

Master en génie mécanique @EPFL



- A. Master degree @EPFL
- B. Orientations/specializations
- C. Where to find SGM information ?
- D. Specific information : specializations, minor, Project et SHS
- E. Professors and laboratories

Contact :

Directeur de section



Pr. Guillermo Villanueva

Adjoint de section



Dr Alain Prenleloup

Admin. assistant



Mme Tamara Pelège

Admin. assistant



Mme Tamara Pelège

Internship representative



Dr Sébastien Soubielle

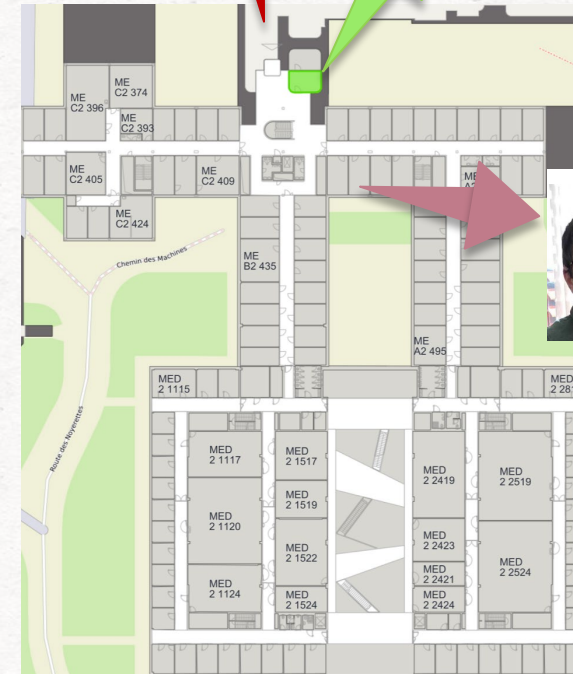
Contact :

- Reception hours:
8h30 – 11h30 Monday to Thursday
- By appointment or by email :
sgm@epfl.ch

Main entrance SGM



Assistante admin.
ME B2 374



Deputy SGM



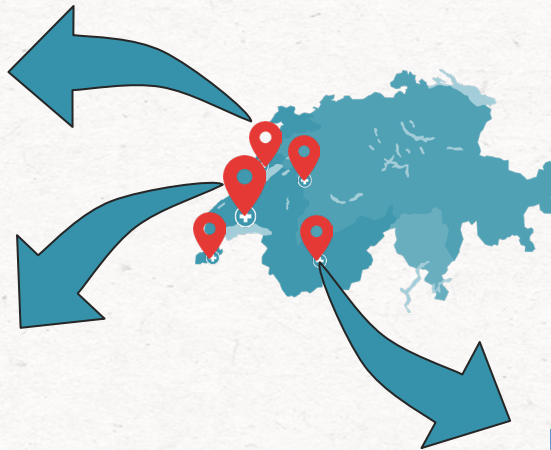
Director SGM
MED 3 1226



Neuchâtel



EPFL worldwide

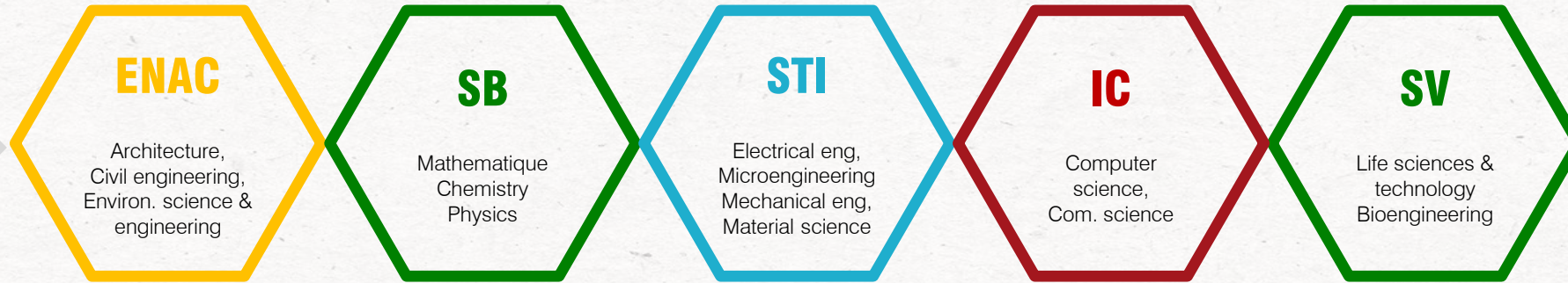


Lausanne



Sion

5 Schools
18 Sections



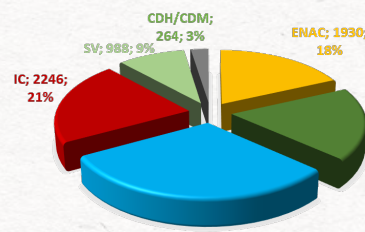
1 College



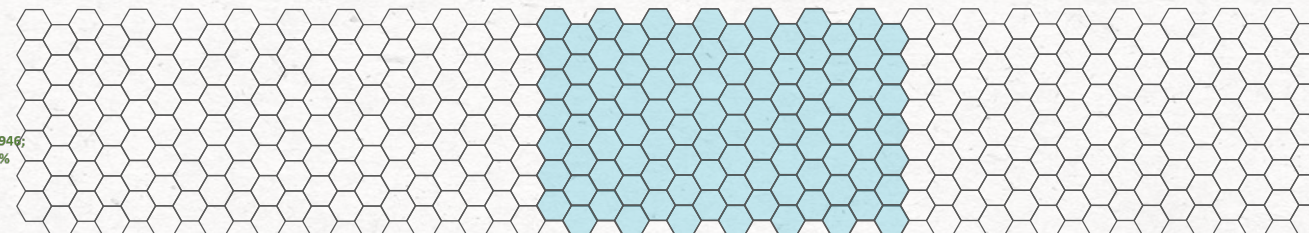
19 Centers



16 Institutes
> 350 Labs



Students



STI-Labs

The EPFL should be a model university in terms of :

- Its culture of respect, tolerance and integrity
- The rich variety of para-academic activities



The EPFL should be a model university in terms of :

