EPFL – Internships
Materials Sciences and Engineering

- General context
- Administrative procedures
- Pep-talk and statistics

Sebastian Gautsch
 Coordinateur des stages STI
STI Internship Coordination

- CDM: Management of technology
- SV: Lifesciences
- ENAC: Architecture
- STI: Engineering
- SB: Basic Sciences
- I&C: Informatics et Communication
- CDH: College of Humanities

- Microengineering + Robotics
  - 131 Ma1 students
  - 116 Ma3 students

- Material Sciences
  - 52 Ma1 students
  - 45 Ma3 students

- Mechanical Engineering
  - 134 Ma1 students
  - 96 Ma3 students

- Electrical Engineering
  - 48 Ma1 students
  - 51 Ma3 students
Internship obligation

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

<table>
<thead>
<tr>
<th>STAP</th>
<th>PDME</th>
<th>Detached internship but credited with the master’s project</th>
<th>Master project in industry</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Models</th>
<th>Duration</th>
<th>Periods</th>
<th>Contact information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical and electronics engineering</td>
<td>STAP</td>
<td>Min. 8 weeks</td>
<td>After bachelor, after MA2 or MA3</td>
</tr>
<tr>
<td></td>
<td>SCS (30 credits)</td>
<td>4-6 months</td>
<td>After MA2</td>
</tr>
<tr>
<td></td>
<td>PDME</td>
<td>25 weeks</td>
<td>During the master project</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>STAP</td>
<td>Min. 8 weeks</td>
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</tr>
<tr>
<td></td>
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<td>25 weeks</td>
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<td></td>
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<td></td>
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<td>During the Master project</td>
</tr>
</tbody>
</table>
Mandatory Internship or Master Project in Industry

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

- Summer:
  - Master cycle: 60 credits
  - Internship: 8 weeks

- Fall:
  - Minor/spec: 30 credits

- Spring:
  - Master project in Industry: 25 weeks, 30 credits

- Summer:
  - Master cycle: 60 credits
  - Internship: 8 weeks

- Fall:
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- Spring:
  - PDM in academia: 17 to 25 weeks, 30 credits

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  - PDM in academia: 17 to 25 weeks

- **Summer**
  - Master project in Industry: 25 weeks
  - PDM in academia: 30 credits

- **Fall**
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:

<table>
<thead>
<tr>
<th>Option</th>
<th>Summer</th>
<th>Fall semester</th>
<th>Spring semester</th>
<th>Summer</th>
<th>Fall semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 1</strong></td>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba5</td>
<td>start master FRAC “present” Registered in Ma2</td>
<td>No master start FRAC “on leave” Semester does not count</td>
<td>Start master FRAC “present”</td>
<td></td>
</tr>
<tr>
<td><strong>Option 2</strong></td>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba5</td>
<td>start master FRAC “present” Registered in Ma2</td>
<td>No master start FRAC “on leave” Semester does not count</td>
<td>Start master FRAC “present”</td>
<td></td>
</tr>
<tr>
<td><strong>Option 3</strong></td>
<td>Start master FRAC “present” Registered in Ma1</td>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba6</td>
<td>No master start FRAC “on leave” Semester does not count</td>
<td>Start 2nd master semester FRAC “present”</td>
<td></td>
</tr>
<tr>
<td><strong>Option 4</strong></td>
<td>No master start for motivated reasons FRAC “on leave”</td>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba6</td>
<td>Start 2nd master semester FRAC “present”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

- In Industry
- Other Universities
- @ EPFL

**Electrical Engineering**
- Less students for EPFL research projects

**Microengineering**
- Questionable academic quality of a portion of industrial master thesis
- Good professional insertion

**Materials Sciences**
- Limited international outreach

**LifeSciences**
- Potential increase of industry-academia collaborations

**Mechanical Engineering**
- 36%
- 20%
- 44%
- 63%
- 9%
- 28%
- 23%
- 43%
- 34%
- 29%
- 48%
- 24%
- 71%
- 19%
- 10%
Current habits for establishing master thesis in industry

