EPFL – Internships
Electrical and Electronic 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 future employees

- **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

EPFL

CDM
Management of technology

SV
Lifesciences

ENAC
Architecture

STI
Engineering

SB
Basic Sciences

I&C
Informatics et Communication

CDH
College of Humanities

Microengineering + Robotics
165 Ma1 students
187 Ma3 students

Material Sciences
44 Ma1 students
36 Ma3 students

Mechanical Engineering
106 Ma1 students
150 Ma3 students

Electrical Engineering + Energy Science and technology
81 Ma1 students
101 Ma3 students
Internship obligation

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

Models:

- **SCS**: Credited internship during the master course
- **STAP**: Detached internship but credited with the master’s project
- **PDME**: Master project in industry

<table>
<thead>
<tr>
<th>Models</th>
<th>Duration</th>
<th>Periods</th>
<th>Contact information</th>
</tr>
</thead>
</table>
| **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 GM |
| **Mechanical engineering**
  - 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

- **Short Internship (STAP)**
  - Immersion into industry
  - Familiarize with company processes
  - Apply transversal skills
  - Minimum duration of 8 weeks, up to 12 weeks
  - Evaluation report by student and industrial supervisor

- **Long Internship (SCS)**
  - Immersion into industry
  - Familiarize with company processes
  - Apply and analyze transversal skills
  - Acquire specific competences
  - Minimum duration of 17 weeks, up to 6 months
  - Written report to section

- **Master project in industry**
  - A research project in the company
  - Student applies the competences acquired during his master
  - Supervised by a Professor from an EPFL research lab
  - Written report and oral defense
  - 25 week duration (+1 week vacation)
SEL Master Curriculum

- **Courses + Minor or Courses + specialisation**
  - 90 credits

- **Short Internship**
  - 8-12 weeks
  - 30 credits

- **Master Project in Industry**
  - 25 weeks
  - 30 credits

- **Master Project in Academia**
  - 17 – 25 weeks

- **Courses + specialisation**
  - 60 credits

- **Long Internship**
  - 17 – 25 weeks
  - 30 credits

- **Master Project in Academia**
  - 17-25 weeks
  - 30 credits
When to place your internship / Master thesis?

- **Summer**: Master cycle 60 credits, Internship 8 weeks
- **Fall**: Minor/spec 30 credits
- **Spring**: PDM in academia 17 weeks, 30 credits
- **Summer**: Master cycle 60 credits
- **Fall**: Minor/spec 30 credits, PDM in academia 17 weeks, 30 credits
- **Spring**: Internship 8 weeks, Master project in Industry 25 weeks, 30 credits

PDM in academia in foreign Universities: 25 weeks
When to place your internship / Master thesis?

- **Summer**: Master cycle (60 credits)
- **Fall**: Internship (6 months, 30 credits)
- **Spring**: PDM in academia (17 weeks, 30 credits)
- **Fall**: PDM in academia in foreign Universities: 25 weeks
When to place your internship / Master thesis?

- Summer: Master cycle 60 credits
- Fall: Missing credits x credits
- Spring: Internship 6 months 30 credits
- Summer: PDM in academia 17 weeks 30 credits
- 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 2nd attempt in a lab at EPFL

EPFL
Validation of 30 credits for long internship (SCS)

Mandatory Internship Activity and Transversal Skills Analysis Report

This activity report is mandatory for all students performing a master in Electrical Engineering and wishing to acquire 30 credits for their industrial internship lasting more than 17 weeks. It can be written either in French or in English. It has to be sent to the STI internship coordinator the latest 2 weeks after the official ending of the internship.

This report has to be completed in addition to the regular evaluation report sent to students 2 weeks before internship ending.

The activity report should be 3 to 5 pages long with the following structure:

1. Student’s internship search campaign
2. Internship activity and technical skills report
3. Transversal skills report and analysis

Download the report template here
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:

  **Option 1**
  - Internship up to 6 months: FRAC "internship" Registered in Ba5
  - Start master FRAC "present" Registered in Ma2

  **Option 2**
  - Internship up to 6 months: FRAC "internship" Registered in Ba5
  - No master start FRAC "on leave" Semester does not count

  **Option 3**
  - Start master FRAC "present" Registered in Ma1

  **Option 4**
  - No master start for motivated reasons FRAC "on leave"
  - Internship up to 6 months: FRAC "internship" Registered in Ba6
  - Start 2nd master semester FRAC "present"

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.