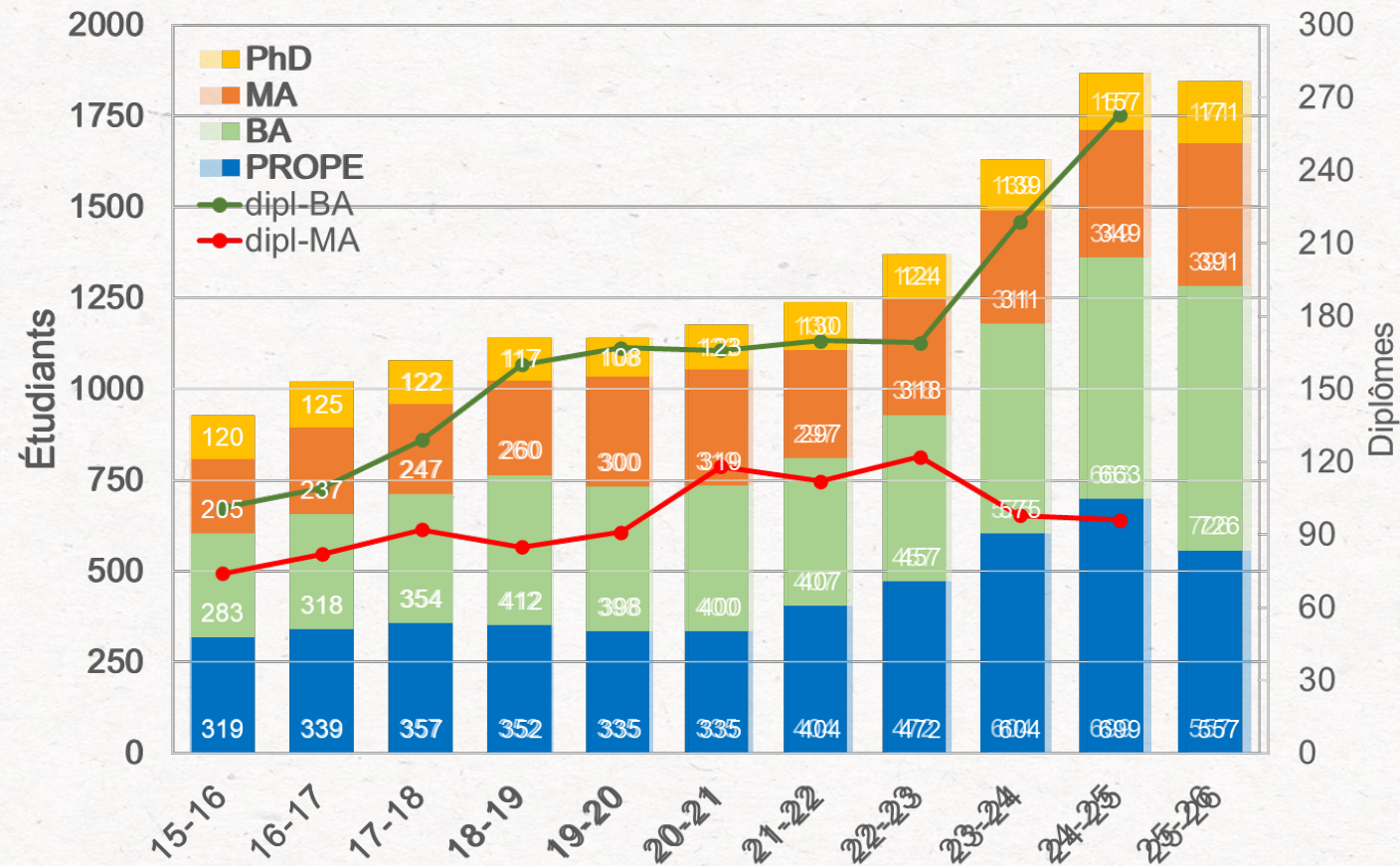
- Harassment, violence and discrimination are not tolerated here
- Provide and seek support
- Talk about it, bring up the problems



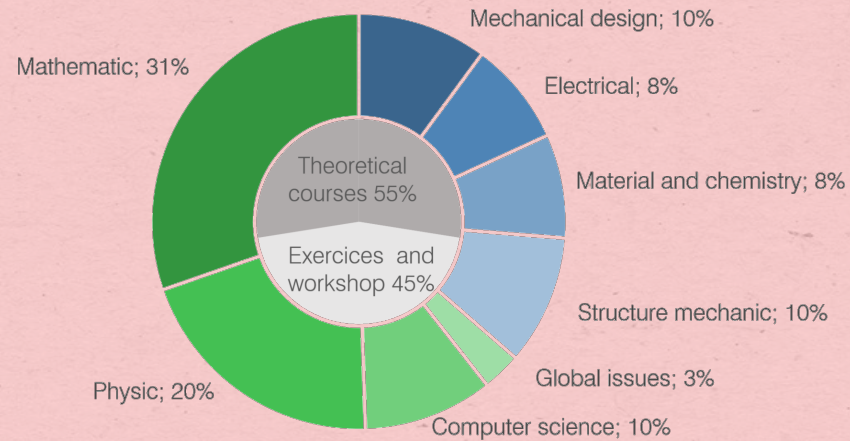
- > go.epfl.ch/tsn (Trust and Support Network)
- > Take the online training on Moodle: « Promoting Respect »

Students statistic in GM

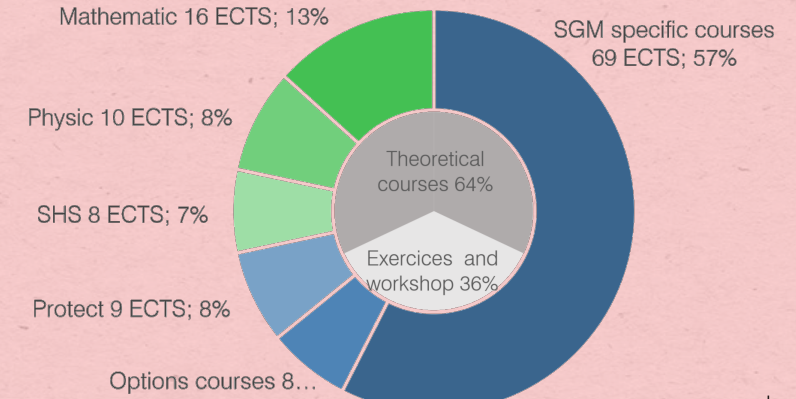
- BA1₂₀₂₆ 618
- BA_{total} 1307
- Master_{total} 453
- PhD 171
- Professeurs 25
- Chargé de cours ~10