- Companies get in touch with research labs to propose master thesis topics
- Companies can accept students for internship proposals and accept the format change to master thesis projects
- Students contact professors of their section to ask for existing industrial projects
- Students can apply for internships and have it validated as master thesis projects by 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 proposals from students before accepting it as master thesis projects
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 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>Juil-Fév (P2)</th>
<th>Juil-Sept (P3)</th>
<th>N° du stage</th>
<th>Format</th>
<th>Inscrits</th>
<th>Place</th>
<th>Prof</th>
<th>Date de création du stage</th>
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</thead>
<tbody>
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<tr>
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<td>1</td>
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<td>Constellium Valais SA</td>
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<tr>
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<tr>
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<tr>
<td>Various internship positions in Motion analysis Startup for applications in Sports, Health and Gaming</td>
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<td>0</td>
<td>1</td>
<td></td>
<td>1.09.2017</td>
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</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, ...).
- Organize a meeting between the teacher 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.
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 positioned to act on an ongoing basis as a means of achieving certain 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 be performed in a company, the master project must imperatively include a research and an academic dimension defined and controlled by the professor. Although it is performed in a company, it is essential that the research carried out by the laboratory. It is also important that the laboratory’s research be carried out 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 if the terms discussed with the company do 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.
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 between 1’500-2’500 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, ...).
Internships done during the bachelor degree are not accepted for validation. Exceptions can be granted in the following cases:

- Internships done after your bachelor degree
  - The internship must be accepted by the section deputy
  - The internship duration must be at least 8 weeks
  - The ending should not be further than 1 year apart from your master beginning date.
  - An evaluation report or a work certificate has to be presented to the section deputy.

- Industrial experiences of at least 1 year related to the field of the future master studies can be accepted for validation
  - A valid work certificate has to be presented to the section deputy.
Administrative aspects and Procedures
Work authorization
(not required for Master Projects with no 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 2-6 month internship have to be announced at the cantonal office.

☐ It is the company’s responsibility to request this authorization at the proper working office of their canton/country.

☐ It requires up to 8 weeks to obtain this authorization from the cantonal offices.

☐ It is recommended 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 is 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”.

---

Example: “As I’m a non-EU/EFTA resident, your company is 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”.
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 the student can find an alternative to his personal quest for finding an internship.
- Access to the EPFL portal is given through the student’s IS-Academia account.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Monaires</th>
<th>H. Tchalal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrechemistry engineering</td>
<td>Energy storage in power systems: technologies, applications and future</td>
<td></td>
</tr>
<tr>
<td>Industrial electronics I</td>
<td>Hydrogen energy systems</td>
<td></td>
</tr>
<tr>
<td>Mathematics of data: from theory to computation</td>
<td>Mathematically control and coordination systems</td>
<td></td>
</tr>
<tr>
<td>Principles of semiconductor devices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Internships showroom (stu)**

Access to the portal is given through the student’s IS-Academia account.
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 by these alternative ways needs to be approved by your section. Please contact the section deputy as soon as you have found an opportunity.
Ingénieurs du Monde

Qui sommes-nous?

Ingénieurs en devenir, nous nous intéressons aux problématiques liées à la coopération scientifique Nord-Sud et au développement.

Nous contacter

Ecrivez-nous à stage.idm@listes.epfl.ch

On vous offre une bourse...

- Qui couvre frais de voyage et de visa
- Pour un stage
  - Dans un pays en développement
  - Pour un projet durable
  - De minimum 8 semaines

Allez regarder les offres disponibles sur notre plateforme!

http://idm.epfl.ch/stages/
WHAT IS AN XGRANT?

Launched in October 2017, the XGrant program encourages and supports EPFL Bachelor and Master students’ entrepreneurial drive! If you are developing your start-up, contact us at xgrant@epfl.ch!

WHAT DOES IT OFFER?

- Awards up to CHF10'000
- Workshops
- Immersive Trips. Berlin & San Francisco
- Information Guidance
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.