- 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.

Announce your stay abroad to EPFL Safety domain

- [ ] http://securite.epfl.ch/voyages
- [ ] Comply with updated COVID-19 recommendations

**Safety during business and academic travels**

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](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](https://www.admin.ch/opc/fr/classified-compilation/20070993/index.html#a39) 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](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
EPFL – Internships
Electrical and Electronic 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.
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:
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.
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

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
Dear Master Student,
Dear PhD Candidate,

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

“Data Analytics @ Pictet with apero”

to be held at EPFL
on Wednesday, September 25, 2019
from 17:15 to 19:00
in room B4410
followed by an apero

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 ccap@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/
Linked’In
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.
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
End of January: Mailing to Industry
Mid-February
June: End of Spring Semester
August 1st: Possible 1st starting date
August 1st – September 30th

Internship 2-6 Months
PDM 25 weeks

Student applications sent to Industry every Monday 2:00 PM
Attribution process in the fall semester

- **Sept. 1st**: Mailing to Industry
- **End of September**:
- **December**: End of Fall Semester
- **Beginning of Spring Semester**: Possible 1st starting date
- **Mid-February – March 1st**
  - PDMe 25 weeks
  - Internship 2-6 Months

- **Student applications sent to Industry every Monday 2:00 PM**
Internship attribution, possible scenarios

1st application round
- Internship 1: Refused
- Internship 2: in progress
- Internship 3: Refused
- Internship 4: in progress
- Internship 5: in progress

2nd application round
- Internship 1: in progress
- Internship 2: in progress
- Internship 3: Refused
- Internship 4: Accepted
- Internship 5: in progress

3rd application round
- Internship 1: in progress
- Internship 2: in progress
- Internship 3: in progress
- Internship 4: Accepted
- Internship 5: in progress

4th application round
- Internship 1: in progress
- Internship 2: Cancel
- Internship 3: Cancel
- Internship 4: X Refer
- Internship 5: in progress

Within 3 days
- Accept
- Refuse

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
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:

☐ In case of a credited internship (only EE students):
  - Semester (choose the right one: MA1; MA2; MA3)
  - Status: Internship (authorized by the section)
  - Mention in the comments « Credited internship during master course (SCS) »

☐ In case of a long internship without credits
  - 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»
(See regulations for this on slide # 12)
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.
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 of EE. The signing of the agreement is mandatory.
- Transmit a copy of the agreement to the secretariat of EE.
- 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 according to this table FRAC EE
- In case of an SCS internship with associated credits, hand in the mandatory transversal skills report to the section deputy and internship coordinator. Latest deadline to hand in the report is 2 weeks after the internship termination.
- 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
- Professors and teachers propose master thesis projects with known partner companies
- 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

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

Compatibility with academic calendar

- IP owner(s)

Confidentiality

Eligibility of candidate for master thesis
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

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

Project starts under co-supervision by company and professor
## Master thesis in industry – offers on the internship portal

<table>
<thead>
<tr>
<th>Action</th>
<th>Stage</th>
<th>Entreprise mère</th>
<th>Localisation du stage</th>
<th>Févr-Sept (P1)</th>
<th>Jull- Fév (P2)</th>
<th>Jull-Sept (P3)</th>
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<th>Inscrits</th>
<th>Places</th>
<th>Prof</th>
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<td>à trouver (si PDM)</td>
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<td>Yverdon-les-Bains</td>
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<td>Ax en Provence</td>
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<td>Hôpitaux Universitaires de Genève</td>
<td>HUG Genève</td>
<td>✔️</td>
<td>✔️</td>
<td>18930</td>
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<td>2</td>
<td>Prof. Thiran Jean-Philippe</td>
<td>22.09.2017</td>
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<tr>
<td>Various internship positions in Motion analysis Startup for applications in Sports, Health and Gaming</td>
<td>🏛️</td>
<td>Gait Up</td>
<td>Renens</td>
<td>✔️</td>
<td>18922</td>
<td>Stage</td>
<td>1</td>
<td>2</td>
<td>12.09.2017</td>
<td></td>
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<tr>
<td>Various internship positions in Motion analysis Startup for applications in Sports, Health and Gaming</td>
<td>🏛️</td>
<td>Gait Up</td>
<td>Renens</td>
<td>✔️</td>
<td>✔️</td>
<td>18922</td>
<td>PDM coordonné</td>
<td>0</td>
<td>2</td>
<td>Prof. Aminian Kamal</td>
<td>12.09.2017</td>
<td></td>
</tr>
<tr>
<td>Printed freeform optics for light control</td>
<td>🏛️</td>
<td>CSEM SA Muttenz</td>
<td>Basel</td>
<td>✔️</td>
<td>18915</td>
<td>PDM ou Stage</td>
<td>0</td>
<td>1</td>
<td>à trouver (si PDM)</td>
<td>11.09.2017</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

