EPFL – Internships
Materials Science and Engineering

- General context
- Administrative procedures
- 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
STI Internship Coordination

School of Engineering
Dean: Ali Sayed
Adjunct: Matteo Galli

EPFL internship program
VP Education
Educational Affairs
Academic Service
Career center

STI Internship Coordination
Sebastian Gautsch
Stéphanie Mottier

Bioengineering
Section Director: John McKinney
Adjunct: Igor Allaman

Mechanical Engineering
Section Director: François Gallaire
Adjunct: Alain Preneloup
Secretaries
Faculty members

Electrical Engineering
Section Director: Jean-Philippe Thiran
Adjunct: Philippe Gay-Balmaz
Secretaries
Faculty members

Materials Science and Engineering
Section Director: Roland Logé
Adjunct: Homeira Sunderland
Secretaries
Faculty members

Microengineering
Section Director: Olivier Martin
Adjunct: Guy Delacrétaz
Secretaries
Faculty members

Legal and IP aspects
VP Research
Tech Transfer Office

Internship portal
IS-A Developpement staff

750 STI Master students

Industry
HR, CEOs, CTO's Engineers
...

Industry
HR, CEOs, CTO's Engineers
...
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
172 Ma1 students
119 Ma3 students

Material Sciences
38 Ma1 students
47 Ma3 students

Mechanical Engineering
133 Ma1 students
124 Ma3 students

Electrical Engineering + Energy Science and technology
67 Ma1 students
50 Ma3 students

Material Sciences
38 Ma1 students
47 Ma3 students
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

<table>
<thead>
<tr>
<th>Models</th>
<th>Duration</th>
<th>Periods</th>
<th>Contact information</th>
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</thead>
<tbody>
<tr>
<td><strong>Electrical and electronics engineering</strong></td>
<td></td>
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</tr>
<tr>
<td>STAP</td>
<td>Min. 8 weeks</td>
<td>After bachelor, after MA2 or MA3</td>
<td>Web Site EL</td>
</tr>
<tr>
<td>SCS (30 credits)</td>
<td>4-6 months</td>
<td>After MA2</td>
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</tr>
<tr>
<td>PDME</td>
<td>25 weeks</td>
<td>During the master project</td>
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<tr>
<td><strong>Mechanical engineering</strong></td>
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<tr>
<td><strong>Materials science and engineering</strong></td>
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<tr>
<td><strong>Microengineering</strong></td>
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<td>Web Site MT</td>
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<td>During the Master project</td>
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</table>
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?

Summer
- Internship 8 weeks
- Master cycle 60 credits
- Minor/spec 30 credits

Fall
- PDM in academia 17 weeks
- 30 credits

Spring
- PDM in academia 17 weeks
- 30 credits

Summer
- Internship 8 weeks
- PDM in academia 17 weeks
- 30 credits

Fall
- 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)
- Spring: Minor/spec (30 credits)
- Summer: PDM in academia in foreign Universities: 25 weeks
When to place your internship / Master thesis?

- **Summer**
  - Master cycle: 60 credits
- **Fall**
  - Minor/spec: 30 credits
  - Internship: 6 months
- **Spring**
- **Summer**
  - PDM in academia: 17 weeks
  - 30 credits
- **Fall**

PDM in academia in foreign Universities: 25 weeks
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- **Summer**
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- **Fall**
  - Minor/spec: 30 credits

- **Spring**
  - Internship: 6 months

- **Summer**
  - Master project in Industry: 25 weeks

PDM in academia in foreign Universities: 25 weeks
**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 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba5</td>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba5</td>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba6</td>
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<tr>
<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>
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<tr>
<td>Option 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internship up to 6 months: FRAC “internship” Registered in Ba6</td>
<td>Start 2nd master semester FRAC “present”</td>
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<tr>
<td>In option 4 the fall semester will be accounted to your master studies, except if you are doing your army or civil service</td>
<td></td>
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</tr>
</tbody>
</table>

EPFL
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.
EPFL – Internships
Materials Science and Engineering

- Administrative 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 by the company.