Bachelor: 180 ECTS

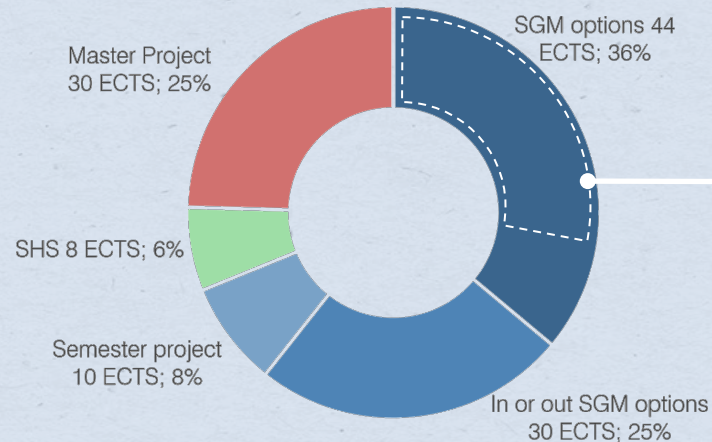


1st year



2nd and 3rd years

Master : 120 ECTS



Specialization (elective);
30 ECTS, 25%

- A Fluid mechanics
- B Automatic and systems
- C Design and Production
- D Thermal sciences
- E Mechanics of Solids and Structures
- F Biomechanics

+



Industrial internship

4th et 5th years

+4 years
of PhD studies



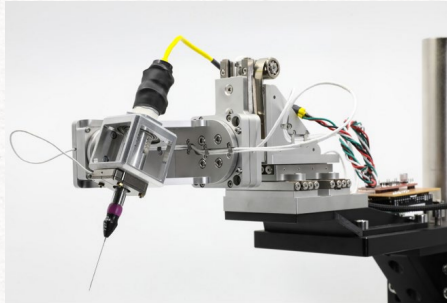
European Credit Transfer and Accumulation System : 1 ECTS = 30 work hours
(60 ECTS per year x 30 work hours / 45 work weeks = 40 hours by weeks)

MSc curriculum (120 ECTS)

« GROUPE »	Electives in Mechanical Engineering Specialization : ≥ 30 ECTS (Excel form on sgm.epfl.ch)	≥ 44 ECTS
« GROUPE »	Other electives / Minor	≥ 30 ECTS
« BLOC »	1 Semester Project in Mechanical Engineering	10 ECTS
	SHS Course + Project	6 ECTS
	Internship and Master Project in Mechanical Engineering	30 ECTS

B. Orientations/specializations

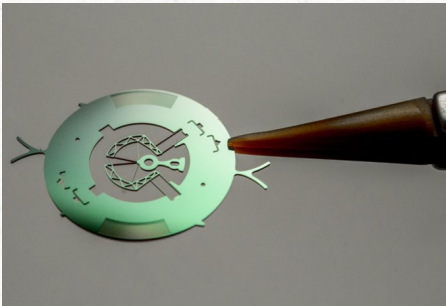
BIOMECHANICS



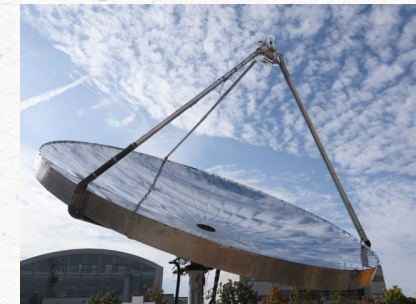
CONTROL, ROBOTICS, AND SYSTEMS



DESIGN AND MANUFACTURING



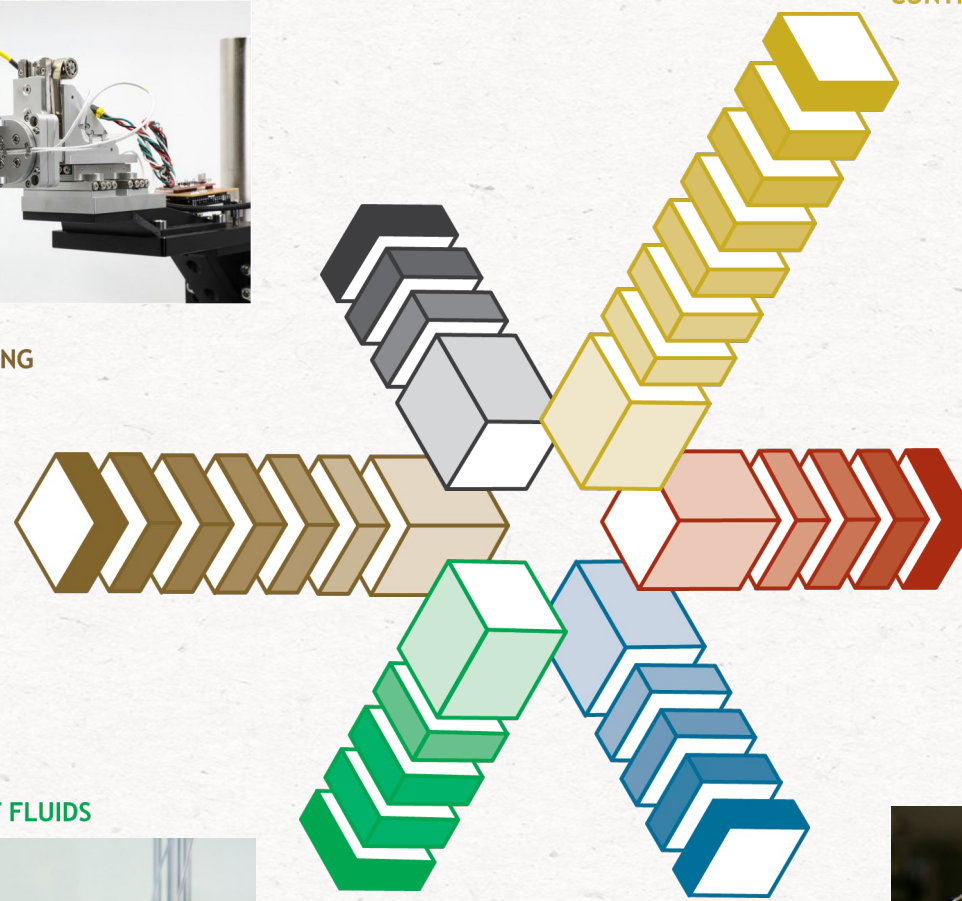
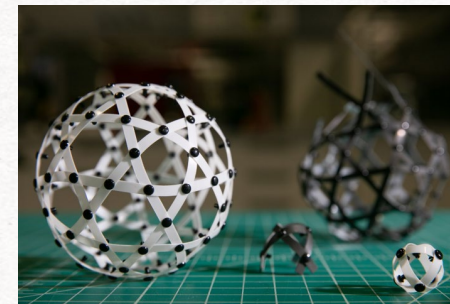
THERMAL SCIENCES AND ENERGY