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.

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)
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 EE.
- 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 Projects in Industry

- Official starting dates for master projects in industry are listed here. 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 according to this table FRAC EE

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 further information, please visit the internship page of your section:
  - [https://sti.epfl.ch/research/institutes/iel/internships/](https://sti.epfl.ch/research/institutes/iel/internships/)

- EPFL webpage:

- Depending on your inquiry, you can contact the following persons:

  - Hind Klinke
    STI
    Internship Coordinator

  - Philippe Gay-Balmaz
    SEL
    Adjunct to the SEL Director

  - Mrs Suzanne Manné
    SEL
    Administration

  - Stéphanie Mottier
    STI-DO
    Administration
Thank you for your attention
And best of success for your internship campaign!
EPFL – Internships
Electrical and Electronic Engineering

- More info and statistics
EPFL links to Industry

- **Vice Presidency for Innovation**
  - Tech transfer
  - Innovation Park
  - Sponsored chairs
  - Special programs
  - Alliance

- **Career Center**
  - Research labs; industrial projects
  - Selection advisory boards
    - Meeting every year

- **EPFL Alumni**
  - Network
  - Events
  - Magazine

- **Section advisory boards**
  - Employer survey
  - Jobs for Brains Recruitment platform
  - Recruitment days
  - Round tables
  - Sponsorships
  - EPFL Forum

- **Research labs; industrial projects**
  - Master Theses in Industry
  - Internships in Master curriculum

- **EPFL Alumni**
  - Network
  - Events
  - Magazine

- **Section advisory boards**
  - Meeting every year

- **Research labs; industrial projects**
  - Master Theses in Industry
  - Internships in Master curriculum
Value chain from internships to industry funded research
Internship evaluations

Student auto-evaluation
(Years 2015-2020, 1400 students)

The placement gave me a clear idea as to the realities of working life

- Completely agree: 726
- Agree: 530
- Neither agree or disagree: 140

The placement was an opportunity for me to acquire new practical skills and knowledge

- Completely agree: 1051
- Agree: 303
- Neither agree or disagree: 42

I was able to demonstrate my professional independence

- Completely agree: 859
- Agree: 492
- Neither agree or disagree: 52

I have good communication skills

- Completely agree: 462
- Agree: 770
- Neither agree or disagree: 161

I integrated well into the professional context

- Completely agree: 832
- Agree: 507
- Neither agree or disagree: 60

I improved my organisational skills

- Completely agree: 587
- Agree: 625
- Neither agree or disagree: 175

I was able to apply my technical and scientific knowledge

- Completely agree: 694
- Agree: 605
- Neither agree or disagree: 101
Internship evaluations

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

![Graph showing feedback ratings for various aspects.]

- **Overall Evaluation**: 1004 Excellent, 355 Good, 246 Sufficient, 40 Insufficient
- **Workplace atmosphere**: 1108 Excellent, 246 Good, 36 Sufficient, 16 Insufficient
- **Technical resources accessible during the placement**: 901 Excellent, 380 Good, 103 Sufficient, 17 Insufficient
- **Professionalism and work organisation**: 886 Excellent, 446 Good, 62 Sufficient, 24 Insufficient
- **Quality of supervision**: 953 Excellent, 359 Good, 66 Sufficient, 28 Insufficient
Internship evaluations

Company evaluation of the student (Years 2015-2020, 1400 STI students)
Internship offers from industry – to Engineering students
Number of offers - Per Engineering student