☐ 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”.

EPFL
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.
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.
Master Thesis format

In Industry
Other Universities
@ EPFL

Questionable academic quality of a portion of industrial master thesis
Limited international outreach
Less students for EPFL research projects

Potential increase of industry-academia collaborations
Good professional insertion

Engineering students

Challenges of master theses 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

Compatibility with academic calendar
Agreement on IP
Confidentiality
Eligibility of candidate for master thesis
Ideal Scenario for Master Projects in industry

Company has an idea for a master thesis project

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

Company discusses the project with a 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>Juil-Sept (P2)</th>
<th>N° du stage</th>
<th>Format</th>
<th>Inscrits</th>
<th>Prof</th>
<th>Date de création du stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amélioration qualité image satellite par contrôle fin de la ligne de visée</td>
<td>Thales Alenia Space</td>
<td>Cannes, France</td>
<td>✔</td>
<td>18978</td>
<td>Stage</td>
<td>0</td>
<td>1</td>
<td>14.09.2017</td>
<td></td>
<td></td>
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<tr>
<td>Experimental Physics Internship</td>
<td>Diistran GmbH</td>
<td>Zurich</td>
<td>✔</td>
<td>18972</td>
<td>PDM ou Stage</td>
<td>0</td>
<td>1</td>
<td>à trouver (si PDM)</td>
<td>14.09.2017</td>
<td></td>
</tr>
<tr>
<td>Transfer learning for field and crop adaptation in agriculture applications</td>
<td>ecoRobotix</td>
<td>Yverdon-les-Bains</td>
<td>✔</td>
<td>18972</td>
<td>PDM ou Stage</td>
<td>0</td>
<td>1</td>
<td>à trouver (si PDM)</td>
<td>14.09.2017</td>
<td></td>
</tr>
<tr>
<td>Product Engineer</td>
<td>Infineon Technologies France</td>
<td>Aix en Provence</td>
<td>✔</td>
<td>18967</td>
<td>Stage</td>
<td>0</td>
<td>1</td>
<td>14.09.2017</td>
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<tr>
<td>Déploiement d’un système de sûreté pour un site sensible</td>
<td>Etis Lea</td>
<td>Carouge</td>
<td>✔</td>
<td>18962</td>
<td>Stage</td>
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<td>Thermal effect and Compensation in high precision states</td>
<td>Beig S.A.</td>
<td>Bienne</td>
<td>✔</td>
<td>✔</td>
<td>Stage</td>
<td>0</td>
<td>1</td>
<td>13.09.2017</td>
<td></td>
<td></td>
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<tr>
<td>Intern Manufacturing</td>
<td>Stryker Trauma AG</td>
<td>Salzach (SO)</td>
<td>✔</td>
<td>18934</td>
<td>Stage</td>
<td>0</td>
<td>1</td>
<td>12.09.2017</td>
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<tr>
<td>Modélisation d’un processus de laminage</td>
<td>Constellium Valais SA</td>
<td>Sierre</td>
<td>✔</td>
<td>18933</td>
<td>Stage</td>
<td>0</td>
<td>1</td>
<td>12.09.2017</td>
<td></td>
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<tr>
<td>Hybrid PET/MR Imaging guided radiation therapy treatment planning</td>
<td>Hôpitaux Universitaires de Genève</td>
<td>HUG Genève</td>
<td>✔</td>
<td>✔</td>
<td>PDM coordonné</td>
<td>0</td>
<td>2</td>
<td>Prof. Thiiran Jean-Philippe</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>Gait Up</td>
<td>Renens</td>
<td>✔</td>
<td>18922</td>
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<tr>
<td>Various internship positions in Motion analysis Startup for applications in Sports, Health and Gaming</td>
<td>Gait Up</td>
<td>Renens</td>
<td>✔</td>
<td>✔</td>
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<td>0</td>
<td>2</td>
<td>Prof. Aminian Kamilar</td>
<td>12.09.2017</td>
<td></td>
</tr>
<tr>
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<td>CSEM SA Muttenz</td>
<td>Basel</td>
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<td>PDM ou Stage</td>
<td>0</td>
<td>1</td>
<td>À trouver (si PDM)</td>
<td>21.09.2017</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, …)
- 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.
Master thesis in industry, instructions to Profs

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.

