

Minor in Systems Engineering: Registration Form

Deadline to register: end of the first semester of the master program

STUDENT'S PERSONAL INFORMATION	
Last name:	
First name:	
SCIPER:	
E-mail address:	
Section:	Current semester:

I register for the Minor in Systems Engineering.

Date of beginning (semester/year):

Place and date:

Signature:

1. **Sign and date** your registration form. Convert it to **pdf-format**.
2. Send the registration form (together with any accompanying pdf-files of course books and syllabi) **via email to the director of the EPFL Systems Engineering Minor** (thomas.weber@epfl.ch)
3. Once you receive the approval, **forward it together with the registration form to :**
 - **the secretariat of your section**
 - **the secretariat of the MTE section**

STUDY PLAN 2024 - 2025
INTERDISCIPLINARY MINOR in SYSTEMS ENGINEERING
Minor Advisor: prof. Th. Weber

**The minor must be done during the Master studies
and requires to obtain 30 credits**

Legend: A = Autumn, S = Spring / 1 semester = 14 weeks

CODE	Courses	Lecturers	Course catalogue	Credits	Nb of places	Semester		
Group "Minor"				30				
CORE COURSES								
MGT-484	Applied probability & stochastic processes	Cristi	MTE	4		A		<input type="checkbox"/> = Cr
COM-502	Dynamical system theory for engineers 1)	Thiran P.	SC	6		S		<input type="checkbox"/> = Cr
MATH-265	Introduction to optimization and operations research	Bierlaire	GC	4		A		<input type="checkbox"/> = Cr
MICRO-455	Machine learning I	Billard	MT	4		A		<input type="checkbox"/> = Cr
MICRO-570	Machine learning II	Billard	MT	4		S		<input type="checkbox"/> = Cr
MICRO-405	Systems engineering (not given in 24-25)	Bellouard/Feusier/ Gass/Moser + Feusier	MT	3		A		<input type="checkbox"/> = Cr
DOMAIN-SPECIFIC COURSES								
Industrial engineering								
ME-516	Lifecycle performance of product systems	Friot	GM	3		S		<input type="checkbox"/> = Cr
Operations research								
MGT-431	Information: strategy & economics	Weber Th.	MTE	4		A		<input type="checkbox"/> = Cr
MGT-483	Optimal decision making	Kuhn	MTE	4		S		<input type="checkbox"/> = Cr
MGT-526	Supply chain management	Timonina/Markoff	MTE	4	60	S		<input type="checkbox"/> = Cr
Space systems engineering								
ENG-411	Concurrent engineering of space missions	Kneib	EL	2		S		<input type="checkbox"/> = Cr
EE-584	Spacecraft design and system engineering	Rodriguez Martinez	EL	4		A		<input type="checkbox"/> = Cr
Energy and process systems engineering								
ME-451	Advanced energetics	Maréchal	GM	5		A		<input type="checkbox"/> = Cr
ME-454	Modelling and optimization of energy systems	Maréchal	GM	4		A		<input type="checkbox"/> = Cr
Systems biology								
BIO-341	Dynamical systems in biology	Naef/Shillcock	SV	4		A		<input type="checkbox"/> = Cr
BIO-463	Genomics and bioinformatics	Bitbol/Luisier/ Rougemont	SV	4		S		<input type="checkbox"/> = Cr
ChE-411	Principles and applications of systems biology	Hatzimanikatis	CGC	3		A		<input type="checkbox"/> = Cr
Network systems engineering								
MGT-416	Causal inference	Kiyavash	MTE	4		S		<input type="checkbox"/> = Cr
COM-512	Networks out of control (not given in 2024-25) 1)	Grossglauser/Thiran P.	SC	6		S		<input type="checkbox"/> = Cr
Control engineering								
ME-524	Advanced control systems	Karimi	GM	3		S		<input type="checkbox"/> = Cr
ME-523	Commande non linéaire	Müllhaupt	GM	3		A		<input type="checkbox"/> = Cr
ME-425	Model predictive control	Jones	GM	4		A		<input type="checkbox"/> = Cr
ME-421	System identification	Karimi	GM	3		S		<input type="checkbox"/> = Cr
Project								
ENG-422	Optional project in Systems engineering	Various lecturers	--	8		A	S	<input type="checkbox"/> = Cr

TOTAL CREDITS

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Remarks:

1) Given every 2 years

Legend :

A = autumn, S = spring

1 semester = 14 weeks