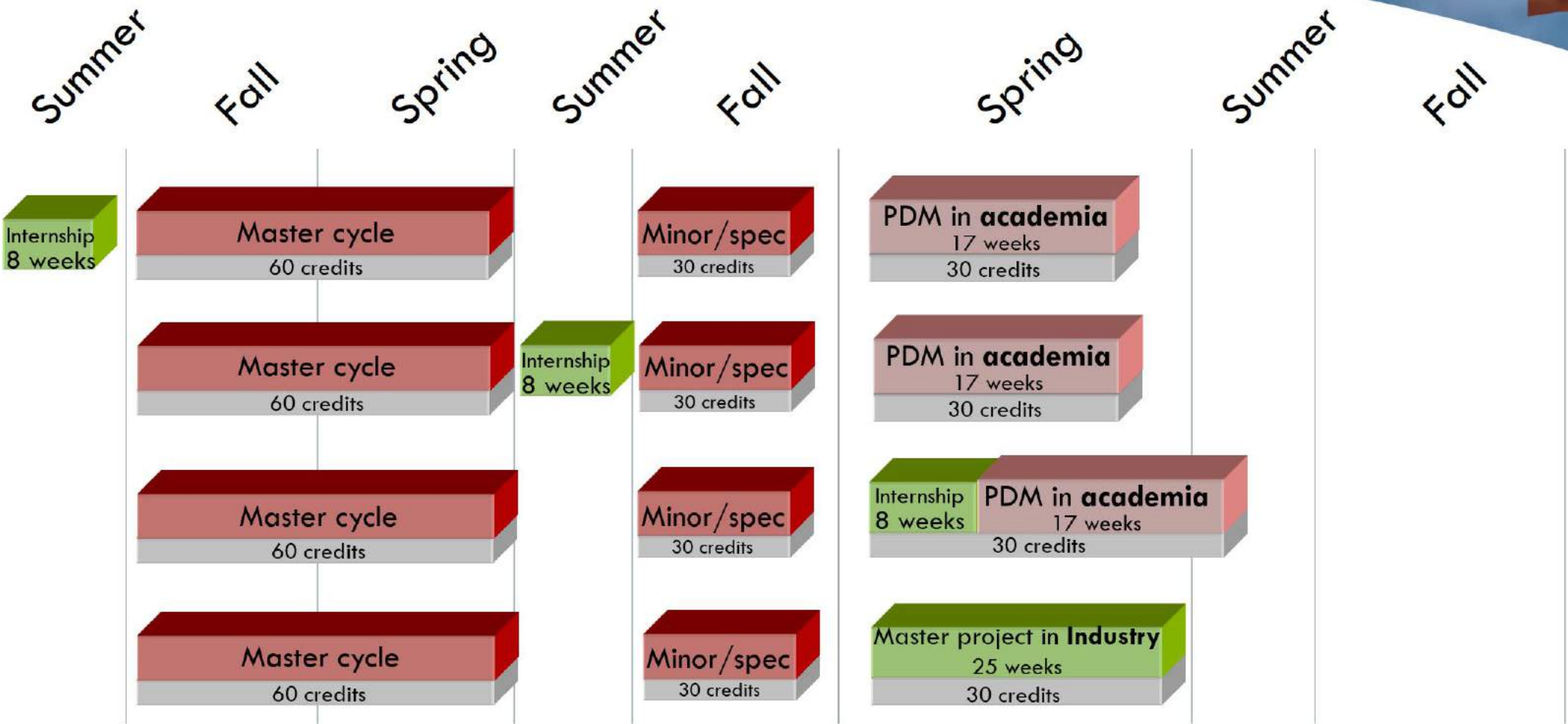


## □ Master project in industry

- A research project in the company
- Student applies the competences acquired during his master
- Supervised by a Professor **from his section**
- Written report and oral defense
- **Monthly feedback to Professor**
- 25 week duration (+1 week vacation)



# When to place your internship / Master thesis?



PDM in academia in foreign Universities: 25 weeks



# When to place your internship / Master thesis?



Summer

Fall

Spring

Summer

Fall

Spring

Summer

Fall



PDM in academia in foreign Universities: 25 weeks





# When to place your internship / Master thesis?



Summer

Fall

Spring

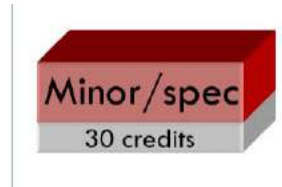
Summer

Fall

Spring

Summer

Fall



PDM in academia in foreign Universities: 25 weeks



# When to place your internship / Master thesis?



Summer

Fall

Spring

Summer

Fall

Spring

Summer

Fall



PDM in academia in foreign Universities: 25 weeks



# Important rules

## Maximum duration of studies

### The maximum duration of course semesters

- ❑ Maximum amount of study semesters allowed: 6
- ❑ Extended by one semester if the internship is done during a semester

The Master's project must be successfully completed within two semesters of the successful completion of the Master's cycle (including the industry internship). Should the Master's project (of a duration of 25 weeks and in industry) serve to validate the engineer's internship, the deadline is extended to three semesters.

## Internship in parallel to taking courses

Performing the industry internship in parallel to taking master courses is generally not encouraged. Exceptions can be granted by the section under the following conditions:

- ❑ The student can physically follow the registered courses and attend the exam session
- ❑ The maximum amount of credits does not exceed 5 ECTS
- ❑ The company accepts that the student takes courses

## Failed Master thesis in industry

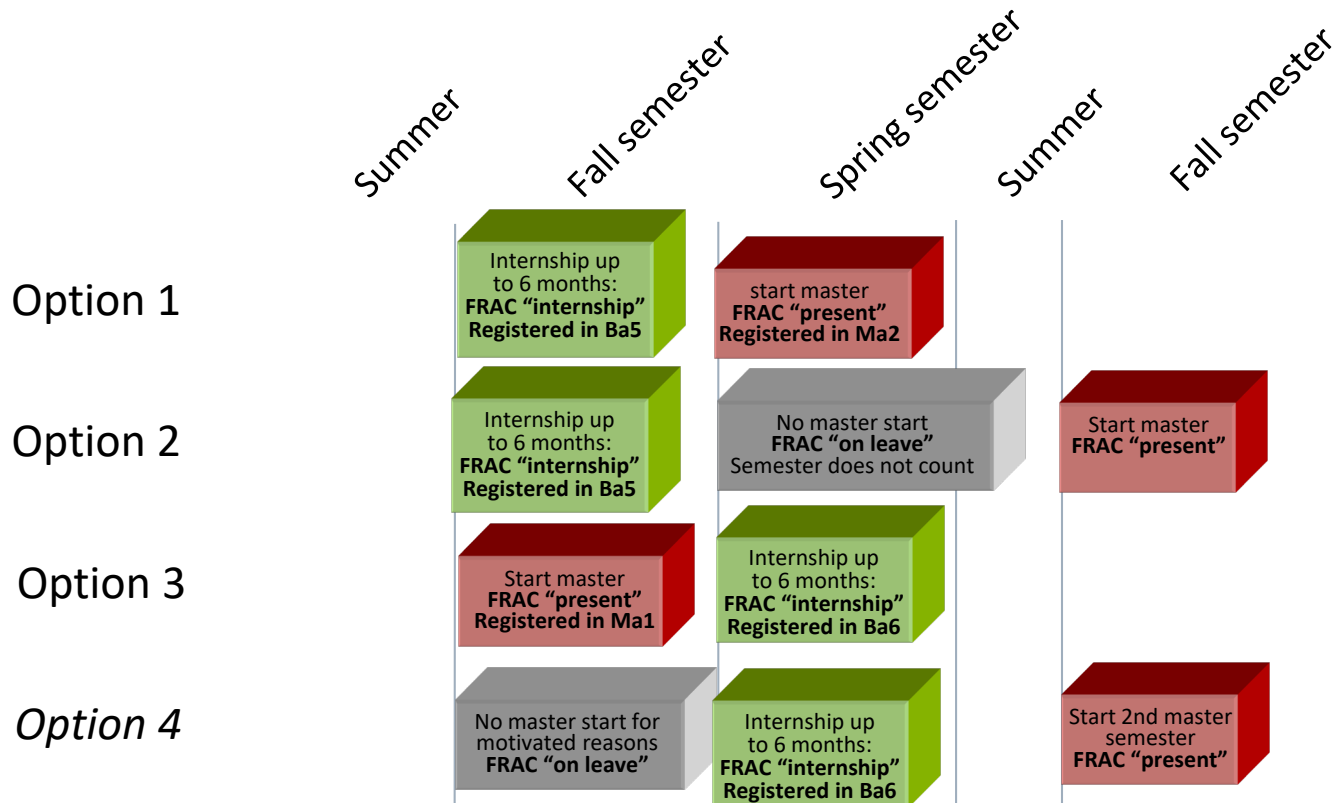
Students who fail their master thesis in industry during the first attempt are asked to perform their 2<sup>nd</sup> attempt in a lab at EPFL



# Internships between bachelor and master



- If you have finished your bachelor and would like to take an interim year to do your mandatory industry internship for your master, [the following academic rules](#) and FRAC status' apply:



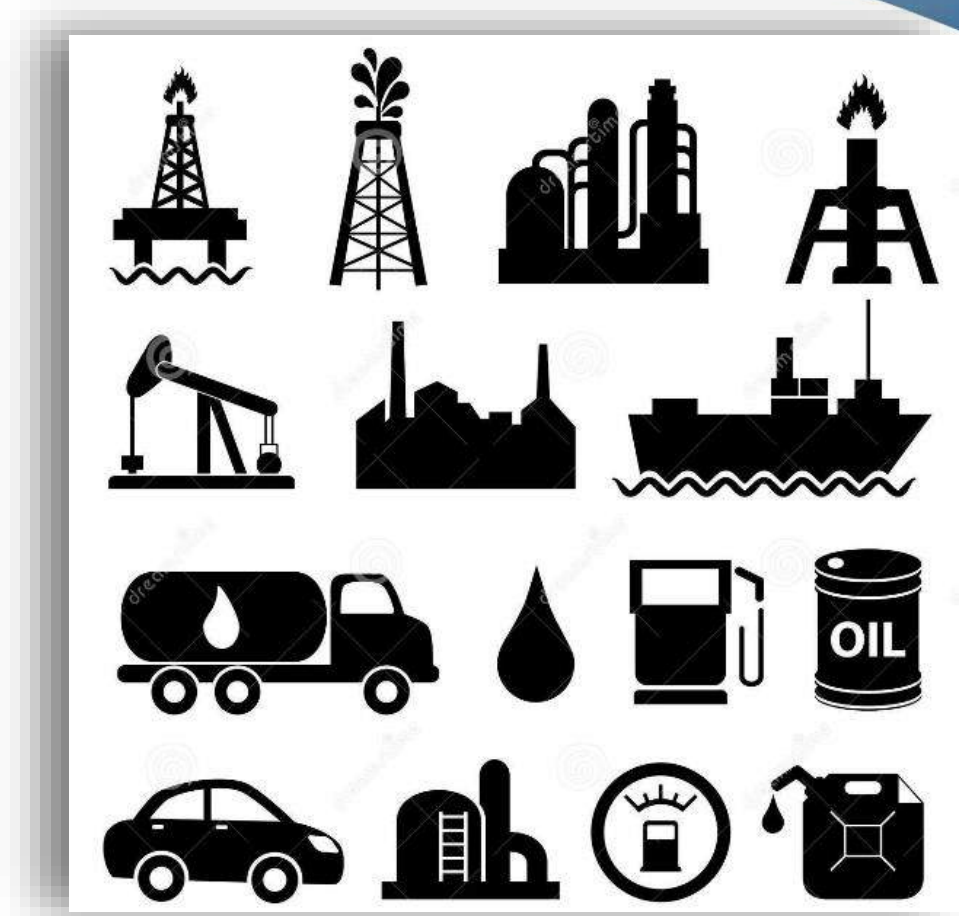
In option 4 the fall semester will be accounted to your master studies, except if you are doing your army or civil service



# What is considered «Industry» ?



- ❑ Every company or start-up offering a workplace outside of an EPFL laboratory (EPFL's Innovation Parc included)
- ❑ Every Research Organisation not delivering academic credits
- ❑ Affiliation of independent research labs with academic institutions can lead to a specific decision by the section



# How much salary ?



- There is no official regulation in Switzerland to pay a monthly salary for an internship.
  - Salaries are mostly ruled by offer and demand
  - Often the salary is dependent of the company's size and status
    - Typical salary in large companies: **~3'000 SFr**
    - Typical salary in start-ups and SMEs: **1'500 SFr**
    - Typical salary in the European Union: **600 - 900 Euros**
  - EPFL recommends a typical monthly salary around **2'000 SFr**. However, there is no obligation of the company to comply with this.
- In Case of a Master Project in Industry, remuneration can be handled more freely (no monthly salary, compensations, bonus at the end, ...)