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 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)
Open to all master students of the School of Engineering

Engineering Industry Day
Wednesday March 25, 2020
Technology exhibition

Face to face meetings

Networking

Industry pitches

Pitches from academia
2019 Program

9h00 Welcome Message
Marc Greger
Vice President for Innovation
VPF EFPL

9h05 Keynotes from Academia
Innovation and Tech Transfer at the School of Engineering and the School of Life Sciences
Holly Frensmuth
Associate Dean for Innovation, STI
Bart Deplancke
Associate Dean for Innovation, SV

9h25 Academic pitch session 1
Engineering for Life Sciences and Health
Bart Deplancke
Laboratory of systems biology and genetics
Francisco Petri
Researcher in translational neuroscience
Deep Ghesi
Medtronic Chair in neuroengineering
Sebastian Merski
Lab of biological network characterization
Marta Altug
Bionanoprototic systems lab
Mirella dal Person
Laboratory for biomolecular modeling

Robotics and Manufacturing
Yehezkel Gallopin
Gallopin Lab
Vivek Subramanian
Lab for advanced fabrication technologies
Alsio Lipsert
Molecular systems lab
Sebastian Sklar
Molecular materials lab
Guillermo Vittorias
Advanced nanomechanical systems lab
Remy Rock
Reconfigurable robotics lab

10h30 Coffee break and networking

11h15 Academic pitch session 2
Data Enabled Engineering
Vincent Charron
Lab for information and inference systems
Jean-Philippe Thouven
Signal processing lab 5
Dennis Gillet
Coordination and interaction group RACET
Andreas Burg
Telecommunications circuits laboratory

Materials and Processes
Fabien Soria
Lab of photonic materials and fibre devices
John Knoblos
Engineering mechanics of soft interfaces
Esther Amral
Soft materials lab
Pedro Reis
Flexible structures lab

12h20 Internships and Master Thesis in Industry
Sebastian Guastich
Internships and outreach coordination
Faculty of Engineering, EPFL

12h30 Lunch Break and exhibition

13h45 Industry pitches
Face to face meetings (Garden Floor)

15h15 Coffee Break and networking

16h00 Industry pitches
Face to face meetings (Garden Floor)

17h25 Closing remarks
17h30 Apéro and Exhibition

Industry Pitches

13h45
Innovation MECATIS
14h00
IRsweep
13h50
BUHLER
14h45
logitech
14h50
STN
15h00
AMERICAN VALTRONIC
14h05
RIGTECH
15h05
csem
14h10
Start-up Van baele
15h10
Empa
14h15
Zisman motor
14h20
LYO-X
14h30

Face-to-Face Meetings (Garden Floor)

Session 1
14h00 - 14h30
14h30 - 15h00
15h00 - 15h30

Session 2
16h00 - 16h30
16h30 - 17h00
17h00 - 17h30

Exhibition space (Garden Floor)
Join us on Wednesday March 25th 2020

110 companies
80 laboratories
300 students
50 booths
50 presentations
https://journeeindustrie.epfl.ch/
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/

Every Internship found through «Ingénieurs du monde» needs to be approved by your section.
Please contact the section deputy as soon as you have found an opportunity.
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 VPI 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, starting by contacting xgrant@epfl.ch.
EPFL Alumni network

- EPFL students have access to the Alumni network
  - Website: alumni.epfl.ch
  - Pocketcampus app
Start working with Linked’In
Find an Internship during EPFL’s Forum

