

Studies Plan

Mineur : Systems engineering 2023-24

Minor : Systems engineering

Courses			Exam Session	Exam	Credit
Language	Code	Section	Teacher		
Advanced control systems					
E	ME-524	GM	Karimi	Sum	Written 3
Advanced energetics					
E	ME-451	GM	Maréchal	Win	Oral 5
Advanced machine learning					
E	MICRO-570	MT		Sum	Oral 4
Applied machine learning					
E	MICRO-455	MT	Billard	Win	Written 4
Applied probability & stochastic processes					
E	MGT-484	MTE	Sutter	Win	Written 4
Causal inference					
E	MGT-416	MTE		Sum	During the 4 semester
Concurrent engineering challenge					
E	ENG-411	EL		Sum	Oral 2
Dynamical systems in biology					
E	BIO-341	SV	Naef Shillcock	Win	Written 4
Dynamical system theory for engineers					
E	COM-502	SC		Sum	Written 6
Genomics and bioinformatics					
E	BIO-463	SV	Bitbol Luisier Rougemont	Sum	During the 4 semester
Information: strategy & economics					
E	MGT-431	MTE	Weber	Win	During the 4 semester
Introduction to optimization and operations research					
E	MATH-265	GC	Bierlaire	Win	Written 4
Lifecycle performance of product systems					
E	ME-516	GM	Friot	Sum	During the 3 semester
Mathematical foundations of signal processing					
E	COM-514	SC		Win	Written 6
Modelling and optimization of energy systems					
E	ME-454	GM	Maréchal	Win	Oral 4
Model predictive control					
E	ME-425	GM	Jones	Win	Written 4
Networks out of control					
E	COM-512	SC	Grossglauser Thiran	Sum	Written 6
Nonlinear Control Systems					
F	ME-523	GM	Müllhaupt	Win	Oral 3
Optimal decision making					
E	MGT-483	MTE	Kuhn	Sum	Written 4
Optional project in Systems engineering					
E	ENG-422	MTE	Profs divers	Sum Win	During the 8 semester
Principles and applications of systems biology					
E	ChE-411	CGC	Hatzimanikatis	Win	During the 3 semester
Spacecraft design and system engineering					
E	EE-584	EL	Rodriguez Martinez	Win	During the 4 semester
Statistical inference and machine learning					
E	MGT-448	MTE	Kiyavash	Win	Written 4
Supply chain management					
E	MGT-526	MTE	Seifert	Sum	During the 4 semester

	System identification					
<i>E</i>	<i>ME-421</i>	<i>GM</i>	<i>Karimi</i>	<i>Sum</i>	<i>Written</i>	<i>3</i>
	Systems engineering					
<i>E</i>	<i>MICRO-405</i>	<i>MT</i>		<i>Win</i>	<i>During the</i>	<i>3</i>
					<i>semester</i>	