- This opportunity will be offered to 3-4 projects per year and starts as of September 2018. Students will have to go through a selection process, starting by contacting xgrant@epfl.ch.

- Further communication will be undertaken throughout the year by the faculties internship coordinators.
EPFL Alumni network

- EPFL students have access to the Alumni network
  - Website: alumni.epfl.ch
  - Pocketcampus app
Start working with Linked’In

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilles Pillonel</td>
<td>R&amp;D Project Manager at BOBST</td>
</tr>
<tr>
<td>Adi Vardi</td>
<td>MSc Microtechnique EPFL, spécialisation en Robotique et Systèmes Autonomes</td>
</tr>
<tr>
<td>Adrian Troemel</td>
<td>Candidat MBA à Rice Univeristy</td>
</tr>
<tr>
<td>Adrien Briod</td>
<td>Co-founder &amp; CTO of Flyability SA</td>
</tr>
<tr>
<td>Adrien Béraud</td>
<td>Ring project director chez Savoir-faire Linux</td>
</tr>
<tr>
<td>Adrien Chabbey</td>
<td>Area Sales Manager chez Fischer Connectors</td>
</tr>
</tbody>
</table>
Find an Internship during EPFL’s Forum

Retrouvez le Forum EPFL

du 8 au 12 octobre 2018

au SwissTech Convention Center

Forum.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.
- Once you have accepted the offer
  - No withdrawal from the accepted position!
  - Kindly notify all other companies you had privileged contact with
End of January: Mailing to Industry
Mid-February
June: End of Spring Semester
August 1st: Possible 1st starting date

Internship 2-6 Months
PDMe 25 weeks

1st student applications sent to Industry
Following student applications sent to Industry every Monday 2:00 PM

August 1st - September 30th

Attribution process in the spring semester
Attribution process in the fall semester

- Sept. 1st: Mailing to Industry
- End of September: Following student applications sent to Industry every Monday 2:00 PM
- December: End of Fall Semester
- Beginning of Spring Semester: Possible 1st starting date
- PDMe 25 weeks: Mid-February – March 1st
- Internship 2-6 Months
Internship attribution, possible scenarii

<table>
<thead>
<tr>
<th>Application Round</th>
<th>Internship 1</th>
<th>Internship 2</th>
<th>Internship 3</th>
<th>Internship 4</th>
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</tr>
<tr>
<td>4th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Within 3 days

- Accept
- Refuse

Master thesis: Don’t accept without academic supervisor
Register internships found by your own

- Submit a 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.

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<table>
<thead>
<tr>
<th>Action</th>
<th>Internship</th>
<th>Company (top)</th>
<th>Assignment location</th>
<th>Févr-Sept (P1)</th>
<th>Juil-Sept (P2)</th>
<th>Internship number</th>
<th>Format</th>
<th>Registered</th>
<th>Places</th>
<th>Prof</th>
<th>Creation date of the internship</th>
</tr>
</thead>
<tbody>
<tr>
<td>📐📊</td>
<td>Industrial Analytics, IoT, and Mobiles</td>
<td>Schindler Aufzüge AG</td>
<td>Ebikon</td>
<td>✔️</td>
<td></td>
<td>19094</td>
<td>Internship</td>
<td>0</td>
<td>1</td>
<td>20.09.2017</td>
<td></td>
</tr>
<tr>
<td>🛠️♀️</td>
<td>Temperature mapping and monitoring of a complex device</td>
<td>CERN - European Organization for Nuclear Research</td>
<td>CERN, Geneva, Switzerland</td>
<td>✔️</td>
<td></td>
<td>19088</td>
<td>Internship</td>
<td>0</td>
<td>1</td>
<td>20.09.2017</td>
<td></td>
</tr>
</tbody>
</table>
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 1h30:

**This fall semester**
1. Understanding recruiters (November ‘16)
2. Reviewing the CV
3. The motivation letter

**Next spring semester**
4. The Job interview
5. Communication and organization at work

Each course will be given 2x in English and 5x in French
Information and mandatory registration here: [https://bookwhen.com/stages](https://bookwhen.com/stages)
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
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) »
Announce your stay abroad to EPFL Safety domain

http://securite.epfl.ch/voyages

**NEWS**  SAFETY, HEALTH & PREVENTION

Create an account  Help

**Assistance program when travelling abroad**

02.06.14 - You are travelling abroad for business or studies?