Retrouvez le Forum EPFL

du 7 au 11 octobre 2019

au SwissTech Convention Center
Dear Master Student,
Dear PhD Candidate,

Pictet Group, a private bank based in Geneva with global presence (more here [www.group.pictet](https://www.epfl.ch/about/recruiting/career-center)) invites you to the workshop:

"Data Analytics @ Pictet with apero" to be held at EPFL on Wednesday, September 25, 2019 from 17:00 to 19:00 in room B336 followed by an apero

[Link to the Pictet Group invitation](https://www.epfl.ch/about/recruiting/career-center/)

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 ccf@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/
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: Following student applications sent to Industry every Monday 2:00 PM

June: End of Spring Semester

August 1st: Possible 1st starting date

Internship 2-6 Months

August 1st – September 30th

PDM 25 weeks

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
- Mid-February – March 1st: PDMe 25 weeks
- Internship 2-6 Months

1st student applications sent to Industry
Internship attribution, possible scenarii

1st application round
- Internship 1: Refused

2nd application round
- Internship 2: In progress
- Internship 3: Refused
- Internship 4: In progress

3rd application round
- In progress
- Accepted

4th application round
- In progress
- Cancel

Within 3 days
- Accept
- Refuse

Master thesis:
Don’t accept without academic supervisor
Mandatory: 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.
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 (28-29 October ‘19)
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
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

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.
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 some 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

- 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 MX. The signing of the agreement is mandatory.*
- Transmit a copy of the agreement to the secretariat of MX.
- 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.]
- **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 [Inscription FRAC MX]
- 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.
Mandatory Steps for a Master project in Industry

- Find a master project in industry by contacting the professors of MX.
- 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 [Inscription FRAC MX](#)
EPFL internships on the web

https://sti.epfl.ch/research/institutes/imx/industrial-internships/

EPFL webpage:
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.
EPFL – Internships
Materials Science and Engineering

- Pep talk to students
- 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

1'200 EPFL students each year
Master Thesis format

- **Electrical Engineering**
- **Microengineering**
- **Materials Sciences**
- **Life Sciences**
- **Mechanical Engineering**

In Industry
Other Universities
@ EPFL

- 31%
- 15%
- 54%
- 60%
- 15%
- 24%
- 47%
- 42%
- 12%
- 32%
- 44%
- 23%
- 63%
- 21%
- 16%

Years:
- 2004-2005
- 2005-2006
- 2006-2007
- 2007-2008
- 2008-2009
- 2009-2010
- 2010-2011
- 2011-2012
- 2012-2013
- 2013-2014
- 2014-2015
- 2015-2016
- 2016-2017
- 2017-2018
- 2018-2019

EPFL
Value chain from internships to industry funded research

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

Professional insertion of students
Master Thesis Interaction Map (Year 2015)
Internship evaluations

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

<table>
<thead>
<tr>
<th>Statement</th>
<th>Completely agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Completely disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The placement gave me a clear idea as to the realities of working life</td>
<td>361</td>
<td>537</td>
<td>298</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>The placement was an opportunity for me to acquire new practical skills and knowledge</td>
<td>557</td>
<td>178</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to demonstrate my professional independence</td>
<td>415</td>
<td>295</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have good communication skills</td>
<td>230</td>
<td>422</td>
<td>81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I integrated well into the professional context</td>
<td>470</td>
<td>293</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I improved my organisational skills</td>
<td>294</td>
<td>336</td>
<td>97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to apply my technical and scientific knowledge</td>
<td>331</td>
<td>347</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Internship evaluations