# Validation of previous internships and industrial experiences



Internships done during the bachelor degree will not exempt you from the mandatory internship. Exemptions can be granted by the section in the following cases:

- Internships done after your bachelor degree
  - The internship duration must be at least 8 weeks
  - The ending should not be further than 1 year apart from your master beginning date.
  - A work certificate or an evaluation report or a has to be presented to the section deputy
  
- Industry employment at 100% occupation of at least 1 year related to the field of the future master studies
  - A valid work certificate has to presented to the section deputy.



# Your start-up as substitute to a master thesis in industry?



- ❑ A few students will be able to undertake their master projects in industry, at the EPFL Innovation Park to work for their own startup.
- ❑ Projects will be co-supervised by a mentor from the Vice Presidency for Innovation and a professor from the section
- ❑ This opportunity will be offered to 3-4 projects per year. Students will have to go through a selection process, start by contacting [pdm-eip@epfl.ch](mailto:pdm-eip@epfl.ch).
- ❑ More information about the program could be found here:
  - ❑ <https://www.epfl.ch/innovation/startup/students/master-project-in-your-startup/>





# Internships outside Switzerland



- As a precaution, EPFL students must comply with the following measures on foreign travel for the fall 2021 semester :
  - Travel abroad by students for internships remains prohibited:
    - In countries or regions that the DFAE discourages
    - In countries or regions mentioned on the OFSP list
    - [Map of authorized countries](#)
  - All study-related travel abroad (Master's projects, exchanges, internships, etc.) will take place under the student's personal responsibility.
  - EPFL will not provide foreign assistance to students who fail to comply with these recommendations.
  - No additional contributions to travel costs will be granted beyond the measures and grants already in place.
  - Students must comply with all health and safety rules in effect in their country of destination as well as at the partner company or university.
  - When students return to Switzerland, [TravelCheck](#) recommendations must be followed.

More information and updates should be retrieved here: <https://www.epfl.ch/campus/security-safety/en/health/coronavirus-covid19/travel/>

# Announce your stay abroad to EPFL Safety domain



- <http://securite.epfl.ch/voyages>
- Comply with updated COVID-19 recommendations

The screenshot shows the EPFL website's navigation menu with '50 years' highlighted. The breadcrumb trail is: Browse > Campus > Health, safety and prevention > Security > Safety during business and academic travels. The left sidebar lists categories: In case of theft, Air Safety - Drones, Events, Infrastructure safety, and Safety during business and academic travels (which is selected). The main content area features the title 'Safety during business and academic travels' and a paragraph: 'According to legal bases, employers have a duty towards their employees to inform, prevent, control and intervene. To fulfill these legal requirements, EPFL relies on a competent partner, renowned for their skills in assisting organizations in the area of risks linked to business and academic travel abroad: International SOS. Thanks to their services, employees and students benefit from medical and security assistance in the whole world, as from June 1, 2014.'

# Work authorization



(not required for Master Projects without a monthly remuneration)

- The federal council allows foreign students of Swiss academic institution to perform a mandatory internship during their studies: <https://www.admin.ch/opc/fr/classified-compilation/20070993/index.html#a39>
- Students with Non-EU/EFTA passports require a valid **work authorization** to do their internship or Master project with monthly salary in Switzerland or EU countries.
- EU students performing a 3-6 month internship have to be simply **announced** at the cantonal office
- It is the company's responsibility to request this authorization at the proper working office of their canton/country ([Link](#) to obtain a mandatory internship certificate).
- It requires up to 8 weeks to obtain this authorization from the cantonal offices.
- We recommend that students from non-EU/EFTA countries inform the companies in their motivation letter of these regulations.

*Example: "As I'm a non-EU/EFTA resident, your company would be required to ask for a temporary work authorization. Please be advised that the federal council allows foreign students of Swiss academic institution to perform a mandatory internship during their studies: <https://www.admin.ch/opc/fr/classified-compilation/20070993/index.html#a39>. As I will stay registered at EPFL during this internship, and since this internship is a mandatory part of my Master education, the delivery of this document does not fall into the quota limitation of each canton and is therefore straightforward".*

## EPFL – Internships Mechanical Engineering

- Administrative procedures



# How can you find an internship ?



- It is the student's responsibility to find an appropriate internship to validate his Master degree.
- No responsibility can be taken from EPFL side if no internship has been found by the student
- The student can find an internship position by himself, but the subject needs to be approved by the section deputy
- EPFL offers an internship portal on which students can find an alternative to their personal quest for finding an internship.
- Access to the EPFL portal is given through the student's IS-Academia account

The screenshot shows the IS-ACADEMIA portal interface. The top navigation bar includes links for Home, FRAC, Courses, Courses booklets, Course Registration, Results, Language Centre, Personal Details, Delegates, Tutoring, and Exchange application. The main content area is divided into three columns:

- Courses:** Lists various courses for the 2017-2018 Master semester 1, including Electrochemical engineering, Energy economics and policy I, Energy storage in power systems, Hydropower plants, Industrial electronics I, Lab in electrical energy systems, Mathematics of data, Multivariable control and coordination systems, and Principles of semiconductor devices.
- Horaires:** Displays a timetable for the week starting 25.09.2017 to 01.10.2017. The timetable shows classes for Wednesday and Friday.
- Right sidebar:** Contains a list of services such as Address changes, Academic registration, Download Bachelor Diploma, Evaluations results, Print enrolment certificates, Registration to Students Online, Reporting, Statement of results, and Teaching evaluations.

A magnifying glass is positioned over the 'Internships showroom (stu)' link in the right sidebar.



# Sustainable Internships

## How to identify them ?

Company submissions are listed on the internship portal once validated by each section. Internships with a sustainability label will be identifiable with the following logo:



Job Title	Start Date	Company	Location	Label	St. de Stage	Formal	Monthly Salary	Perfor. (0-5)	Available Status	Perfor. (0-5)
Learning to walk without the brain	24.08.2020	IMEC	Leuven, Belgium	2022	100% de Stage	0	0	0	0	0
Posticum Masterarbeit MEMS Sensors Infrastruktur	24.08.2020	Avantix AG	Wagwil	2022	Stage	0	0	0	0	0
Software development positions in the field of 3D-Printing	20.08.2020	regentix	Vilvoorde, Vlaanderen	2020	Stage	0	0	0	0	0
Project Assistant	18.08.2020	Golden Partner SA	Genève	2020	100% de Stage	0	0	0	0	0
Acoustic Sensing and Trajectory Estimation of Objects Flying at Supersonic Speed	18.08.2020	STEC AG	Remirex or Effretikon CH	2020	100% de Stage	0	0	0	0	0
Breadboarding mentor	18.08.2020	Avantix SA	Remirex or BFL	2020	100% de Stage	0	0	0	0	0
Agile robots & Machine Learning	17.08.2020	AVANTIX	20 du Vieux St. 1000 Vilvoorde Vlaanderen	2020	100% de Stage	0	0	0	0	0
Machine Learning Internship	16.08.2020	Logimind	Lausanne	2020	Stage	0	0	0	0	0
Industrial Robot Embedded Systems Development	16.08.2020	Technics AG	Lausanne	2020	Stage	0	0	0	0	0
Stage Engineer Thermique/CVSE	13.08.2020	afsa SA architecture of Energie	Genève	2020	Stage	0	0	0	0	0



# Sustainable Internships

Sustainable internships extend EPFL's sustainability strategy to its partnership with companies. This program meets a growing demand from our master students.

## Sustainability categories

Companies interested in receiving the label must explain how the main purpose of the technology (product, process, service) developed during the internship has a direct impact on sustainability.



The criteria are based on the [United Nations' Sustainable Development Goals \(SDG\)](#).

EPFL's [Tech4Impact](#) unit is in charge of evaluating the proposals and attributing the sustainability label.



# Sustainable Internships

## Evaluation report

The evaluation process of the internship is similar to a regular internship but the student is asked to write a half-page report to comment if the sustainability goals have been reached. This report does not influence the validation of the internship for the master curriculum.



## Promote sustainable internship opportunities !

Students are encouraged to identify sustainable internship opportunities within companies that meet the criteria listed above. The proposal of the internship subject is made by the company through the EPFL internship portal.







# Ingénieur.e.s du Monde



## Who are we?

Engineers of tomorrow, we interest ourselves in the cooperation for a sustainable development around the world

## Contact us

Write to us at

[stages.idm@listes.epfl.ch](mailto:stages.idm@listes.epfl.ch)

## We offer you scholarships...

- That covers travel and visa costs
- For an internship
  - In the field of development
  - For a sustainable project
  - Of 8 weeks minimum

Go check our available offers on our webpage!

<http://idm.epfl.ch/stages/>



Every internship found through « Ingénieur.e.s du Monde » needs to be approved by your section. Please contact the section deputy as soon as you have found an opportunity





**Le Forum EPFL est de retour !**

**du 4 au 8 octobre 2021**

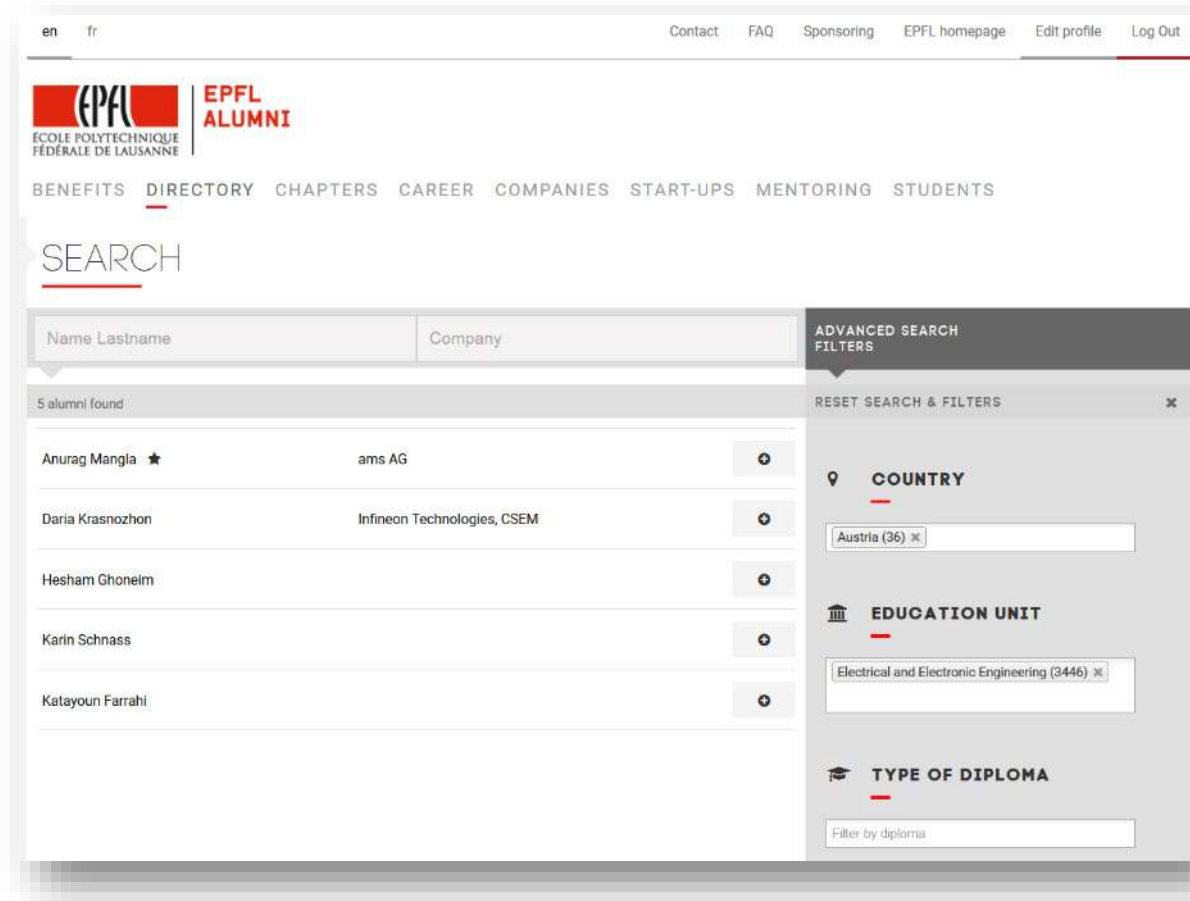
au SwissTech Convention Center



# EPFL Alumni network



- EPFL students have access to the Alumni network
  - Website: alumni.epfl.ch
  - Pocketcampus app



# EPFL Career Center workshops



Dear Master Student,  
Dear PhD Candidate,

**Pictet Group**, a private bank based in Geneva with global presence (more here [www.group.pictet/](http://www.group.pictet/)) invites you to the workshop:

## "Data Analytics @ Pictet with apéro"

to be held at EPFL  
on **Wednesday, September 25, 2019**  
from **17:15 to 19:00**  
in room [BC410](#)  
followed by an apéro

[Link to the Pictet Group invitation](#)

During this workshop, you will have the opportunity to learn more about one of the following topics, please choose the one you prefer:

1. Risk management: how data analytics can help prevent risk? A playground with a fraud detection sample.
2. Asset management: how data are applied to impact investing?
3. Client relationships: how data can be a key game-changer in wealth management?