As a collaborator, doctoral-assistant or student of EPFL, the Safety, Prevention and Health Domain (DSPS) provides you an assistance program when travelling abroad. Since the 1st of June, a partnership with International SOS has been set up to help you to prepare your journeys and to assist you during your business travels abroad (conferences, seminars, training, etc.). Security and medical informations on your country of destination are available, as well as the access to a call centre to assist you 24/7. For any additional information, please consult the website: securite.epfl.ch/travel

**NB.** Private travels are not covered by this program!

**Author:** Sylvia Fabris  **Source:** Sécurité, Prévention et Santé

---

**SUBSCRIPTION**

- Receive an email for each new article

**Unsubscribe**

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**LINKS**

- **safety**
- **All Safety, health & prevention news**
- **All EPFL news**
Internship agreement

- The internship agreement 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 rare cases, but the students must carefully read and comply with the content (IP issues, confidentiality, insurances and especially non-competition clauses).
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.
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).
Mandatory Steps for a 2-6 month internship

1. Find an internship position and in case you have found it without using the IS-A portal, have the subject validated by your section deputy.

2. Inform the STI coordinator that you have found your internship.

3. Cancel all ongoing applications by gently notifying the companies. This step is extremely important to keep a good relationship with potential future employers.

4. Transmit the EPFL internship agreement to the employer and have it filled out and signed by the employer and the section deputy. The signing of the agreement is mandatory.

5. 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.

6. 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.

7. In case your internship is during a semester, make sure to update your FRAC according to the following table

8. At the end of the internship, fill out the evaluation form 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 form.
1. Find a master project in industry by contacting the professors of your section.

2. 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. The STI Initiative on Coordinated Master Projects is promoting offers through the portal.

3. Official starting dates for master projects in industry are as follows:
   - Beginning of spring semester - registration deadline for spring semester courses (2 weeks after)
   - August 1st - registration deadline for fall semester courses (end of September)

Other starting dates can be obtained on special request to your section.

4. All administrative details of your master project in industry have to be settled between the employer and the professor supervising your work. On request from the professor or the company, the EPFL master project agreement can be signed.

5. Once all the details of your Master project in Industry have been settled, enter the details of your PDMe in your study plan

6. Make sure to update your FRAC according to the following table
EPFL internships on the web

Section webpage: http://sti.epfl.ch/page-74480-en.html

EPFL webpage: http://internships.epfl.ch
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 to 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.
STI Internship Program

- Pep talk for Students
- Some statistics
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
Internship evaluations

Student auto-evaluation
(Years 2015-2018, 742 students)
Internship evaluations

Feedback on the host company by student (Years 2015-2018, 742 students)

<table>
<thead>
<tr>
<th>Category</th>
<th>Excellent</th>
<th>Good</th>
<th>Sufficient</th>
<th>Insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Evaluation</td>
<td>508</td>
<td>207</td>
<td>23</td>
<td>106</td>
</tr>
<tr>
<td>Workplace atmosphere</td>
<td>586</td>
<td>133</td>
<td>77</td>
<td>15</td>
</tr>
<tr>
<td>Technical resources accessible during the placement</td>
<td>465</td>
<td>205</td>
<td>61</td>
<td>7</td>
</tr>
<tr>
<td>Professionalism and work organisation</td>
<td>447</td>
<td>252</td>
<td>36</td>
<td>7</td>
</tr>
<tr>
<td>Quality of supervision</td>
<td>482</td>
<td>206</td>
<td>40</td>
<td>14</td>
</tr>
</tbody>
</table>
Internship evaluations

Company evaluation of the student (Years 2015-2018, 742 students)