MECHANICS OF FLUIDS



MECHANICS OF SOLIDS AND STRUCTURES



B. Orientations/specializations



B. Orientations/specializations

Pr. Selman Sakar

BIOMECHANICS



CONTROL, ROBOTICS, AND SYSTEMS

Dr. Christophe Salzmann



DESIGN AND MANUFACTURING

Pr. Jürg Schiffmann



THERMAL SCIENCES AND ENERGY

Pr. Zhengmao Lu



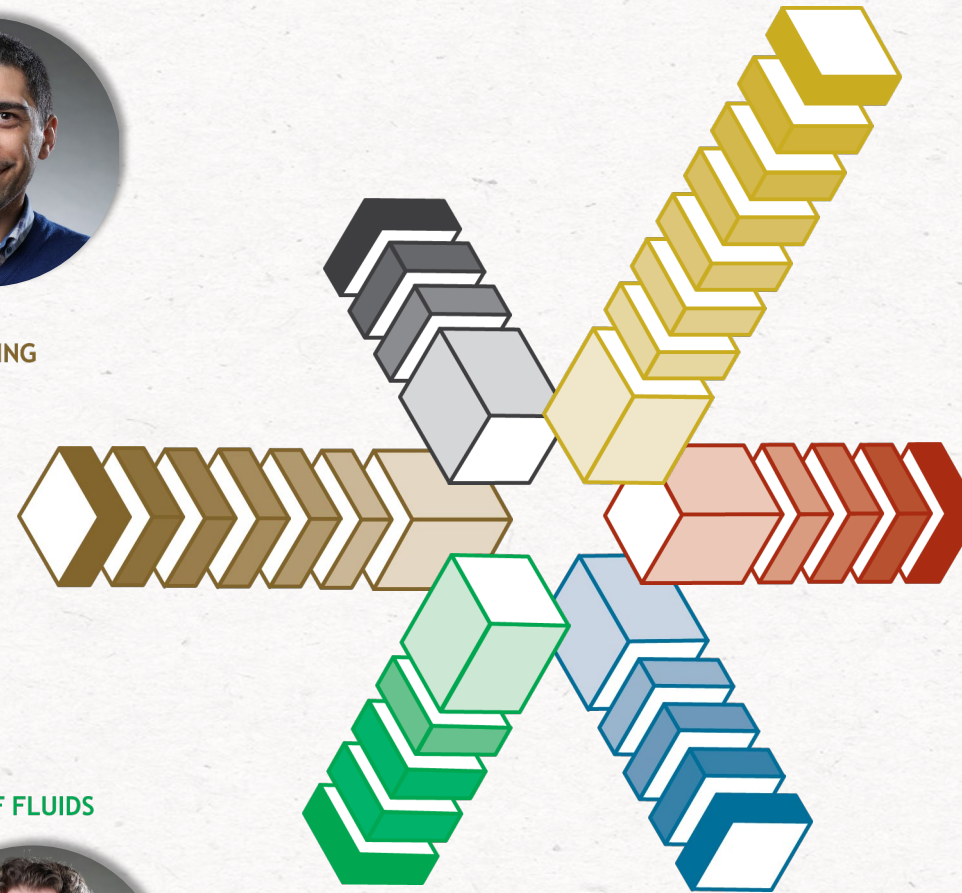
MECHANICS OF FLUIDS

Pr. Tobias Schneider



MECHANICS OF SOLIDS AND STRUCTURES

Pr. Pedro Reis



C. Where to find SGM information?

SGM main web page: <https://sti.epfl.ch/fr/sgm/>



Useful documents

Overview

Master Cycle course list

Admission criteria and application

Semester projects

Master projects

Engineering Internship

Specializations

Minor in Mechanical Engineering

Minor in Energy

GM orientations : <https://sti.epfl.ch/fr/sgm/specialisations/>

EPFL Sciences et techniques de l'ingénieur

Recherche...

FR Login

GÉNIE MÉCANIQUE

[Home](#) [A propos](#) [BSc en génie mécanique](#) [MSc en génie mécanique](#) [Études doctorales](#) [Contact](#)

Spécialisations

Mécanique des fluides

Le domaine des écoulements de fluides est traditionnellement l'une des pierres angulaires du génie mécanique et revêt une importance capitale pour de nombreux secteurs industriels. Bien que les écoulements d'air et d'eau soient au centre de cette orientation, les fluides non newtoniens, les écoulements multiphasiques, l'interaction fluide-structure et d'autres sujets avancés sont également abordés.



Les connaissances sur le comportement des écoulements, obtenues par des approches théoriques, expérimentales et informatiques, permettent de mieux comprendre les processus mécaniques et fournissent un moyen de les améliorer et de les optimiser. L'analyse des écoulements dans des domaines tels que l'énergie, la bio-ingénierie et les transports présente un intérêt particulier dans ce contexte.