To apply for this fascinating workshop, please send your CV to [cc@epfl.ch](mailto:cc@epfl.ch) stating "**Pictet Workshop**" in the subject line before **September 17, 2019**.

**Please mention in the email your preferred topic, in order of preference.**

The participants will be enrolled on a first come, first served basis.

<https://www.epfl.ch/about/recruiting/career-center/>



**1 269 relations**

Classer par: Prénom ▾

Trouver des relations [Chercher avec des filtres](#)

- Gilles Pillonel** 裴尔吉  
R&D Project Manager at BOBST [Message](#) ...
- Adi Vardi**  
MSc Microtechnique EPFL, spécialisation en Robotique et Systèmes Autonomes [Message](#) ...
- Adrian Troemel**  
Candidat MBA à Rice Univeristy | MSc EPFL Genie des Materiaux [Message](#) ...
- Adrien Briod**  
Co-founder & CTO of Flyability SA [Message](#) ...
- Adrien Béraud**  
Ring project director chez Savoir-faire Linux [Message](#) ...
- Adrien Chabbey**  
Area Sales Manager chez Fischer Connectors [Message](#) ...

Gérer les contacts importés

Il reste encore des contacts avec qui vous connecter

[Se connecter](#)

Plus d'options

**Concentrez-vous sur le savoir-faire et la qualité. Nous assurons votre entreprise.**

En savoir plus >

Heureux. Ensemble.

**vaudoise**  
Assurances

À propos Assistance clientèle  
Conditions générales et confidentialité ▾  
Publicité Solutions professionnelles ▾



# Other opportunities for finding an internship



- Personal contacts, family, friends
- Topic related agencies and organizations
- International platforms
- Company websites



- EPFL Professors, especially for master projects in Industry



Every Internship found outside the IS-A portal has to be approved by your section. Please send a short but detailed description to the section deputy as soon as you have found an opportunity



# Fill out the form !

Mechanical engineering students are asked to fill out [the following form](#) to validate internships found outside the IS-A portal



**EPFL**

Section de Génie Mécanique  
Secrétariat

## Demande de validation d'un stage hors du portail ISA / Application for validation of an internship outside the ISA portal

*(Le formulaire doit être renvoyé secrétariat de la section dûment complété et signé avant le début du stage / This form should be sent to the section secretariat duly completed and signed by all the parties before the internship starts)*

### Stage en entreprise / Internship

Entreprise / company	Site web / website	Pays
Descriptif de l'entreprise / Company description		
Cahier des charges de l'étudiant / Student's tasks		

### Etudiant concerné / Student concerned

Nom, prénom / Name, first name	Date	Signature
SCIPER	Semestre actuel <input type="checkbox"/> MA1 <input type="checkbox"/> MA2 <input type="checkbox"/> MA3 <input type="checkbox"/> MA4	Info <input type="checkbox"/> 90 ECTS déjà complétés / 90 ECTS already completed <input type="checkbox"/> Semestre d'automne / Fall <input type="checkbox"/> semestre printemps / Spring

### Adjoint de la section de l'étudiant / Deputy of student's section

*Par sa signature, l'adjoint confirme la validité du stage proposé par l'étudiant / By his signature, the deputy confirms that the internship proposed by the student is valid.*

Nom, prénom / Name, first name	Date	Signature
Remarque / Remark		

*Dans le présent document, le genre masculin est utilisé au sens neutre et désigne les femmes autant que les hommes.*

■ École  
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fédérale  
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+41 21 693 29 47  
[sqm@epfl.ch](mailto:sqm@epfl.ch)



# How does the internship portal work ?



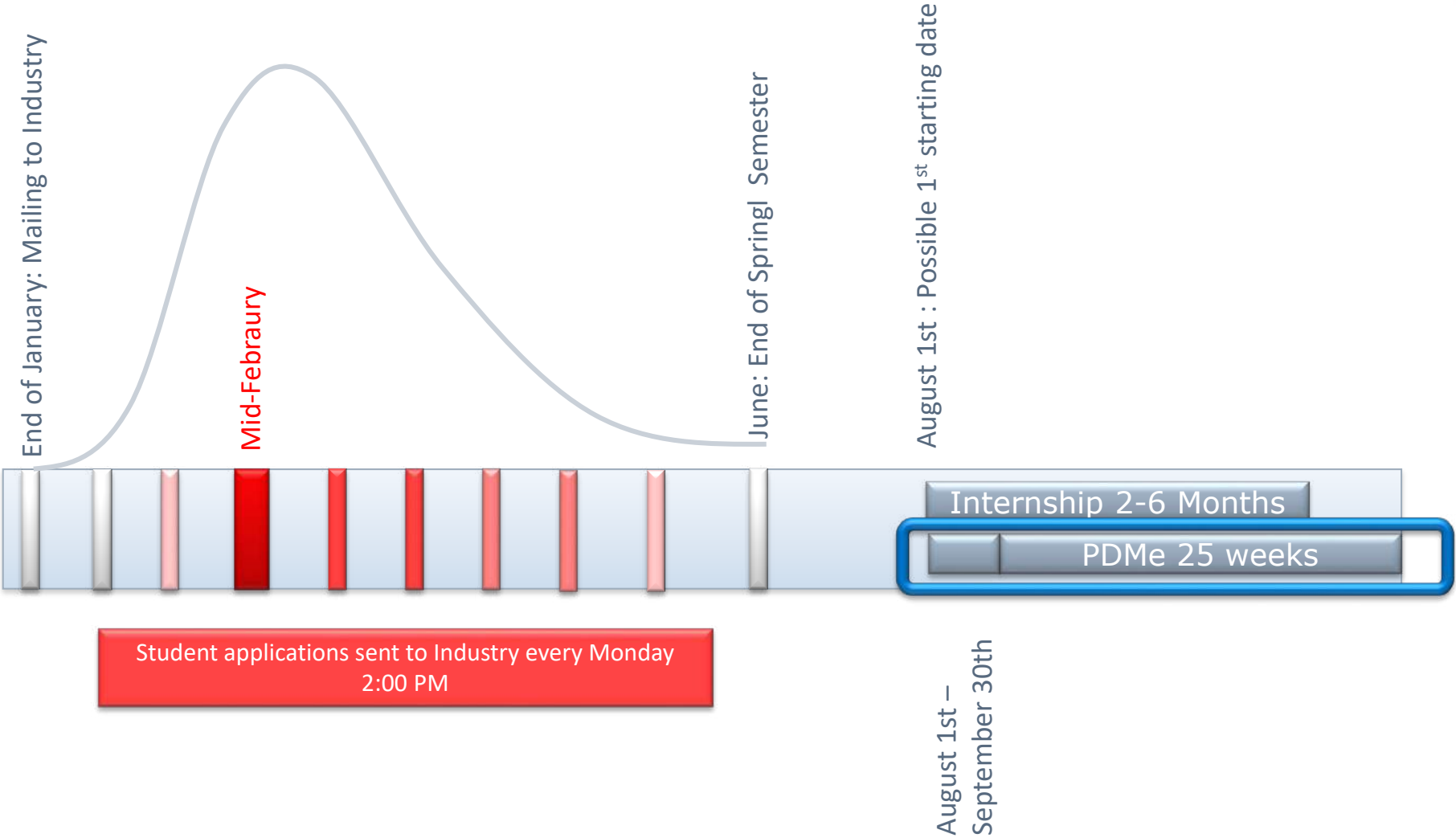
- Browse through the internship offers of your Master program
- Apply for a position by uploading 2 mandatory documents:
  - CV
  - motivation letter
- Applications are sent on a weekly basis to the companies (every Monday 14h00)
- Wait for the company to make its selection process (up to several weeks)
- If no response after 2 months, contact your internship coordinator
- You will be contacted by the company if your application was successful  
(Most selection processes involve an interview and several e-mail exchanges)
- You MUST accept only one offer and reject all the others within the next 3 working days.
  - No withdrawal from the accepted position!
  - Kindly notify all other companies you had privileged contact with



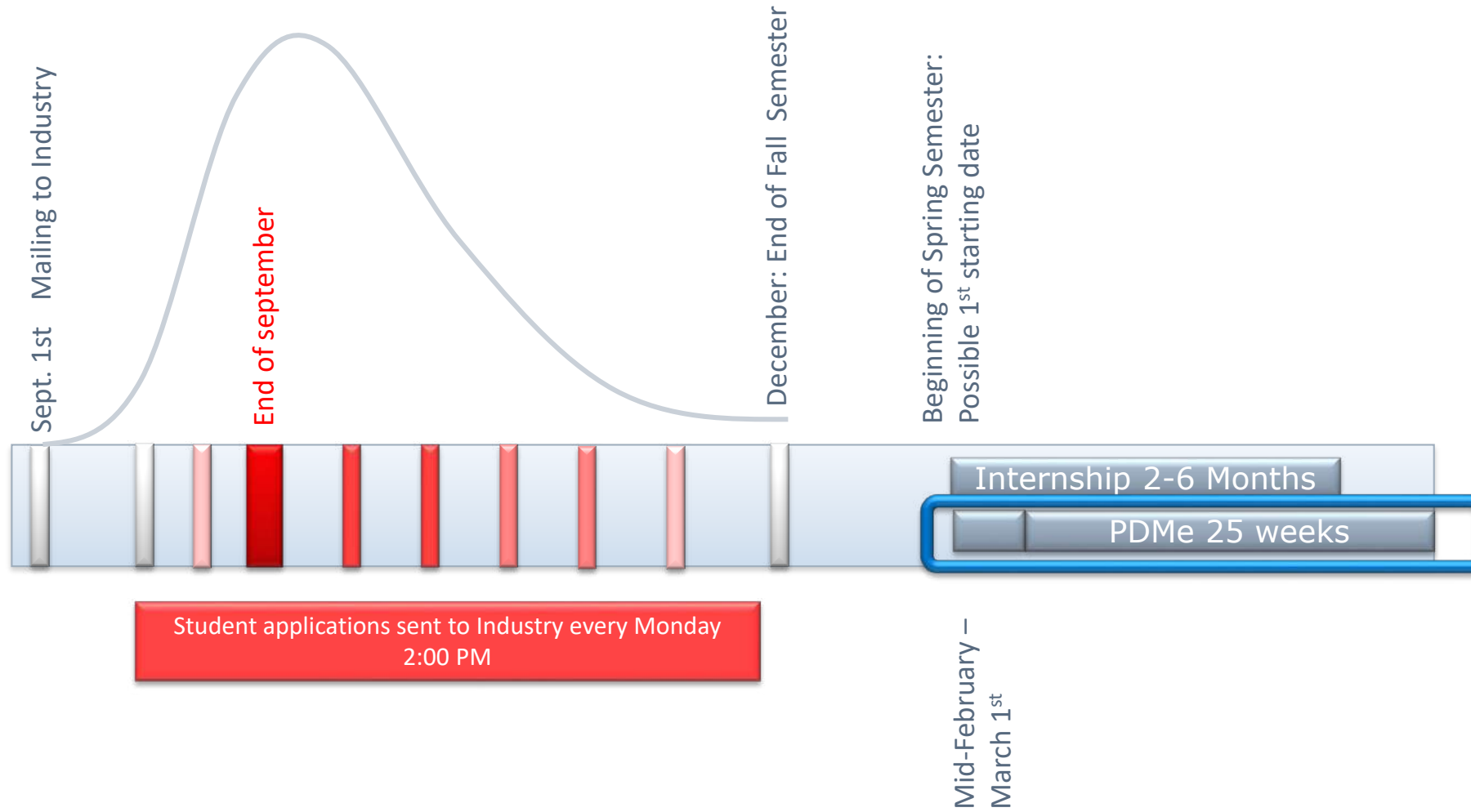
- Do not use the portal for personal internship search
- Apply always through the portal for mandatory internship