<table>
<thead>
<tr>
<th>Year</th>
<th>Materials</th>
<th>Mechanical</th>
<th>Electrical</th>
<th>Micro</th>
<th>Bio</th>
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<tbody>
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<td>3.3</td>
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<td>2012</td>
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<td>8.2</td>
<td>3.4</td>
<td>6.6</td>
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<td>9.2</td>
<td>3.4</td>
<td>6.6</td>
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<td>10.3</td>
<td>3.6</td>
<td>7.0</td>
</tr>
<tr>
<td>2015</td>
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<td>6.2</td>
<td>7.4</td>
<td>4.4</td>
<td>7.2</td>
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<tr>
<td>2016</td>
<td>3.3</td>
<td>6.1</td>
<td>11.9</td>
<td>4.7</td>
<td>7.2</td>
</tr>
<tr>
<td>2017</td>
<td>10.5</td>
<td>16.8</td>
<td>11.9</td>
<td>5.8</td>
<td>9.3</td>
</tr>
<tr>
<td>2018</td>
<td>2.9</td>
<td>12.0</td>
<td>16.8</td>
<td>2.9</td>
<td>9.3</td>
</tr>
</tbody>
</table>
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)

February 1st
- 15 offers
- 20 offers
- 17 offers
- 16 offers
- 11 offers
- 4 offers

March 1st
- 20 offers
- 17 offers
- 23 offers
- 19 offers
- 17 offers
- 9 offers

April 1st
- 16 offers
- 16 offers
- 15 offers
- 23 offers
- 19 offers
- 8 offers

April 15th
- 72 offers
- 28 offers
- 41 offers
- 54 offers
- 55 offers

September 1st
- 7 offers
- 9 offers
- 9 offers
- 44 offers
- 44 offers
- 37 offers

In 2018:
- Electrical Engineering: 622 offers
- Mechanical Engineering: 426 offers
- Microengineering: 527 offers
- Materials Sciences: 340 offers
## Internship countries of STI students (2015-2019)

<table>
<thead>
<tr>
<th>Country</th>
<th>EL</th>
<th>GM</th>
<th>MT</th>
<th>MX</th>
<th>Summe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suisse</td>
<td>205</td>
<td>383</td>
<td>367</td>
<td>203</td>
<td>1,158</td>
</tr>
<tr>
<td>France</td>
<td>18</td>
<td>69</td>
<td>14</td>
<td>14</td>
<td>115</td>
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<tr>
<td>Allemagne</td>
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<td>14</td>
<td>11</td>
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<tr>
<td>Etats-Unis</td>
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<td>2</td>
<td>18</td>
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<td>29</td>
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<tr>
<td>Japon</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>2</td>
<td>24</td>
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<tr>
<td>Pays-Bas</td>
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<td>6</td>
<td>5</td>
<td>20</td>
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<tr>
<td>Chine</td>
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<td>2</td>
<td>4</td>
<td>3</td>
<td>18</td>
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<tr>
<td>Belgique</td>
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<td>6</td>
<td>3</td>
<td>16</td>
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<td>4</td>
<td>1</td>
<td>12</td>
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<tr>
<td>Suède</td>
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<td>3</td>
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<tr>
<td>Royaume-Uni</td>
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<td>Norvège</td>
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<tr>
<td>Singapour</td>
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<td>1</td>
<td>8</td>
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<tr>
<td>Brésil</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
Average number of applications through portal to secure the internship

- EL: 3.7 applications
- GM: 4.9 applications
- MT: 3.4 applications
- MX: 4.7 applications
- EPFL: 4.5 applications

Total internships:
- 20 internships: 402 applications
- 50 internships: applications
- 55 internships: applications
- 21 internships: applications
- 402 internships: applications
Average number of applications through portal to secure the internship

<table>
<thead>
<tr>
<th>Year</th>
<th>STI</th>
<th>EPFL</th>
</tr>
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<tbody>
<tr>
<td>2014</td>
<td>2.9</td>
<td>3.8</td>
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<tr>
<td>2015</td>
<td>3.2</td>
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<tr>
<td>2018</td>
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<td>4.2</td>
</tr>
<tr>
<td>2019</td>
<td>4.1</td>
<td>4.5</td>
</tr>
</tbody>
</table>

School of Engineering

- 57 internships in 2014
- 92 internships in 2015
- 60 internships in 2016
- 98 internships in 2017
- 140 internships in 2018
- 146 internships in 2019
Average number of applications by Nationality to secure the internship (2014 – 2019)