College of Management of Technology
Management of Technology Section

Minor in
Systems Engineering:

Registration Form

Deadline to register (IS-Academia): 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:

Please mail this form to:

- the secretariat of your section
- the secretariat of the MTE section: EPFL CDM MTE
  Odyssea Building
  Station 5
  CH-1015 Lausanne

STUDY PLAN 2023 - 2024
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

Lecturers, credits and course periods are subject to change
Courses already taken within the frame of the bachelor or master cannot be taken a second time in a minor

Code	Courses			Lecturers	Course catalogue	Credits	Nb of places	Semester		
Group "Minor"						**30**				
CORE COURSES										
MICRO-570	Advanced machine learning	(not given in 23-24)		Billard	MT	4			S	☐
MICRO-455	Applied machine learning			Billard	MT	4		A		☐
MGT-484	Applied probability & stochastic processes			Sutter	MTE	4		A		☐
COM-502	Dynamical system theory for engineers	(not given in 23-24)	1)	Thiran P.	SC	6			S	☐
MATH-265	Introduction to optimization and operations research			Bierlaire	GC	4		A		☐
MGT-448	Statistical inference and machine learning		1)	Kiyavash	MTE	4		A		☐
MICRO-405	Systems engineering	(not given in 23-24)		Bellouard/ Feusier/ Gass/Moser + Feusier	MT	3		A		☐
DOMAIN-SPECIFIC COURSES										
	Industrial engineering									
ME-516	Lifecycle performance of product systems			Friot	GM	3			S	☐
	Operations research									
MGT-431	Information: strategy & economics			Weber Th.	MTE	4		A		☐
MGT-483	Optimal decision making			Kuhn	MTE	4			S	☐
MGT-526	Supply chain management			Seifert	MTE	4	60		S	☐
	Space systems engineering									
ENG-411	Concurrent engineering challenge			Kneib/ Rodriguez	--	2	15		S	☐
EE-584	Spacecraft design and system engineering			Rodriguez Martinez	EL	4		A		☐
	Energy and process systems engineering									
ME-451	Advanced energetics			Maréchal	GM	5		A		☐
ME-454	Modelling and optimization of energy systems			Maréchal	GM	4		A		☐
	Systems biology									
BIO-463	Genomics and bioinformatics			Luisier/ Rouge	SV	4			S	☐
ChE-411	Principles and applications of systems biology			Hatzimanikatis	CGC	3		A		☐
BIO-341	Dynamical systems in biology			Naef/ Shillcock	SV	4		A		☐
	Network systems engineering									
MGT-416	Causal inference	(not given in 23-24)	1)	Kiyavash	MTE	4			S	☐
COM-514	Mathematical foundations of signal processing	(not given in 23-24)		Fageot	SC	6		A		☐
COM-512	Networks out of control		1)	Grossglauser/ Thiran P.	SC	6			S	☐
	Control engineering									
ME-524	Advanced control systems			Karimi	GM	3			S	☐
ME-523	Commande non linéaire			Müllhaupt	GM	3		A		☐
ME-425	Model predictive control			Jones	GM	4		A		☐
ME-421	System identification			Karimi	GM	3			S	☐
	Project									
ENG-422	Optional project in Systems engineering			Various lecturers	--	8		A	S	☐
						TOTAL				

Remarks :
1) Given every 2 years

Legend :
A = autumn, S = spring
1 semester = 14 weeks