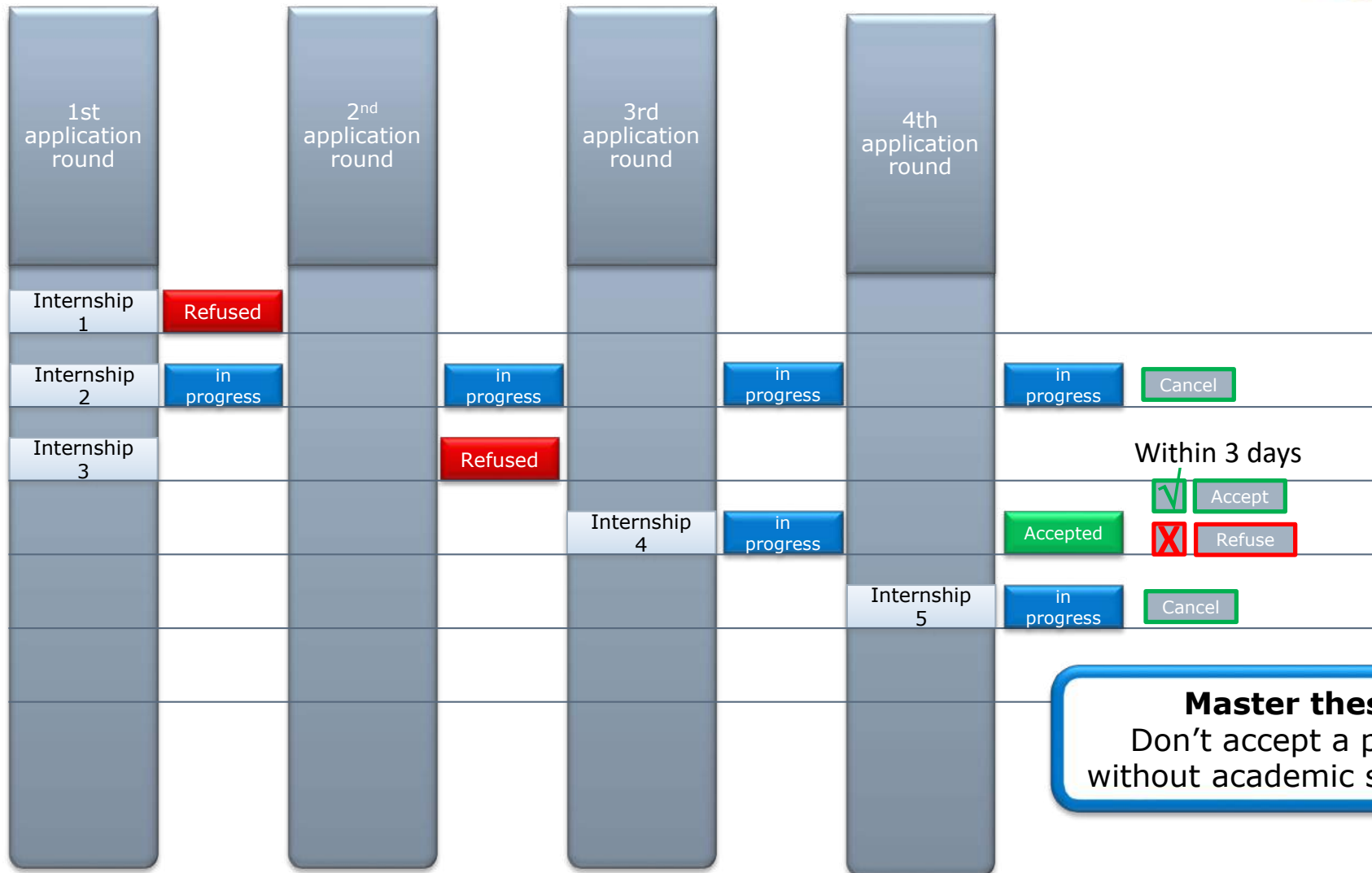
# Attribution process in the spring semester



# Attribution process in the fall semester



# Internship attribution, possible scenarii



**Master thesis:**  
Don't accept a position  
without academic supervisor



# Some advice to prepare your application documents



- 2 important documents

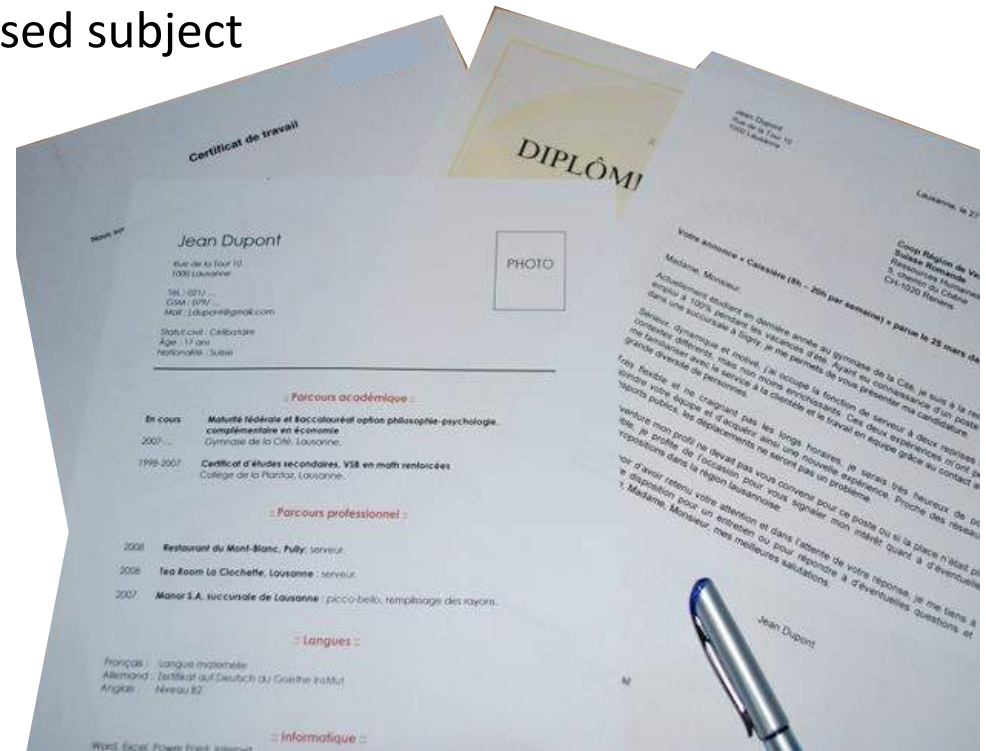
- Motivation letter
- Curriculum vitae (CV)

The criteria for interview selection by the company is mostly based in these documents. Reference letters can be added as well. Your motivation letter should specifically address the company and the proposed subject

- Language : you should use the language of the offer

- To be avoided:

- No motivation letter
- copy-paste errors
- Wrong addressing



# Interview



Most companies would like to meet the students for an interview prior to making their final choice

- Be prepared for the interview and demonstrate a professional attitude
- Non EU/EFTA students: Inform the company about the required work authorization
- If the living allowance is mentioned in the description, do not bargain. If not mentioned, inquire for it.
- Follow up: After the interview, write a short e-mail as feedback of your interview to the company and Cc the internship coordinator.
- For Master projects: Do not accept a position without having confirmed the eligibility of the project and settled the details with the academic supervisor.



# Prepare your internship campaign !



## EPFL proposes 5 modules of 1h45:

### This fall semester

1. Understanding and convincing recruiters
2. The CV sections
3. The motivation letter
4. The Job interview
5. Communication and organization at work

Each course will be given in English and in French

Information and mandatory registration here: <https://epflcareer.ch/en/>



# Update your FRAC



In case your internship is done during an academic semester, make sure to update your FRAC according to your status:

- Semester: (choose the right one: MA1; MA2; MA3)
- Status : Internship (authorized by the section)
- Mention in the comments « Detached internship but credited with master Project (STAP) »

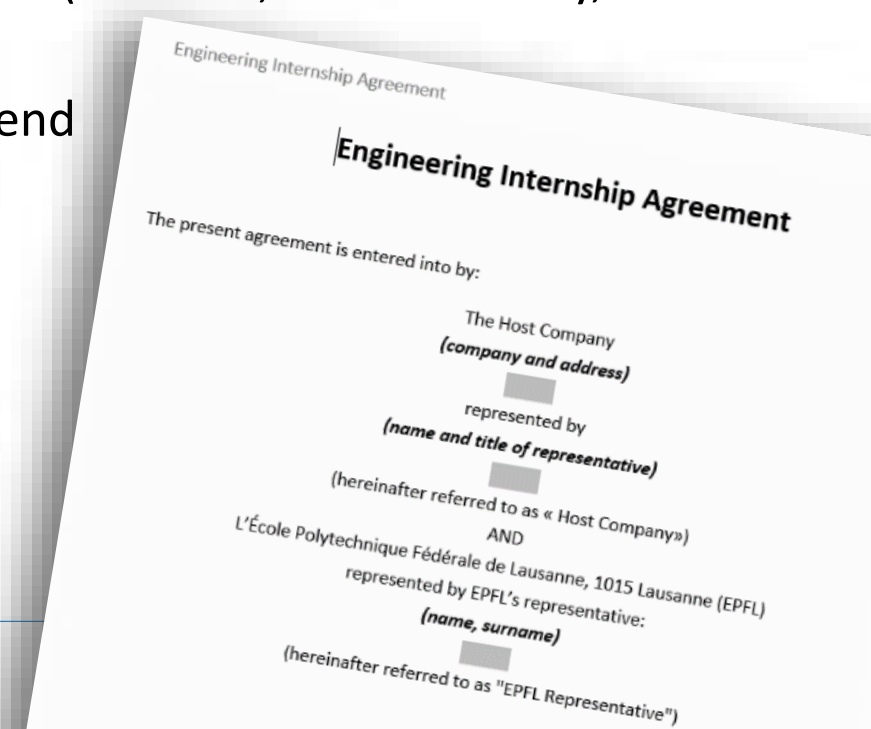
If you take courses in parallel to your internship, your FRAC status should be «present»

# Internship agreement



- The [internship agreement \(French version\)](#) specifies the commitments and responsibilities of EPFL, the company and the internship student.  
This agreement **must be signed** for all engineering internships.
- No other tripartite agreement involving EPFL will be signed by the section.
- Alternative contract proposed by the company and signed only by the student are acceptable in some cases, but the students must carefully read and comply with the content (IP issues, confidentiality, insurances and especially non-competition clauses).

The company must accept to fill out the EPFL evaluation report at the end





# Mandatory: Register internships found on your own



- [Submit a short but detailed description](#) of your internship to your section's deputy,
- Once you have signed the tripartite internship agreement, enter your project details on the internship portal by creating a new internship proposal, and upload a pdf copy of the agreement.

**Internships - Showroom (stu)**

+ You found a work placement, which was not proposed in IS-Academia. Please, do register it clicking [HERE](#).

Nombre de places disponibles : 239 84 displayed item(s) / 84 available item(s)

Context : --  All criteria/words should be contained

Action	Internship	Company	Assignment location	Févr-Sept (P1)	Juil-Févr (P2)	Juil-Sept (P3)	Internship number	Format	Registered	Places	Prof	Creation date of the internship
			=	[all]					25	240		
	Industrial Analytics, IoT, and Mobiles	Schindler Aufzüge AG	Ebikon	✓			19094	Internship	0	1		20.09.2017
	Temperature mapping and monitoring of a complex device	CERN - European Organization for Nuclear Research	CERN, Geneva, Switzerland	✓			19088	Internship	0	1		20.09.2017

# Anticipate !



- A change of residence or relocation might be necessary
- Setting up a Master thesis in industry takes several weeks/months
- Time consuming formalities might be required:
  - Confirm an internship
  - Visa, Work authorization and Residence permit (typically 4-8 weeks)
  - Collection of the signatures of the internship agreement
  - New validation of your passport
  - ...
- It is your responsibility to settle these formalities prior to the Internship beginning