Personne de contact : Prof. Tobias Schneider

Useful documents

Overview

Master Cycle course list

Admission criteria and application

Semester projects

Master projects

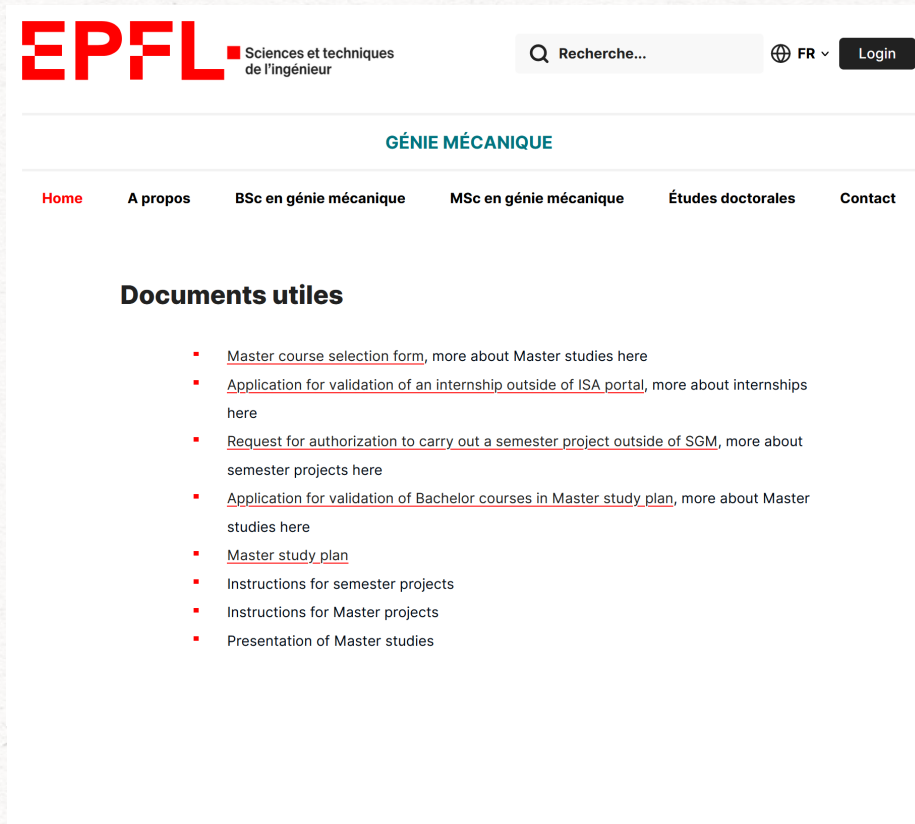
Engineering Internship

Specializations

Minor in Mechanical Engineering

Minor in Energy

Useful documents: <https://sti.epfl.ch/fr/sgm/documents-utiles/>



Useful documents

Overview

Master Cycle course list

Admission criteria and application

Semester projects

Master projects

Engineering Internship

Specializations

Minor in Mechanical Engineering

Minor in Energy

Etudiant:	Prénom et nom de l'étudiant				
Date:	jj.mm.aaaa				
Filière:	aucune				
Conseiller:	aucun				
Mineur:	aucun				
Visa conseiller de filière:					
	Cours	Code	ECTS	Semestre d'enseignement	Semestre dans le plan
Cours SGM	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours	#N/A	0	#N/A	à définir
	Cours BA				à définir
Bloc Projets	Projet Génie Mécanique I SHS: Introduction au projet SHS: Projet	ME-401	10 3 3	Aut./Prin. Aut. Prin.	à définir à définir à définir
Cours hors SGM					à définir à définir à définir à définir à définir à définir à définir à définir à définir à définir
Respect du règlement					
Nombre total d'ECTS (≥ 90)			16		
Nombre d'ECTS en SGM (≥ 44)			0		
Nombre d'ECTS de filière (≥ 18)			0		
Nombre d'ECTS du Mineur (≥ 30)			0		
Charge de travail par semestre					
Nombre d'ECTS 1er semestre (≥ 25 et ≤ 35)			0		
Nombre d'ECTS 2ème semestre (≥ 25 et ≤ 35)			0		
Nombre d'ECTS 3ème semestre (≥ 25 et ≤ 35)			0		
Approbation du Directeur de Section pour cours BA requise.					
Signature:					
al/mq, 16.12.2015					

Concentration: not mandatory!

Concentration advisor's signature: needed only if you do a concentration

44+ ECTS

From the list on the 2nd sheet + 2 Bachelor courses (to be approved by Section Director)