<table>
<thead>
<tr>
<th>Category</th>
<th>Excellent</th>
<th>Good</th>
<th>Sufficient</th>
<th>Insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Evaluation</td>
<td>468</td>
<td>252</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

- **Independence**
  - Capacity to self-evaluate and to respond constructively to feedback: 372 | 298 | 35 | 10
  - Ability to access sources of information and to evaluate them: 427 | 263 | 33 | 7
  - Ability to present and defend her/his own ideas: 358 | 303 | 57 | 7

- **Communication**
  - Interpersonal skills and engagement, including in a multicultural context: 306 | 474 | 235 | 20
  - Communication (clarity, reasoning, self-confidence): 309 | 342 | 80 | 5
  - Written communication (structure, clarity, coherence of reasoning): 300 | 345 | 55 | 5

- **Integration in the professional world**
  - Quality of the work delivered: 456 | 263 | 30
  - Capacity to work in teams: 462 | 205 | 27
  - Understanding company procedures/rules and for their professional ethical codes: 593 | 170 | 25

- **Planning and management of work tasks**
  - Work planning, monitoring of activities, and management of emergent issues: 360 | 299 | 53 | 19
  - Evaluation of resources required: 258 | 342 | 56
  - Definition of work objectives and management of priorities: 322 | 337 | 56

- **Application of scientific and technical knowledge**
  - Mastery of domain-specific methodologies: 342 | 334 | 36
  - Ability to resolve complex problems: 390 | 297 | 28
  - Technical skills and knowledge: 450 | 282 | 20
EPFL links to Industry

Top-Down

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

- Career Center
  - Alumni survey
  - Jobs for Brains Recruitment platform
  - Recruitment days
  - Round tables
  - Sponsorships
  - EPFL Forum

- EPFL Alumni
  - Network
  - Events
  - Magazine

- Section advisory boards
  - Meeting ~every 2 years

Bottom-up

- Research labs; industrial projects
- Master Thesis in Industry
- Internships in Master curriculum
Value chain from internships to industry funded research

- Internships
- Master projects
- Funded research
- Startups
- EPFL academic rankings
- Innovation for Industry

Professional insertion of students
Location of Master Project since 2004

- **In Industry**: 36%, 20%, 44%
- **Other Universities**: 63%, 9%, 28%
- **@ EPFL**: 23%, 43%, 34%
- **Materials Sciences**: 29%, 48%, 24%
- **LifeSciences**: 71%
- **Mechanical Engineering**: 19%, 10%
Save the date:
STI-SV Industry Day
Wednesday March 20th 2019
STI-SV Industry Day: Thursday March 20th 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8h30 - 9h00</td>
<td>Enregistrement et café</td>
</tr>
<tr>
<td>9h00 - 9h05</td>
<td>Message de Bienvenue</td>
</tr>
<tr>
<td>9h05 - 9h20</td>
<td>Keynote académique (MIT, ?)</td>
</tr>
<tr>
<td>9h20 - 9h30</td>
<td>Info stages et projets de masters</td>
</tr>
<tr>
<td>9h30 - 10h30</td>
<td><strong>10 présentations académiques</strong></td>
</tr>
<tr>
<td></td>
<td>Engineering for life science and health</td>
</tr>
<tr>
<td></td>
<td>Robotics and Manufacturing</td>
</tr>
<tr>
<td>10h30 - 11h15</td>
<td>Pause café et expo industrielle</td>
</tr>
<tr>
<td>11h15 - 12h15</td>
<td><strong>10 présentations académiques</strong></td>
</tr>
<tr>
<td></td>
<td>Data enabled Engineering</td>
</tr>
<tr>
<td></td>
<td>Materials and Processes</td>
</tr>
<tr>
<td>12h30 - 13h45</td>
<td>Lunch et expo industrielle</td>
</tr>
<tr>
<td>13h45 - 13h50</td>
<td>Introduction au programme de l’après-midi</td>
</tr>
<tr>
<td>13h50 - 15h15</td>
<td><strong>15 présentations industrielles</strong></td>
</tr>
<tr>
<td></td>
<td>Entreprises, start-ups et organisations</td>
</tr>
<tr>
<td></td>
<td>Témoignages de projets d’étudiants</td>
</tr>
<tr>
<td>15h15 - 16h00</td>
<td>Pause café et expo industrielle</td>
</tr>
<tr>
<td>16h00 - 17h25</td>
<td><strong>15 présentations industrielles</strong></td>
</tr>
<tr>
<td></td>
<td>Entreprises, start-ups et organisations</td>
</tr>
<tr>
<td></td>
<td>Témoignages de projets d’étudiants</td>
</tr>
<tr>
<td>17h25 - 17h30</td>
<td>Clôture de la journée</td>
</tr>
<tr>
<td>17h30 - 19h00</td>
<td>Apéro et expo industrielle</td>
</tr>
</tbody>
</table>

