

Studies Plan

Génie mécanique 2025-26

Block 1

Courses				Bachelor 3	Bachelor 4	Bachelor 5	Bachelor 6	Exam Session	Exam	Credit
Lang.	Code	Sect.	Teacher	C E L T P I	C E L T P I	C E L T P I	C E L T P I			
E	Analysis III MATH-202(c)			MA	Antolin Sanchez	3h 2h		Win	Written	5
E	Analysis IV (for EL, GM, MX) MATH-207(c)			MA	Moschidis	2h 2h		Sum	Written	4
E	General physics: electromagnetism PHYS-201(b)			PH	Ramirez-San-Juan	4h 2h		Win	Written	6
F	Mechanics of structures (For GM) ME-232			GM	Prenleloup Shea	3h 1h		Win	Written	4
F	Numerical analysis MATH-251(e)			MA	Pouchon	2h 2h		Sum	Written	4
F	Probability and statistics MATH-234(d)			MA	Zemel	2h 1h		Sum	Written	3
E	Sustainable products and supply chains ME-203			GM	Kaboli Wakeman	2h	1h	Sum	During the semester	3
E	Thermodynamics and energetics I ME-251			GM	Haussener Lu	3h 1h		Win	Written	4

Block 2

Courses				Bachelor 3	Bachelor 4	Bachelor 5	Bachelor 6	Exam Session	Exam	Credit
Lang.	Code	Sect.	Teacher	C E L T P I	C E L T P I	C E L T P I	C E L T P I			
E	Dynamical systems ME-221			GM	Sakar	2h 1h		Sum	Written	3
E	Fluid mechanics (for GM) ME-280			GM	Schneider	3h 1h		Sum	Written	4
F	Industrial production processes ME-212			GM	Boillat	4h		Sum	Written	4
F	Mechanical behaviour of materials MSE-234			MX	Gheysen Hernandez Escobar Mortensen	3h	1h	Win	Written	4
F	Mechanical systems ME-202			GM	Soubielle	2h 2h		Sum	Written	4
F	Programmation pour ingénieur ME-213			GM	Salzmann	2h 1h	1h	Win	During the semester	4

Block 3

Courses				Bachelor 3			Bachelor 4			Bachelor 5			Bachelor 6			Exam Session	Exam	Credit			
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I				C	E	L
E	Control systems + TP ME-321				GM	Jones Salzmann										3h	1h	Win	Written	4	
F	Dynamical effects in mechanical design ME-311				GM	Schiffmann										1h	1h	1h	Sum	Written	3
F	Electrical machines (for ME) EE-382				EL	Hodder										2h	1h	Win	Written	3	

F	Electronics									
	EE-280	EL	Meinen Sallese	2h	1h			Win	Written	3
F	Finite element method									
	ME-372	GM	Burzio Gallaire	2h	1h			Win	Written	3
E	Foundations of artificial intelligence									
	ME-390	GM	Kamgarpour	2h	1h			Win	Written	3
E	Heat and mass transfer									
	ME-341	GM	Tagliabue			3h	1h	Sum	Written	4
E	Introduction to optimization and operations research									
	MATH-265	GC	Bierlaire	2h	2h			Win	Written	4
F	Mechanical vibrations									
	ME-332	GM	Villanueva	3h	1h			Win	Written	4
E	Product development and engineering design									
	ME-320	GM	Hughes	2h	1h			Win	During the semester	3
E	Solid mechanics									
	ME-331	GM	Reis			3h	1h	Sum	Written	4

Block 4

Courses				Bachelor 3			Bachelor 4			Bachelor 5			Bachelor 6			Exam Session	Exam	Credit						
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I			
	Advanced mechanisms for extreme environments																							
F	MICRO-372	MT	Cosandier													2h	1h			Sum		Written		3
	Compressible-fluid dynamics																							
F	ME-343	GM	Gallaire													3h	1h			Sum		Written		4
	Discrete-time control of dynamical systems																							
F	ME-324	GM	Müllhaupt													2h				Sum		Written		2
	Discretization methods in fluids																							
F	ME-371	GM	Burzio													2h	1h			Sum		Written		3
	Elements of statistics for data science																							
F	EE-209	EL	Müllhaupt													2h	1h			Sum		Written		3
	Experimental methods in biomechanics																							
F	ME-380	GM	Pioletti														1.5h	1.5h		Sum		During the semester		3
	Finite element modelling and simulation																							
F	ME-373	GM	Boujo													1h	1h	1h		Sum		During the semester		3
	General physics : quanta																							
F	PHYS-207(c)	PH	Pasquarello													2h	2h			Sum		Written		4
	Introduction to turbomachinery																							
E	ME-342	GM	Yim													2h				Sum		Written		2
	Matrix analysis																							
F	EE-312	EL	Vandergheynst													2h	1h			Sum		Written		4
	Microinformatique (pour GM)																							
F	ME-303	GM	Müllhaupt													2h		2h		Sum		During the semester		4
	Thermodynamics and energetics II																							
E	ME-351	GM	Raju Natarajan													2h	1h			Sum		Written		3

Block 5

Courses				Bachelor 3					Bachelor 4					Bachelor 5					Bachelor 6					Exam Session	Exam	Credit	
Lang.	Code	Sect.	Teacher	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I	C	E	L	T	P	I
	Concurrent engineering project																										
	ME-314	GM	Profs divers																			5h	Sum		During the semester	5	

Measurement techniques									
<i>E</i>	<i>ME-301</i>	<i>GM</i>	<i>Mulleners</i>		1h	3h	<i>Sum</i>	<i>Written</i>	<i>4</i>

Transverse block HSS

Courses			Exam Session	Exam	Credit
<i>Lang.</i>	<i>Code</i>	<i>Sect. Teacher</i>			
	SHS : Bachelor cycle BA6				
<i>F</i>		<i>SHS</i>			2
	HSS : Bachelor cycle BA5				
<i>F</i>		<i>SHS</i>			2
	HSS : Bachelor cycle BA4				
<i>F</i>		<i>SHS</i>			2
	HSS : Bachelor cycle BA3				
<i>F</i>		<i>SHS</i>			2