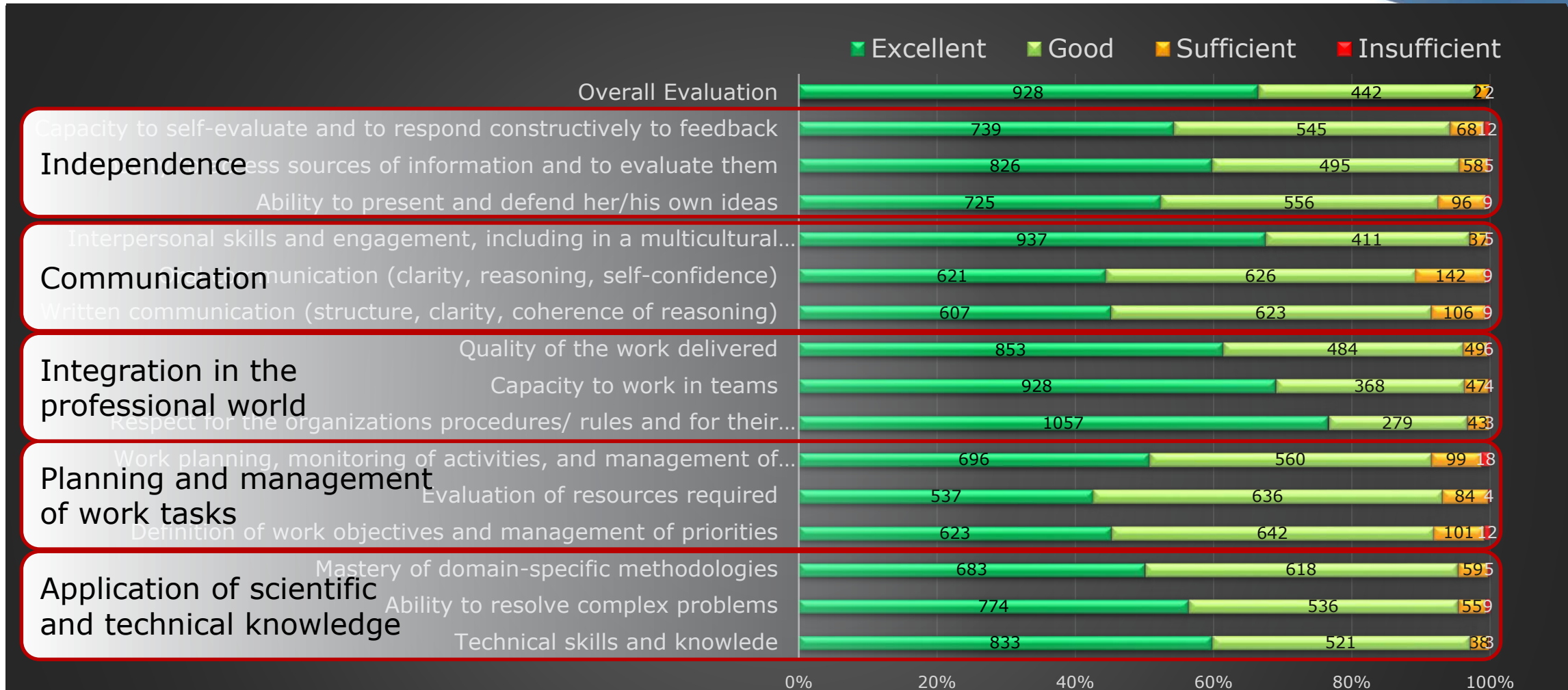
# During and after the internship

- ❑ In case of problems (accident or illness, personal problems, conflict with supervisors, ...), contact urgently the Section deputy and the STI Internships coordinator.
- ❑ No written report of the student is requested by EPFL (except for credited internships in EE), but can be requested by the company.
- ❑ To validate your internship, an evaluation form has to be filled out by the student and the supervisor in the company (sent out 2 weeks prior to ending).



# Internship evaluations

Company evaluation of the student (Years 2015-2020, 1400 STI students)



# Mandatory Steps for a 2-6 month internship



- Find an internship position and in case you have found it by yourself, without using the IS-A portal, [have the subject validated](#) by your section deputy.
- Inform the [STI coordinator](#) that you have found your internship.
- Cancel all ongoing applications by gently notifying the companies. This step is extremely important to keep a good relationship with future employers.
- Transmit [the EPFL internship agreement](#) to the employer and have it filled out and signed by the employer and the section deputy.
- Transmit a copy of the agreement to the section secretariat.
- If you are a non-swiss/EU citizen, ask the company to request a work authorization for the duration of the internship. More [information here](#). ([Link](#) to obtain a mandatory internship certificate.)
- Once all the details of your internship have been settled, enter or edit the details of your internship on the [IS-A internship portal](#). Upload a copy of the signed internship agreement.
- If your internship takes place during an academic semester, make sure to update your FRAC
- At the end of the internship, fill out the evaluation report that will be sent to you by e-mail. The evaluation procedure starts 2 weeks prior to the official ending of the internship. Both the student and the supervisor will fill out an evaluation report.

# Best practice to set up a master thesis in industry



Companies get in touch with research labs to propose master thesis topics



Companies can hire students for internship proposals and accept the format change to master thesis projects without involving a Professor

Compatibility with academic calendar

IP owner(s)



Confidentiality

Eligibility of candidate for master thesis



Students contact professors of their section to ask for existing industrial projects



Students apply for internships on the IS-A portal and have it validated as master thesis projects by the company without involving the supervising professor



Professors and teachers propose master thesis projects with known partner companies

Professors and teachers evaluate the academic content of proposals from companies before accepting it as master thesis projects



Professors and teachers evaluate the academic content of student proposals without interacting with the host company



# Ideal Scenario for Master Projects in industry



Company has an idea for a master thesis project



Company discusses the project with a Professor



Company submits the proposal on the EPFL portal



Project starts under co-supervision by company and professor



Student applies for the project through the portal and gets accepted by the company





# Master thesis in industry, some advice for students



- Give priority to Master thesis proposals from laboratories of your section and proposals posted on the IS-A portal with confirmed academic supervisor

If you can't find a suitable topic this way, **consider doing an internship to validate your industry immersion.** If this is not an option, then proceed like this:

- Contact potential academic supervisors to inform them on your intentions
- Apply for positions and inform companies on your objective to do a master thesis (in motivation letter, during e-mails exchanges and interviews, ...)
- Refer to [the following webpage](#) to inform the company
- Organize a meeting between the academic supervisor and the company to discuss the content and workplan of the project and settle administrative issues. Suggest the signature of the EPFL master thesis agreement (to settle IP and confidentiality).
- Insure a coordinated supervision and regular meetings between the company and the teacher during the project



# Master thesis in industry, best practices for academic supervisors



## Best Practice Regarding Master Projects in Industry

### 1. Introduction

This document sets out the rules to be observed in the field of supervision of master projects in industry.

Master projects in industry are particular in that they are an academic task performed outside academic circles within a host company. Indeed, they imply a tripartite relationship (EPFL professor, student, company) making academic and legal issues more complex due to the hybrid nature of the work.

A master project in industry remains first and foremost a master project. It must therefore include an academic dimension defined and controlled by the professor. Although it is performed in a company, the master project must imperatively include a research and innovation angle, thus contributing to the advancement of science in its field.

In addition, the collaboration induced by the master project in industry must benefit the research carried out by the laboratory. It is also important that the laboratory's research be protected and not therefore offered to companies in the framework of master projects.

A professor may not under any circumstances supervise a student's master project without first making contact with the company prior to any commitment by the parties.

Professors are entitled to refuse to supervise a student's master project should the terms discussed with the company not suit them or contravene EPFL requirements in this field.

### 3.2. Use of EPFL resources

Students may not use EPFL installations, resources, information, software or other intangible assets without their professor's written approval.

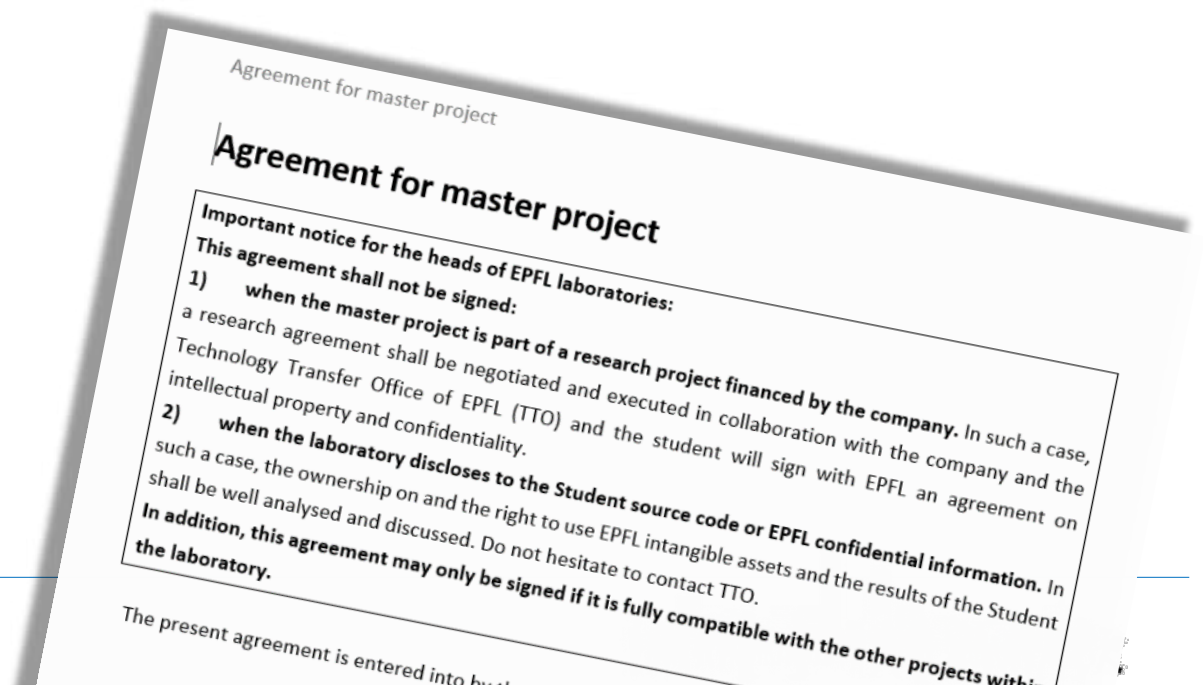
Access to best practices document here (for teachers only)



# Master project agreement



- The [master thesis agreement \(access for teachers only\)](#) specifies the commitments and responsibilities of the supervising teacher, the company and the student.  
This agreement **can be signed upon request of the teacher or the company**
- It defines IP and confidentiality aspects for any master thesis in industry without existing collaborations.
- It allows the academic supervisor to have access to the results of your work without having to sign an NDA.
- **As it is not mandatory**, amendments and changes requested by companies won't be accepted by the internship coordination or the legal department of EPFL



# Mandatory Steps for a Master project in Industry



- ❑ Find a master project in industry by contacting the professors of your section.
- ❑ A master subject can also be found through the IS-A Internship portal. In this case, it is mandatory to find a professor willing to supervise you before you accept the offer from the company. Make sure to comply with the following directions: [Coordinated Master Thesis in Industry](#)
- ❑ [Official starting dates](#) for master projects are determined at a school level. Other starting dates can be obtained on special request to your section.
- ❑ All administrative details of your master project in industry have to be settled between the employer and the professor supervising your work. A special [Master project agreement](#) (link only accessible to Professors) can be signed on request by the supervising professor or the partner company.
- ❑ Once all the details of your Master project have been settled, register your project in your study plan.
- ❑ Update your FRAC
- ❗ [General information](#) about Master's Projects

# Important remarks



- As an EPFL student doing an internship in industry, you act as an EPFL Ambassador. Thanks to your work and positive attitude, you will leave an important impression in the company.
- This aspect is not only important for your future professional career, but also for the EPFL internship program which will benefit from this lasting impression.



# Information and contacts



- For additional information, please visit the internship pages of SGM:
  - <https://sti.epfl.ch/research/institutes/igm/education/engineering-internship>
  
- EPFL webpage:
  - <https://www.epfl.ch/education/studies/en/rules-and-procedures/internships/>
  
- Depending on your inquiry, you can contact the following persons:



Hind Klinke  
STI  
Internship Coordinator



Alain Prenleloup  
SGM  
Adjunct to section director



Anne Mireille Legrand  
SGM  
Administration



Stéphanie Mottier  
STI-DO  
Administration

# Questions ?



Thank you for your attention  
And best of success for your internship campaign!