16 ECTS

Semester project + SHS

30+ ECTS

Minor or any courses including those from the list on the 2nd sheet

Becomes green if your plan complies with the rules

Suggested workload 25-35 ECTS / semester

Cours	Fiche	Code	Enseignant	Filière							ECTS	Sem.	Exam.
				Aéro-Hydrodynamique Automatique et Mécatronique Conception et Production			Énergie Mécanique des solides et des structures Biomécanique						
Advanced control systems	lnk	ME-524	Karimi		B	C	D	E	F	3	Prin.	sans retrait/no withdrawal	
Advanced energetics	lnk	ME-451	Maréchal				D			5	Aut.		
Advanced heat transfer	lnk	ME-465	Haussemer				D			3	Prin.		
Aerodynamics	lnk	ME-445	Mulleners	A			D	E		3	Aut.		
Aérolasticité et interaction fluide-structure	lnk	ME-435	Farhat	A			D	E		3	Aut.		
Applied mechanical design	lnk	ME-403	Schiffmann			C				4	Aut.	sans retrait/no withdrawal	
Bases de la robotique	lnk	MICRO-450	Bieuler/Bouri		B	C				3	Aut.		
Biomechanics of the cardiovascular system	lnk	ME-481	Stergiopoulos	A			E	F		3	Prin.		
Biomechanics of the musculoskeletal system	lnk	ME-482	Pioletti				E	F		5	Aut.		
Cavitation et phénomènes d'interface	lnk	ME-462	Farhat	A			D			3	Aut.		
Commande non linéaire	lnk	ME-523	Muller		B	C		E	F	3	Aut.		
Composites polymères + TP	lnk	MSE-340	Bourban/Michaud				E	F		4	Aut.		
Computer-aided engineering	lnk	ME-417	Stroud			C				5	Prin.		
Conception mécanique intégrée	lnk	ME-418	Schorderet			C	E	F		3	Prin.		
Dynamique numérique des solides et des structures	lnk	ME-473	Gmür	A		C	E	F		5	Prin.		
Engines and fuel cells	lnk	ME-551	van Herle	A			D			4	Aut.		
Fabrication assistée par ordinateur	lnk	ME-416	Kyritsis			C				5	Aut.		
Flow of dispersed media	lnk	ME-463	vacak	A			C			3	Aut.		
Fracture mechanics	lnk	ME-432	Botis/Cugnoni		A	C		E	F	4	Prin.		
Hydraulic turbomachines	lnk	ME-453	Avellan			C	D	E	F	4	Aut.		
Hydrodynamics	lnk	ME-444	Gallaire	A		D	E	F		5	Prin.		
Hydrodynamique acoustique	lnk	ME-443	Nicolet	A		D	E	F		3	Prin.		
Instability	lnk	ME-466	Gallaire	A						3	Aut.		
Introduction to nuclear engineering	lnk	ME-464	Pautz/Hursin				D			2	Prin.		
Lifecycle performance of product systems	lnk	ME-516	Kyritsis			C	D			3	Prin.		
Mechanical product design and development	lnk	ME-410	Pautz			C				4	Aut.	sans retrait/no withdrawal	
Mechanics of composites	lnk	ME-430	Curtin			C		E	F	2	Aut.		
Methods for rapid production and development	lnk	ME-415	Bolliat E.			C				3	Aut.		
Model predictive control	lnk	ME-425	Jones		B					3	Prin.		
Modelling and optimization of energy systems	lnk	ME-454	Maréchal				D			4	Prin.		
Multi-body simulation	lnk	ME-475	Sakar				D			3	Prin.		
Numerical flow simulation	lnk	ME-474	Sawley	A			D		F	5	Aut.		
Numerical methods in biomechanics	lnk	ME-484	Terner						F	3	Prin.		
Numerical methods in heat transfer	lnk	ME-571	Magnin	A			D			3	Prin.	sans retrait/no withdrawal	
Particle-based methods	lnk	ME-476	Sawley	A			D	E	F	4	Aut.	sans retrait/no withdrawal	
Production management	lnk	ME-419	Yoo			C				5	Aut.		
Projet Génie mécanique II	lnk	ME-402	Divers enseignants							10	Aut./Prin.	sans retrait/no withdrawal	
Renewable energy (for ME)	lnk	ME-460	Haussemer/Van Herle	A			D			4	Prin.		
Robotique industrielle et appliquée	lnk	MICRO-451	Bieuler/Bouri		B	C				2	Prin.		
Simulation and optimisation of industrial applications	lnk	ME-499	Yoo				C	D	E	4	Prin.	sans retrait/no withdrawal	
System identification	lnk	ME-421	Karimi		B		C	D	E	3	Aut.	sans retrait/no withdrawal	
Systèmes mécatroniques	lnk	ME-424	Agbevide		B	C				5	Prin.	sans retrait/no withdrawal	
Thermal power cycles and heat pump systems	lnk	ME-459	Kane				D			2	Prin.		
Turbomachines thermiques	lnk	ME-455	Ott		A		D			5	Aut.		
Turbulence	lnk	ME-467	Schneider	A						3	Aut.		
Two-phase flows and heat transfer	lnk	ME-446	Thome/Saenen/Marcinichen	A			D			5	Aut.	sans retrait/no withdrawal	
Advanced satellite positioning	lnk	ENV-542	Botteron/Skaloud		B					4	Prin.		
Applied machine learning	lnk	MICRO-455	Billard		B					4	Aut.		
Assembly techniques	lnk	MSE-464	Plummer/Weber					E		2	Prin.		
Biophysics I	lnk	PHYS-301	Manley						F	3	Prin.		
Biophysics II	lnk	PHYS-302	Verkhovskiy						F	4	Aut.		
Capturs	lnk	MICRO-330	Renaud/Boers		B					4	Prin.		
Commande d'actionneurs à l'aide d'un microprocesseur + TP	lnk	MICRO-510	Koechli+Koechli/Hodder/Perriard		B					2	Prin.		
Composites technology	lnk	MSE-440	Bourban/Michaud					E		3	Aut.		
Computational motor control	lnk	CS-432	Jaspers		A					4	Prin.		
Computer simulation of physical systems I	lnk	PHYS-403	Pasquarello		B					4	Aut.		
Convex optimization and applications	lnk	CS-454	Letort		B					4	Prin.		
Corrosion et protection des métaux + TP	lnk	MSE-311	Mischler			C				3	Prin.		
Déformations des matériaux	lnk	MSE-310	Logé					E		4	Aut.		
Distributed intelligent systems	lnk	ENG-466	Martinoli		B					5	Aut.		
Dynamical system theory for engineers	lnk	COM-502	Thiran		B					4	Aut.		
Environmental transport phenomena	lnk	ENG-420	Parté Agel+Crouzy	A						5	Aut.		
Evolutionary robotics	lnk	MICRO-515	Floreano						F	4	Prin.		
Human robot interfaces	lnk	MICRO-453	Bieuler/Bouri		B					3	Prin.		
Image optics	lnk	MICRO-421	Hertz/Scharf		B					3	Prin.		
Industrial automation	lnk	CS-487	Pignolet-Oswald/Tournier		B					3	Prin.		
Integrated transducers and drives	lnk	EE-461	Kochli		B					3	Aut.		
Laser microprocessing	lnk	MICRO-520	Hoffmann			C				2	Prin.		
Life cycle engineering of polymers	lnk	MSE-430	Letortier					E		2	Aut.		
Materials selection	lnk	MSE-474	Vaucher/Michler/Stegmann					E		2	Prin.		
Numerical approximation of PDF's I	lnk	MATH-451	Noblin	A						5	Aut.		
Numerical methods for conservation laws	lnk	MATH-459	Hesthaven	A						3	Aut.		
Physiologie par systèmes II	lnk	BIO-377	Roy					F		4	Prin.		
Propagation of acoustic waves	lnk	EE-549	Martin					E		3	Aut.		
Recycling of materials	lnk	MSE-463	Letortier			C				2	Prin.		
Robotics practicals	lnk	MICRO-453	Billard/Floreano/Mondada		B					2	Prin.	sans retrait/no withdrawal	
Space mission design and operations	lnk	EE-585	Nicollier			C				2	Prin.		
Statique II	lnk	CIVIL-224	Leibuzzi/Vurpillot					E		4	Prin.		
Supply chain management	lnk	MGT-526	Seifert			C				4	Prin.		
Surface analysis	lnk	MSE-351	Mucchi/Selikhov/Mischler			C				3	Aut.		
Systèmes embarqués microprogrammés	lnk	EE-310	Atienza		B					4	Aut.		
Techniques d'assemblage	lnk	MICRO-440	Chautems			C				3	Prin.		
Technologie et mise en œuvre des polymères +TP	lnk	MSE-360	Manson/Plummer+Plummer					E		4	Aut.		
Tribology	lnk	MSE-485	Mischler					E		2	Aut.		