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

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

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Sufficient</th>
<th>Insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Evaluation</strong></td>
<td>468</td>
<td>252</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>Capacity to self-evaluate and to respond constructively to feedback</td>
<td>372</td>
<td>298</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>Ability to access sources of information and to evaluate them</td>
<td>427</td>
<td>263</td>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td>Ability to present and defend her/his own ideas</td>
<td>558</td>
<td>501</td>
<td>57</td>
<td>7</td>
</tr>
<tr>
<td>Interpersonal skills and engagement, including in a multicultural context</td>
<td>474</td>
<td>235</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Oral communication (clarity, reasoning, self-confidence)</td>
<td>306</td>
<td>342</td>
<td>80</td>
<td>7</td>
</tr>
<tr>
<td>Written communication (structure, clarity, coherence of reasoning)</td>
<td>300</td>
<td>345</td>
<td>53</td>
<td>7</td>
</tr>
<tr>
<td>Integration in the professional world</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of the work delivered</td>
<td>456</td>
<td>265</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Capacity to work in teams</td>
<td>482</td>
<td>205</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Compliance with procedures/ rules and for their professional ethical codes</td>
<td>532</td>
<td>270</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Planning and management of work tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resolution of problems and management of emergent issues</td>
<td>380</td>
<td>258</td>
<td>53</td>
<td>7</td>
</tr>
<tr>
<td>Evaluation of resources required</td>
<td>268</td>
<td>342</td>
<td>56</td>
<td>7</td>
</tr>
<tr>
<td>Definition of work objectives and management of priorities</td>
<td>322</td>
<td>357</td>
<td>56</td>
<td>7</td>
</tr>
<tr>
<td>Application of scientific and technical knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastery of domain-specific methodologies</td>
<td>342</td>
<td>334</td>
<td>86</td>
<td>7</td>
</tr>
<tr>
<td>Ability to resolve complex problems</td>
<td>856</td>
<td>107</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>Technical skills and knowledge</td>
<td>430</td>
<td>282</td>
<td>20</td>
<td>7</td>
</tr>
</tbody>
</table>

EPFL
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
Internship offers from industry – to Engineering students

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>236</td>
<td>532</td>
<td>597</td>
<td>671</td>
<td>690</td>
<td>844</td>
<td>942</td>
<td>1141</td>
</tr>
</tbody>
</table>
Number of offers - Per Engineering student

- Materials
- Mechanical
- Electrical
- Micro
- Bio

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.5</td>
<td>4.2</td>
<td>7.2</td>
<td>3.3</td>
<td>4.3</td>
<td>6.6</td>
<td>3.4</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>1.4</td>
<td>4.8</td>
<td>8.2</td>
<td>3.4</td>
<td>6.6</td>
<td>3.6</td>
<td>4.4</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>1.9</td>
<td>4.7</td>
<td>9.2</td>
<td>3.4</td>
<td>6.6</td>
<td>3.6</td>
<td>4.4</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>2.5</td>
<td>10.3</td>
<td>3.6</td>
<td>7.2</td>
<td>7.2</td>
<td>7.2</td>
<td>9.3</td>
</tr>
<tr>
<td></td>
<td>2.2</td>
<td>2.2</td>
<td>11.9</td>
<td>4.4</td>
<td>7.2</td>
<td>7.2</td>
<td>10.5</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td>2.9</td>
<td>12.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Number of offers - Per week

In 2018:
- Electrical Engineering: 758 offers (+22% vs 2017)
- Mechanical Engineering: 549 offers (+30% vs 2017)
- Microengineering: 652 offers (+19% vs 2017)
- Materials Sciences: 437 offers (+19% vs 2017)
Internship countries of STI students (2015-2019)

<table>
<thead>
<tr>
<th>STI</th>
<th>EL</th>
<th>GM</th>
<th>MT</th>
<th>MX</th>
<th>Somme</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>
</tr>
<tr>
<td>Allemagne</td>
<td>13</td>
<td>14</td>
<td>11</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>Etats-Unis</td>
<td>9</td>
<td>2</td>
<td>18</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Japon</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>Pays-Bas</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Chine</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Belgique</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Espagne</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Suède</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Royaume Uni</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Norvège</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Singapour</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Brésil</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
When do MX students start their internship & Master thesis (2015-2018)?
Information and contacts

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

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

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

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