## EPFL – Internships Mechanical Engineering

- [More info and statistics](#)





# EPFL links to Industry

## □ Vice Presidency for Innovation

- Tech transfer
- Innovation Park
- Sponsored chairs
- Special programs
- Alliance

## □ Career Center

- Employer survey
- Jobs for Brains Recruitment platform
- Recruitment days
- Round tables
- Sponsorships
- EPFL Forum

## □ EPFL Alumni

- Network
- Events
- Magazine

## □ Section advisory boards

- Meeting every year

## □ Research labs; industrial projects

## □ Master Theses in Industry

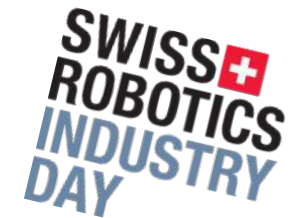
## □ Internships in Master curriculum



Transdisciplinary initiatives



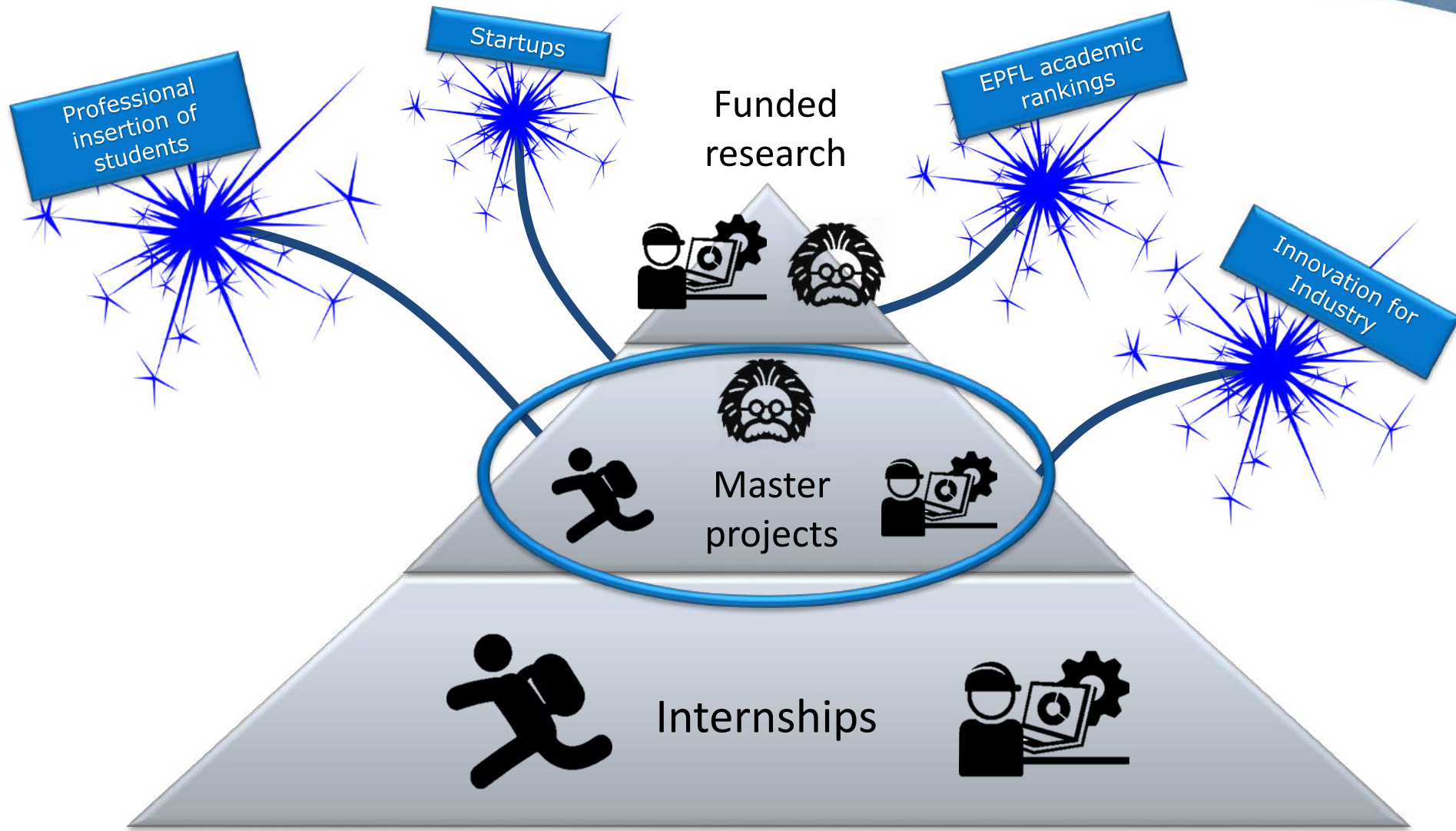