Cours gérés par la SGM

Cours choisis gérés par une autre Section

SGM

Reconnu pour GM

What are the learning prerequisites ?

FICHES DE COURS

Propédeutique Cycle Bachelor Cycle Master Mineur Ecole doctorale



Advanced control systems

ME-524

Enseignant(s) :
Karimi Alireza

Langue:
English

Withdrawal
It is not allowed to withdraw from this subject after the registration deadline.

Summary
This course covers some theoretical and practical aspects of robust and adaptive control. Robust controller design with H-infinity performance, digital controller design with pole placement technique, direct, indirect and switching adaptive control are studied and implemented in a hands-on lab.

Content
Stability, performance and robustness of closed-loop control systems. Robust controller design by loop shaping. Robust H-infinity controller design in the frequency domain. Multivariable decoupling controller design. Gain-scheduled controller design.
Two-degree of freedom RST digital polynomial controller. Pole placement technique and its relation to Internal Model Control (IMC), Model Reference Control (MRC) and Minimum Variance Control (MVC). Robust pole placement with Q parameterization. Parameter adaptation algorithms. Direct and Indirect adaptive control. Switching adaptive control.

Keywords
Adaptive control, robust control, digital RST controller.

Learning Prerequisites

Required courses

Control systems + Lab

Recommended courses

1. Control Systems
2. System Identification
3. Multivariable systems

Important concepts to start the course

- Analyze a linear dynamical system (both time and frequency responses)
- Represent a linear system by a transfer function
- Identify a dynamic system using experimental data
- Design a PID controller
- Design a simple controller for a dynamic system

Learning Outcomes

By the end of the course, the student must be able to:

- Design an advanced controller for a dynamic system, A11
- Assess / Evaluate the stability, performance and robustness of a closed-loop system, A12
- Define (specifications) the adequate control performance for dynamic systems, A13
- Propose several control solutions, formulate the trade-offs, choose the options, A14

DANS LES PLANS D'ÉTUDES

Génie mécanique, 2018-2019, Master semestre 2

Semestre	Forme de l'examen
Printemps	Pendant le semestre
Crédits	Matière examinée
3	Advanced control systems
Cours	Projet
2 Heure(s) hebdo x 14 semaines	1 Heure(s) hebdo x 14 semaines

Génie mécanique, 2018-2019, Master semestre 4

Gestion de l'énergie et durabilité, 2018-2019, Master semestre 2

Gestion de l'énergie et durabilité, 2018-2019, Master semestre 4

Microtechnique, 2018-2019, Master semestre 2

Microtechnique, 2018-2019, Master semestre 4

Robotique, 2018-2019, Master semestre 2

Mineur en Systems Engineering, 2018-2019, Semestre printemps

SEMAINE DE RÉFÉRENCE

	Lu	Ma	Me	Je	Ve
8-9					
9-10			MER334		
10-11			MER334		
11-12					
12-13					
13-14					
14-15					
15-16					
16-17					
17-18					
18-19					
19-20					
20-21					
21-22					

Cours Exercice, TP Projet, autre

LÉGENDE

Learning Prerequisites

Required courses

Control systems + Lab

Recommended courses

1. Control Systems
2. System Identification
3. Multivariable systems

Important concepts to start the course

- Analyze a linear dynamical system (both time and frequency responses)
- Represent a linear system by a transfer function
- Identify a dynamic system using experimental data
- Design a PID controller
- Design a simple controller for a dynamic system



How to choose and register for courses ?

1. Create your study plan for the 3 semesters (Excel form)
2. If you do a specialization : submit it for approval to the concentration advisor and then to SGM secretariat
3. A course can count once either in a Minor or in Groupe « options »
4. Register for courses in IS-Academia (mandatory) before September 18th
5. Announce all major modification (ex : minor surrender) of your study plan to our secretariat (update and submit your form)
6. Exam withdraw until the 10th week's semester, except for semester courses (November 20)
7. 2 Bachelor courses may eventually be accepted with the section's Director prior agreement

How to choose and register for courses ?

General exam withdrawal deadline for 2025-26 Winter Session: 20 November 2026

It is not possible to withdraw after 18th September from the semester courses listed here:

- ME-420 Advanced design for sustainable future
- ME-403 Applied mechanical design
- ME-482 Biomechanics of musculoskeletal systems
- ME-498 Continuous improvement of manufacturing systems
- ME-428 Data-driven design & fabrication methods
- ME-412 Experimental methods in engineering mechanics
- ME-429 Game theory for multiagent decision-making
- ME-562 Innovation in and for space
- ME-410 Mechanics of soft and biological matter
- ME-470 Mechanobiology: how mechanics regulate life
- ME-436 Micro/Nao robotics
- ME-469 Nano-scale heat transfer
- ME-474 Numerical flow simulation
- ME-517 Product decarbonization and life cycle analysis
- ME-419 Production management
- ME-467 Turbulence

How to choose and register for courses ?