**Présentations académiques**

Session 1: Engineering for life science and health
- Stéphanie Lacour – Lab for soft bioelectronic interfaces
- Diego Ghezzi – Medtronic chair in neuroengineering
- Sebastian Maerki – Lab. of biological network characterization
- Hatice Altug – Bionanophotonic systems lab.
- Auke Ijspeert – Biorobotics lab.

Session 2: Robotics and Manufacturing
- Vivek Subramanian – Subramanian group
- Yves Bellouard – Galatea lab.
- Selman Sakar – Microbiorobotic systems lab.
- Jamie Paik – Reconfigurable robotics lab.
- Guillermo Villanueva – Advanced nanomechanical systems lab.

**Présentations industrielles**

Session 3: Data enabled Engineering
- Volkan Cevher – Lab. for information and interference systems
- Aude Billard – Learning algorithms and systems lab.
- Pascal Frossard – Signal processing lab. 4
- Van de Ville – Medical image processing lab.
- David Atienza – Embedded systems lab.

Session 4: Materials and Processes
- Fabien Sorin – Lab. of photonic materials and fibre devices
- Yves Leterrier – Lab. of processing and advanced composites
- Esther Amstad – Soft materials lab.
- Pedro Reis – Flexible structures lab.
STI Internship offers between 2012 and 2016

Since 2012:
- 580 companies
- 2’400 offers

Switzerland: 66%
France: 17%
Rest of Europe: 11%
USA/Asia: 6%

At least 1 offer
More than 5 offers

In 2017:
- Electrical Engineering: 593 offers (+19% vs 2016)
- Mechanical Engineering: 386 offers (+15% vs 2015)
- Microengineering: 527 offers (+26% vs 2015)
- Materials Sciences: 356 offers (+10% vs 2015)
Internship countries of STI students

<table>
<thead>
<tr>
<th>Country</th>
<th>EL</th>
<th>GM</th>
<th>MT</th>
<th>MX</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suisse</td>
<td>107</td>
<td>178</td>
<td>156</td>
<td>104</td>
<td>545</td>
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<tr>
<td>France</td>
<td>11</td>
<td>28</td>
<td>5</td>
<td>6</td>
<td>50</td>
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<tr>
<td>Allemagne</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>27</td>
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<tr>
<td>Etats-Unis</td>
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<td>2</td>
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<td></td>
<td>16</td>
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<tr>
<td>Belgique</td>
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<td>3</td>
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<tr>
<td>Chine</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Pays-Bas</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td>9</td>
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<tr>
<td>Japon</td>
<td>1</td>
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<td>3</td>
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<td>Suède</td>
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<tr>
<td>Brésil</td>
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<td>Cameroun</td>
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<td>Espagne</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
Information and contacts

- For further information, please visit the internship page of your section:
  - http://sti.epfl.ch/smx/stages

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

  - Sebastian Gautsch
    - STI
    - Internship Coordinator
  - Homeira Sunderland
    - SMX
    - Deputy Head
  - Danièle Utz
    - SMX
    - Administrator
Questions ?

Thank you for your attention 😊