EPFL  
Innovation Park



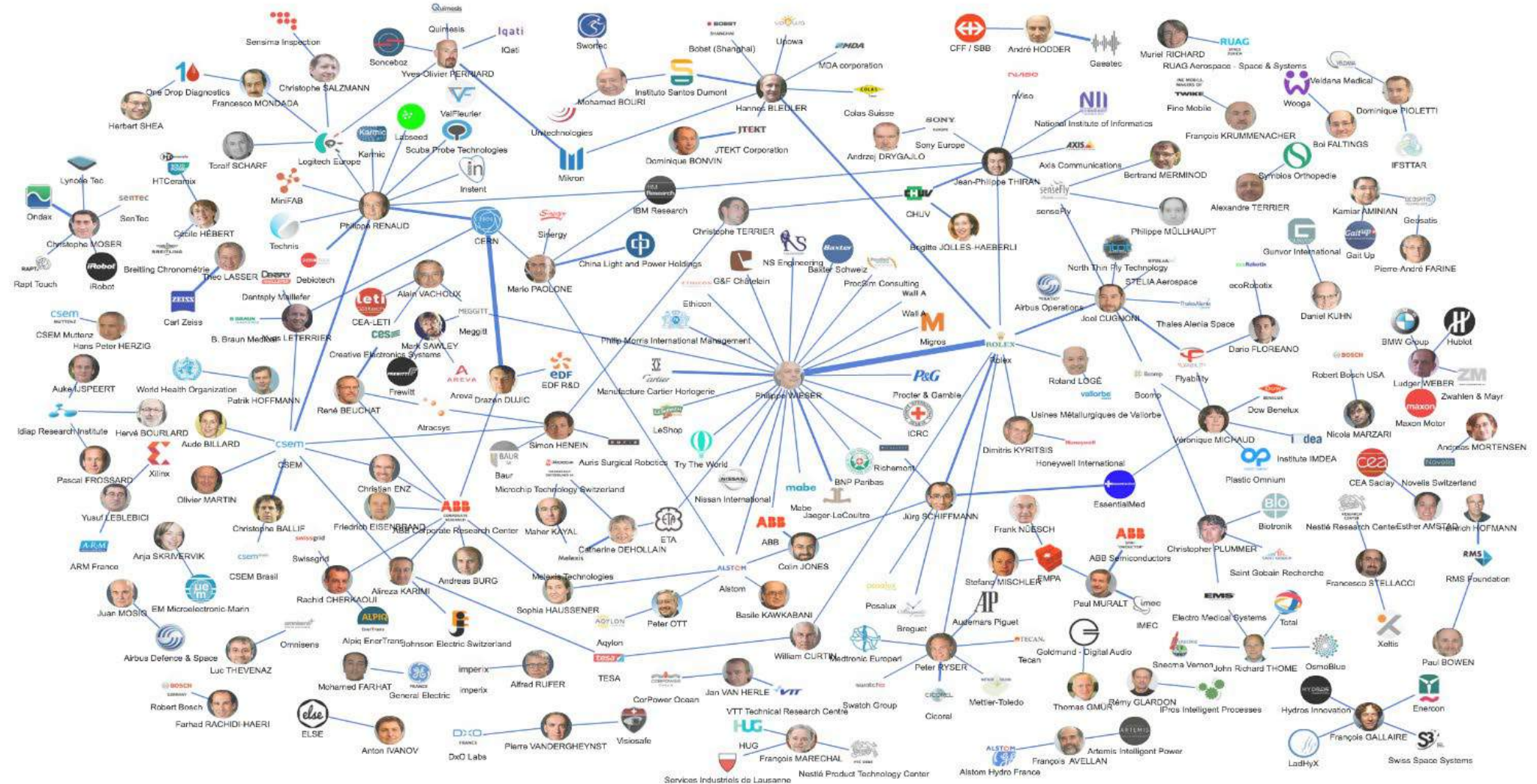
1'200 EPFL students  
each year



# Value chain from internships to industry funded research



# Master Thesis Interaction Map (Year 2015)



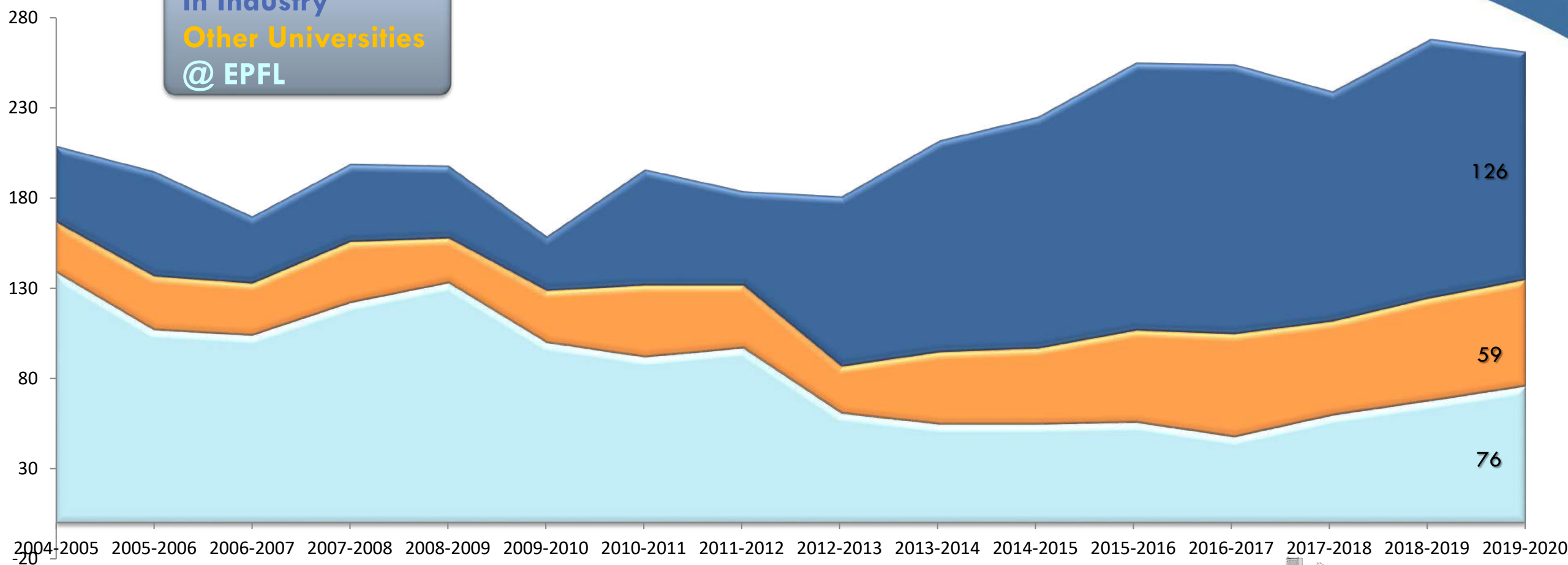
©John Maxwell



# STI Master Thesis location

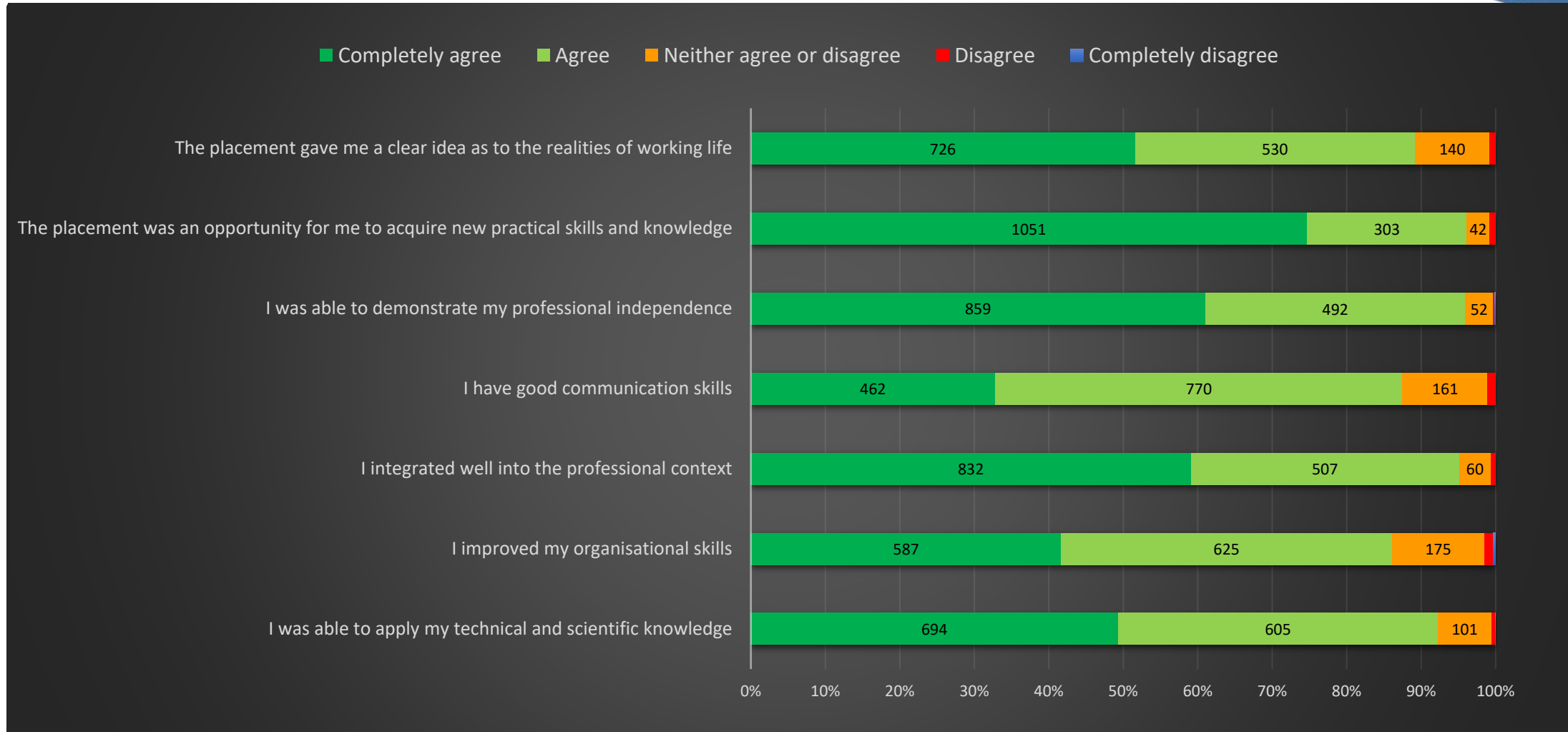


In Industry  
Other Universities  
@ EPFL



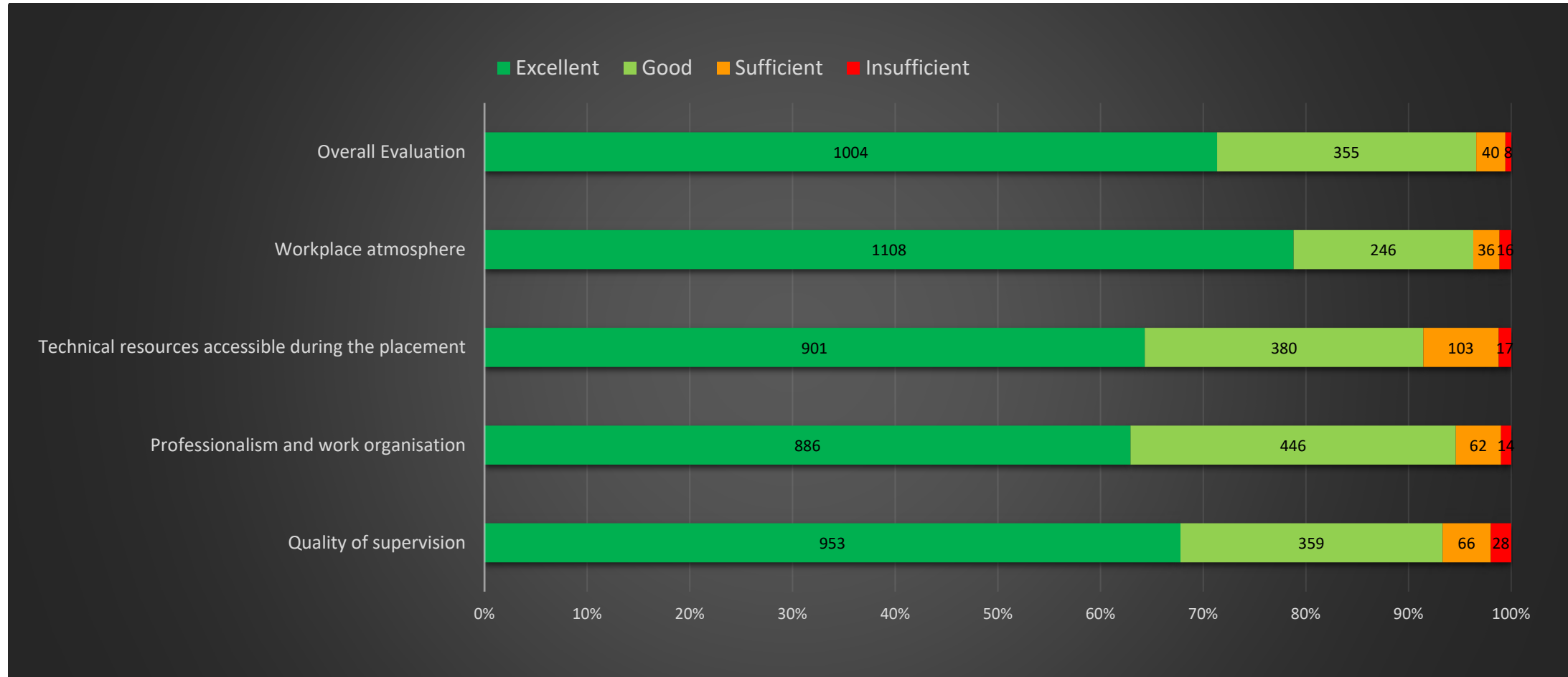
# Internship evaluations

Student auto-evaluation  
(Years 2015-2020, 1 400 students)

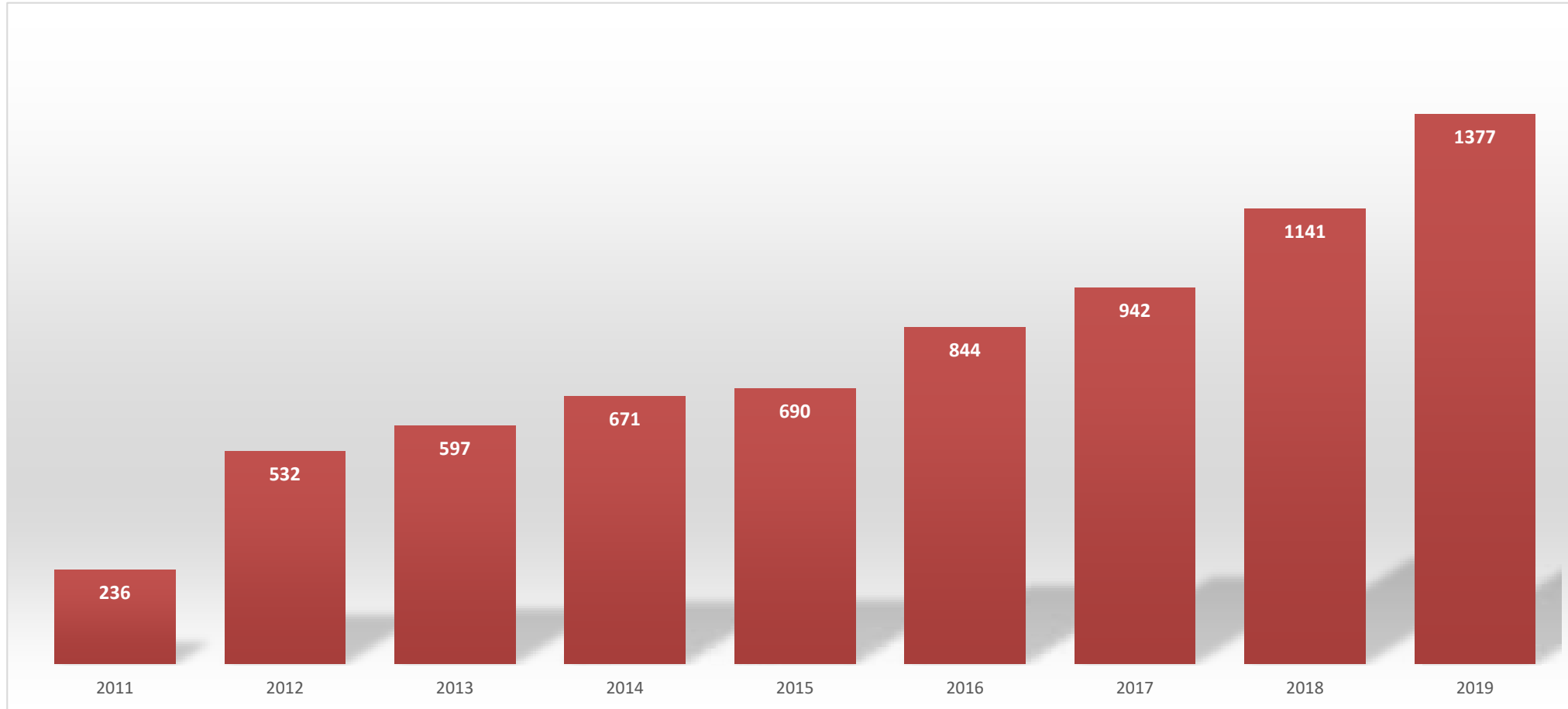


# Internship evaluations

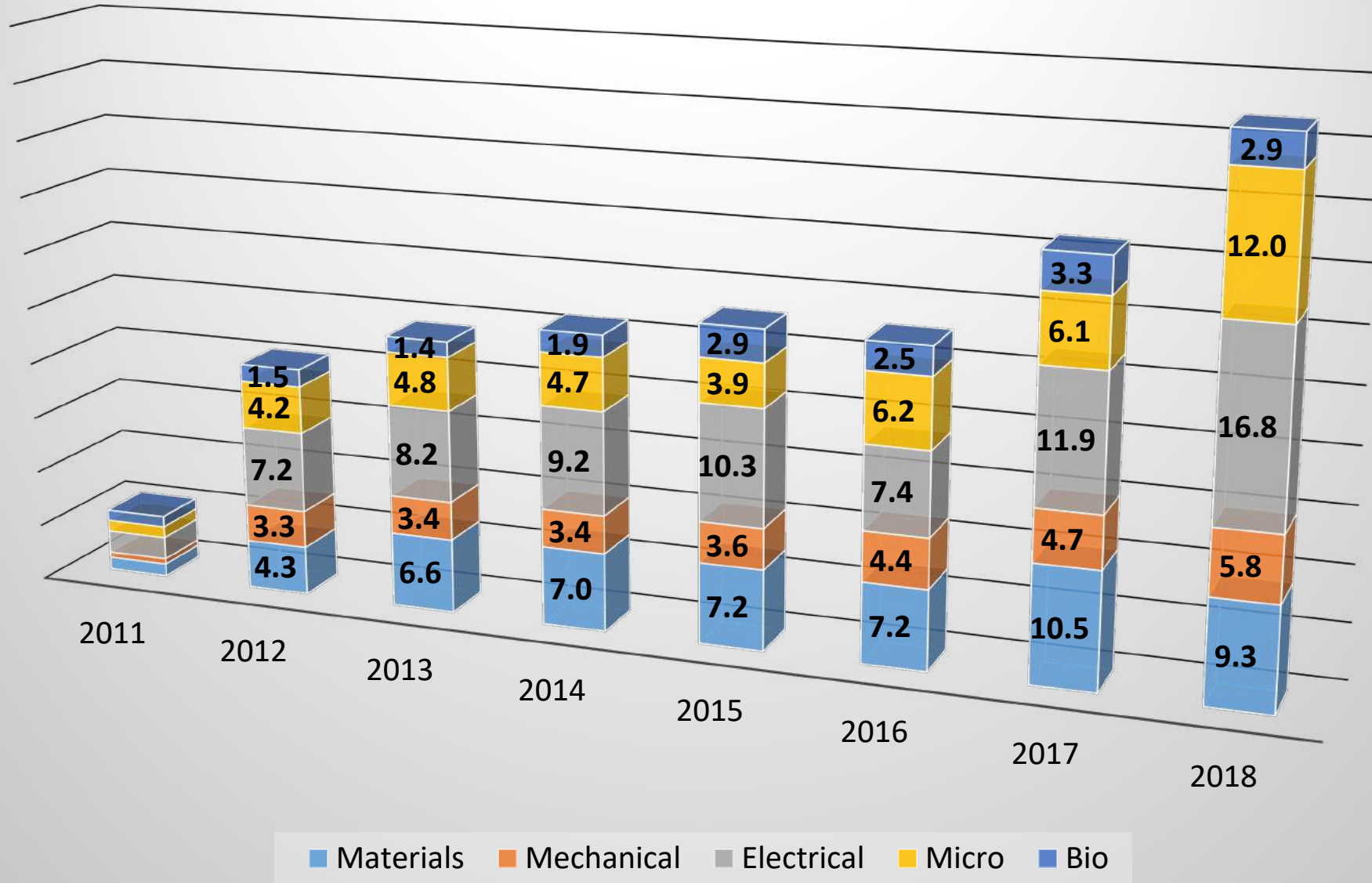
Feedback on the host company by student  
(Years 2015-2020, 1400 students)