General exam withdrawal deadline for 2025-26 Winter Session: 21 November 2025

It is not possible to withdraw after 19th September from the semester courses listed here:

- MICRO-413 Advanced additive manufacturing technologies
- MSE-464 Assembly techniques
- MSE-440 Composites technology
- MICRO-436 Computational motor control
- MICRO-421 Computational optical imaging
- CIVIL-407 Energy and comfort in buildings
- MGT-555 Innovation & entrepreneurship in engineering
- MICRO-507 Leges robots
- CIVIL-426 Machin learning for predictive maintenance applications
- MICRO-401 Machine learning programming
- CIVIL-450 Thermodynamics of comfort in buildings
- MSE-433 Towards sustainable materials
- MSE-485 Tribology

How to choose and register for courses ?

Art. 12 al. 5 (english)

It is the student's responsibility to have a study plan that complies with the section rules



Minors : subscription before the end of the first semester

Recommended Minors (any other EPFL Minor is accepted)

- Energy
- Management of technology and entrepreneurship
- Computational science and engineering
- Materials science and engineering
- Biomedical technologies
- Spatial technologies
- Engineering for Sustainability

Procedure

- Select the minor in IS-Academia
- Contact the Minor advisor
- Fill-in the registration form (copy to SGM)
- Register for courses in IS-Academia
- Withdrawal from a Minor: contact SGM to convert part of the Minor's ECTS to electives

Specializations are elective

- Domain consolidation
- 30 ECTS with variable fundamental base courses

30 credits fundamental base courses :

- A Fluid mechanics: 12
- B Automatic and systems: 9
- C Design and Production: 16
- D Thermal sciences : 15
- E Mechanics of Solids and Structures : 8
- F Biomechanics : 8

Semestre project

- Semester projects in Mechanical Engineering
 - Projet I : mandatory; 10 ECTS (10 x 30 h /14 weeks $\approx$ 21.5 hours per week)
 - Projet II : elective; 10 ECTS
- Visit the web pages of the various [laboratories](#), and make sure that the teacher responsible for the project is affiliated with the Institute of Mechanical Engineering. If this is not the case, you must submit the project to the Section Director for approval.
- Registration procedure :
 1. Find a project
 2. Contact the project manager
 3. Request [authorization](#) to carry out a project outside GM
 4. Register the project in IS-A (student portal, course selection)
 5. Have the form signed by the professor (or research professor) responsible for supervision
 6. Forward the form to the secretary's office

SHS (social and Human sciences)

Humanities and Social Sciences Program 2025-26

Download the study
plan (PDF)

HSS : Introduction to project

Artistic practices: field studies, film practice I	▼
China: the rebirth of a great power I	▼
Collective creation: improv-arts & engineering I	▼
Comment enseigner la durabilité I	▼
Contemporary Japan I	▼
Critical thinking I	▼
Design for sustainability I	▼
Digital urban history: Lausanne Time Machine I	▼
Ecological transition: from theory to practice	▼
Economic growth and sustainability I	▼
Emotion, value, and life-defining choices I	▼
Experimental cognitive psychology I	▼
Graphic design I	▼
History of globalization I	▼
How people learn: Designing Learning Tools I	▼
Humans/machines	▼
Industrial design I	▼
L'(in)action pro-environnementale I	▼
Law and computation I	▼
Law and technology I	▼
Managing organizations I	▼
Media culture I	▼
Médiation scientifique I	▼
Montreux Jazz Memories: Heritage & digitalization I	▼
Music, politics and society I	▼
Myths of the ancient Mediterranean Sea I	▼

The SHS program is over two
semesters (Fall-Spring)

REGISTER NOW!

Master project

- 2 alternatives
 - At EPFL under the (co)supervision of an SGM teacher
 - Outside EPFL (University or company, combined or not with the internship) under the (co)supervision of an SGM teacher
- Duration (+1 week for vacation)
 - at EPFL: 17 weeks
 - outside EPFL: 25 weeks
- Conditional PDM: minimum of 82 ECTS
- Informative course sheet ME-599
- Expected work: Written report, oral presentation and poster
- Evaluation method : Oral defense of the written report

Projet de Master

- Visit the web pages of the various [laboratories](#) and make sure that the teacher in charge of the project is affiliated with the Mechanical Engineering Section. If not, you'll need to find a co-supervisor from the Mechanical Engineering Institute.
- Project registration :
 1. The subject must be defined by, or in conjunction with, the GM Section Professor.
 2. The dates and conditions (e.g. location, contact person) of the PDM must be defined.
 3. In the case of in-company projects, it is generally necessary to sign a contract between the company and the student (private contract, covering, among other things, working conditions).
 4. For projects abroad (university or company), check entry requirements (visa)
 5. Register the project in IS-Academia
 6. Print out the form (ISA) and have it signed by the professor (or research professor) responsible for supervision
 7. Send the form to the secretariat

Industrial internship

- When to do an internship
 - Between bachelor's and master's degrees
 - Between semesters (during the summer)
 - During a semester off
 - In parallel with a semester (not necessarily full-time)
 - With the Master's project
- How to find an internship
 - Internship portal
 - Personal search and validation request to the internship representative
- Other
 - Minimum duration 8 weeks and maximum 6 months (average ~5 months)
 - Outside universities
 - Requirements corresponding to the skills of a mechanical engineer
 - Agreements imposed by companies are generally refused by the school

Industrial internship

- Three-way contract between the student, the company (usually the internship supervisor or HR) and the academic supervisor(sebastien.soubielle@epfl.ch)
- If you have any questions, please contact the STI faculty internship coordinator (hind.klinke@epfl.ch)
- Full presentation will take place in October, 12:00 – 13:00



Sébastien Soubielle



Valérie Berger

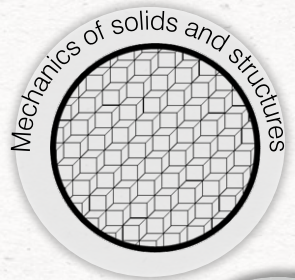
Be aware that !

- You need to pass each exam
- The 44 ECTS in Mechanical Engineering can only come from the list in the Excel sheet
- You need 30 ECTS for a specialization
- If you do a Minor you are not allowed to take any additional ECTS outside Mechanical Engineering
- Begin your SHS this Fall
- To begin your Master Project you must have passed at least 82 ECTS
- Dedicated presentation with Q&A : Monday 14 September





















Thanks for your attention

sgm@epfl.ch