# Internship offers from industry – to Engineering students



# Number of offers - Per Engineering student



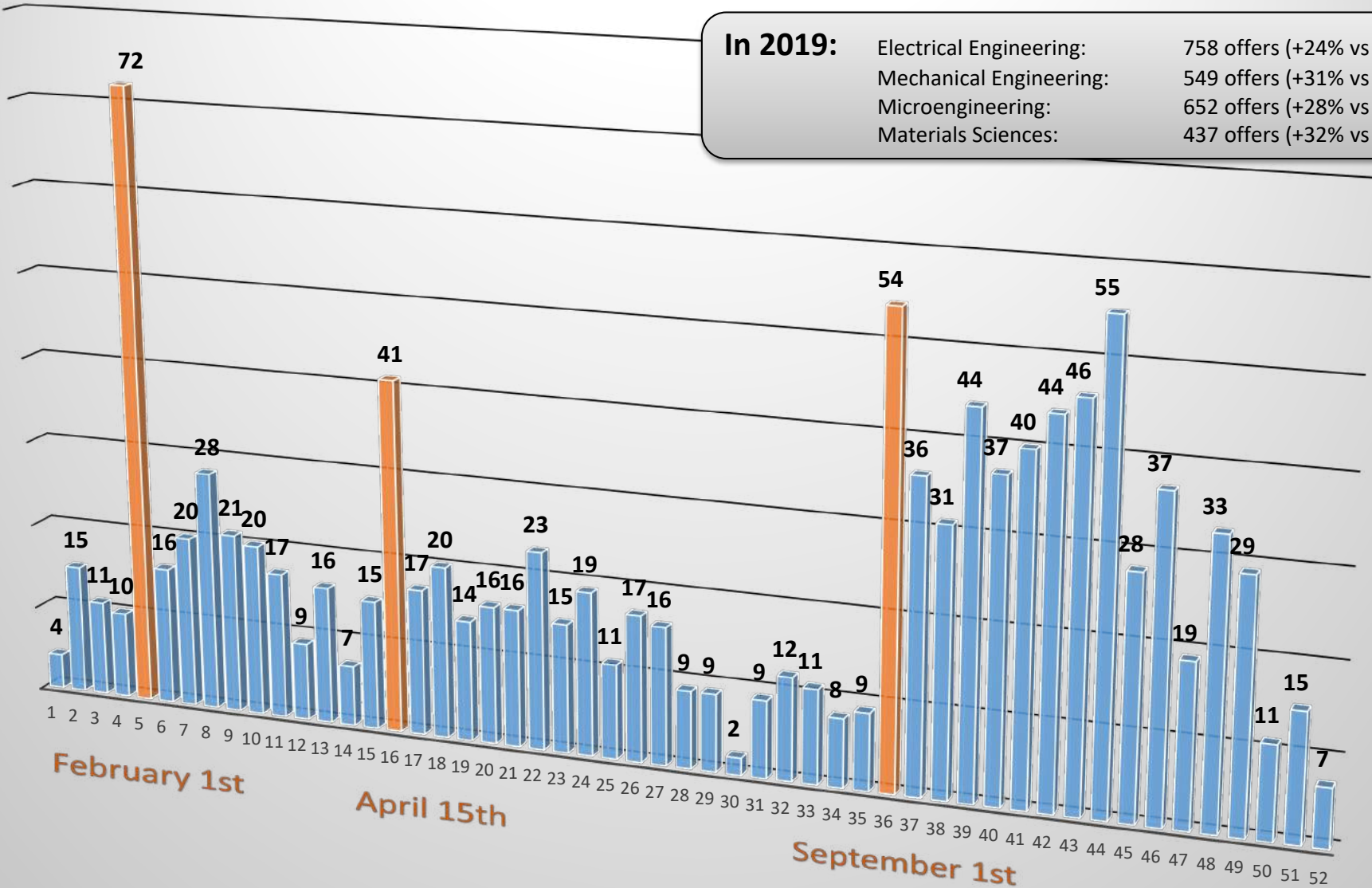


# Number of offers - Per week



**In 2019:**

Electrical Engineering:	758 offers (+24% vs 2018)
Mechanical Engineering:	549 offers (+31% vs 2018)
Microengineering:	652 offers (+28% vs 2018)
Materials Sciences:	437 offers (+32% vs 2018)



# Internship countries of STI students (2015-2019)

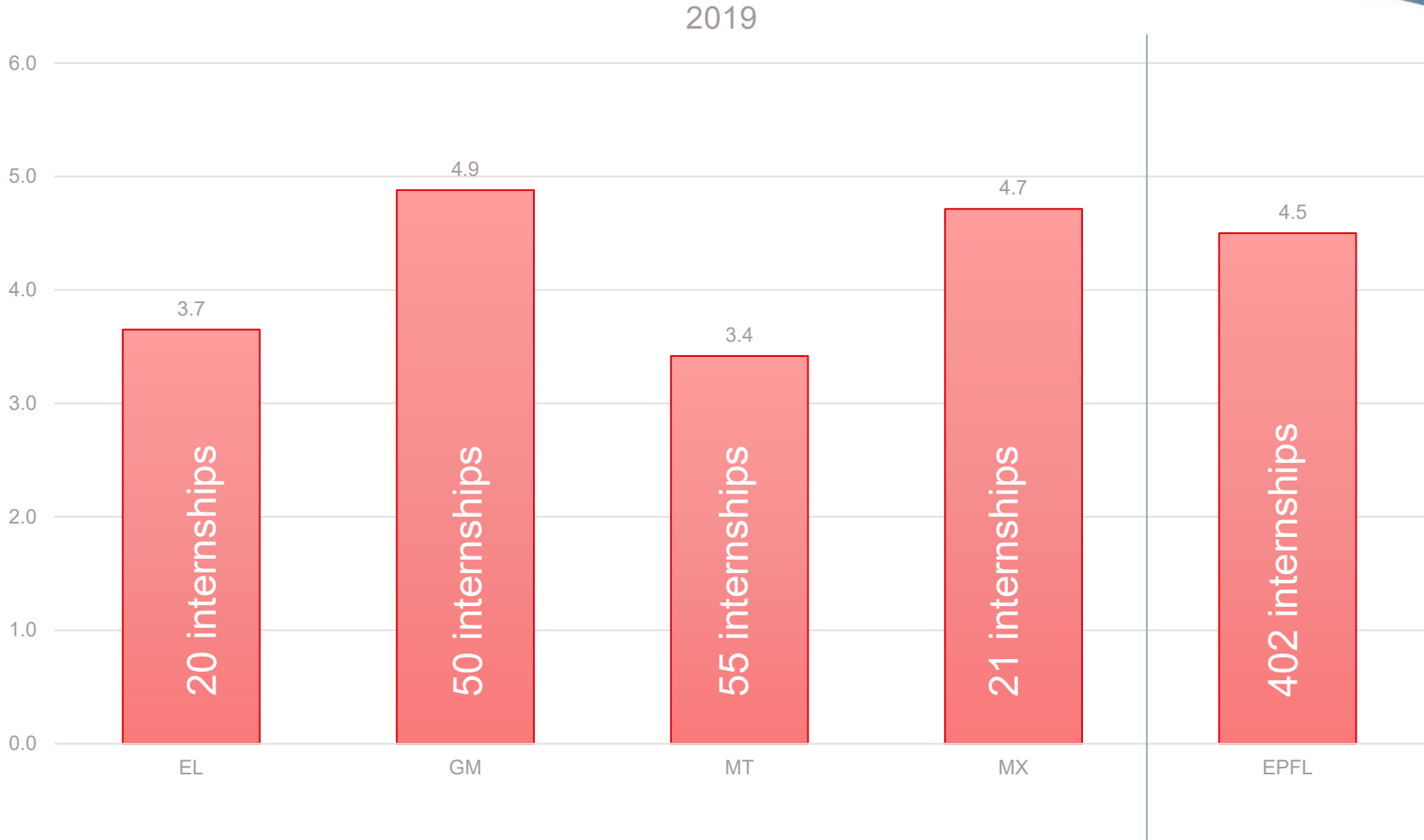


	STI				Somme :
	EL	GM	MT	MX	
Suisse	205	383	367	203	1,158
France	18	69	14	14	115
Allemagne	13	14	11	5	43
Etats-Unis	9	2	18		29
Japon	7	9	6	2	24
Pays-Bas	4	5	6	5	20
Chine	9	2	4	3	18
Belgique	3	4	6	3	16
Espagne	1	6	4	1	12
Suède	1	8	3		12
Royaume-Uni	1	4	4	1	10
Norvège	4	1	2	1	8
Singapour	3	1	3	1	8
Brésil		1	5		6

	STI				Somme :
	EL	GM	MT	MX	
VD	84	173	205	55	517
GE	22	71	35	32	160
NE	22	32	40	21	115
AG	31	19	4	21	75
ZH	9	22	23	14	68
BE	12	15	25	8	60
FR	5	20	7	11	43
VS	11	7	10	8	36
SO	1	4	5	11	21
LU	3	5	3	1	12
SG	1	1		9	11
JU		1	4	4	9
BL			3	3	6
BS	3		1	2	6



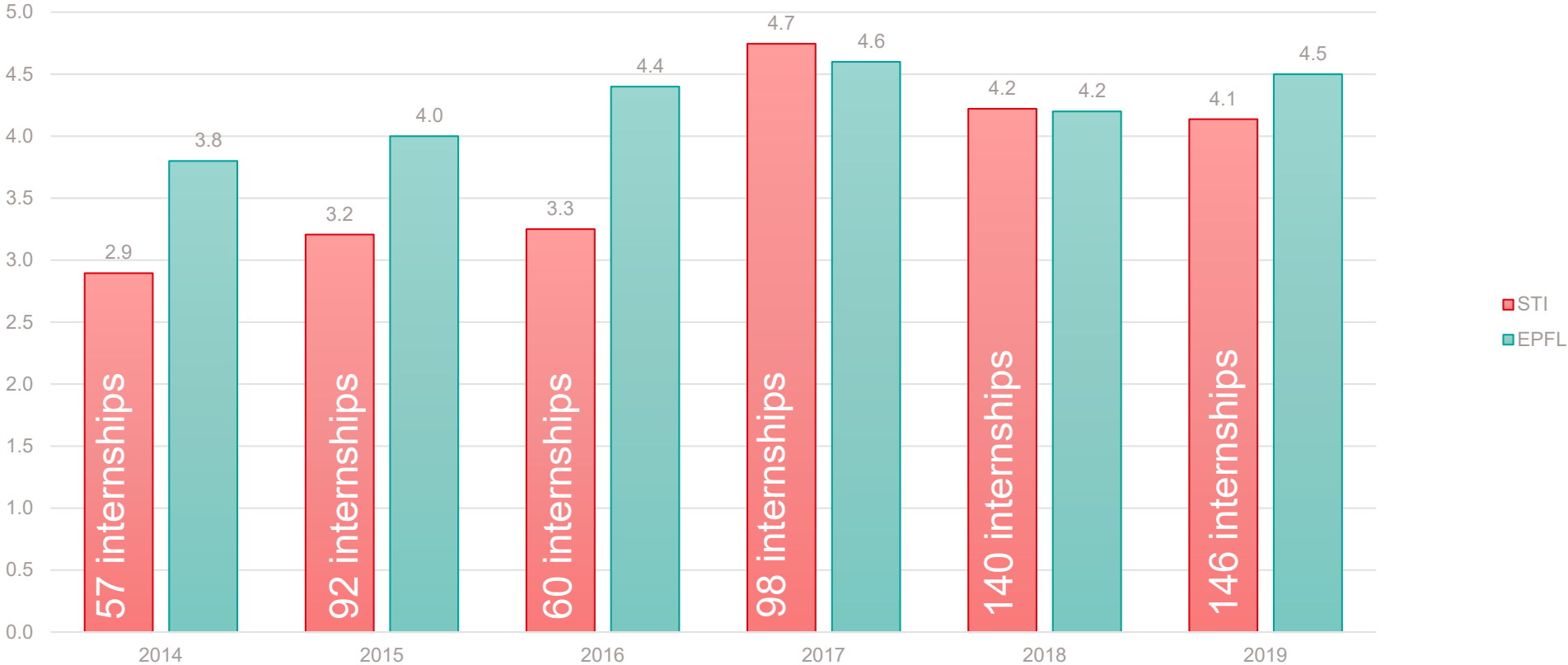
# Average number of applications through portal to secure the internship



# Average number of applications through portal to secure the internship



School of Engineering



# Average number of applications by Nationality to secure the internship (2014 – 2019)

