

Studies Plan

G nie civil 2025-26

Block "Cross-disciplinary team projects"

Courses			Exam Session	Exam	Credit
Lang.	Code	Sect. Teacher			
F	Semaine ENAC		Sum		4
F	Unit�s d'enseignement ENAC		Sum		4

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			
F	Analysis III MATH-203(b)	MA Str�tt	2h 2h				Win	Written	4
E	Analysis IV MATH-207(d)	MA Braun		2h 2h			Sum	Written	4
E	Introduction to optimization and operations research MATH-265	GC Bierlaire	2h 2h				Win	Written	4
F	Probability and statistics MATH-234(a)	MA Ruffieux	2h 1h				Win	Written	3

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			
F	Continuum mechanics (for GC) CIVIL-225	GC Molinari	3h 2h				Win	Written	5
E	Engineering a sustainable built environment CIVIL-239	GC Sonta	2h 1h				Win	Written	3
F	Fluids mechanics (For GC) CIVIL-210	GC Ancey		3h 2h			Sum	Written	5
E	Structural mechanics (for GC) CIVIL-238	GC Vassilopoulos		2h 2h			Sum	Written	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 T P I	C E L T P I			
E	Fundamentals of indoor climate CIVIL-212	GC Licina	1h 1h				Win	During the 2 semester	
F	Geology CIVIL-211	GC M�ntener Vanardois Violay	2h 1h	1h			Win	Written	4
E	Introduction to machine learning for engineers CIVIL-226	GC Alahi Fink		2h 3h			Sum	During the 5 semester	
E	Introduction to transportation systems CIVIL-355	GC Bierlaire		2h 1h			Sum	During the 3 semester	
E	Soil mechanics and flow through porous media CIVIL-203	GC Karapiperis		3h 2h	1h		Sum	Written	5

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	C	E	L	T	P	I			
F	Design of steel structures																								3h	2h	Sum	Written	5	
F	CIVIL-235 GC Nussbaumer																								3h	2h	Sum	Written	5	
F	Geotechnical engineering																								3h	2h	Sum	Written	5	
F	CIVIL-306 GC Möri																								3h	2h	Sum	Written	5	
E	Hydraulic engineering and infrastructures																								3h	2h	Win	Written	5	
E	CIVIL-312 GC Musa																								3h	2h	Win	Written	5	
E	Numerical analysis																								2h	1h	Win	Written	3	
E	MATH-251(a) MA Olikier																								2h	1h	Win	Written	3	
F	Numerical modelling of solids and structures																								2h	1h	1h	Sum	Written	4
F	CIVIL-321 GC Anciaux Molinari																								2h	1h	1h	Sum	Written	4
E	Reinforced concrete structures																								3h	2h	Win	Written	5	
E	CIVIL-323 GC Ruggiero																								3h	2h	Win	Written	5	
F	Rock mechanics																								3h	2h	Win	Written	5	
F	CIVIL-308 GC Sandrone Vacat Violay																								3h	2h	Win	Written	5	
E	Traffic engineering																								2h	2h	Win	During the semester	4	
E	CIVIL-349 GC Geroliminis																								2h	2h	Win	During the semester	4	
E	Urban public transport systems																								2h	1h	Sum	During the semester	3	
E	CIVIL-324 GC Zhang																								2h	1h	Sum	During the semester	3	
E	Urban thermodynamics																								1h	1h	1h	Win	During the semester	3
E	CIVIL-309 GC Khovalyg																								1h	1h	1h	Win	During the semester	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
	Project in civil engineering																										
F	CIVIL-390	GC	Profs divers																	5h				5h	Sum Win	During the semester	5

Block 6

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
	Data Science for infrastructure condition monitoring																										
E	CIVIL-332	GC	Fink																2h	1h		Sum	During the semester	3			
	Dimensioning of Timber structures																										
F	CIVIL-331	GC	Natterer																2h	1h		Win	Written	3			
	Estimation methods																										
F	ENG-267	SIE	Skaloud																2h	2h		Win	Written	4			
	Geographic information system (GIS)																										
F	ENV-342	SIE	Joost																2h	2h	1h	Sum	Written	5			
	Heat and mass transfer																										
E	ME-341	GM	Tagliabue																3h	1h		Sum	Written	4			
	Hydrology for engineers																										
E	ENV-221	SIE	Bonetti																2h	2h	1h	Win	Written	5			
	Numerical representation / BIM																										
F	CIVIL-307	GC	Domer																2h	1h		Sum	During the semester	3			
	Signals, instruments and systems																										
E	ENG-366	SIE	Martinoli																2h	2h	1h	Sum	Written	5			

Transverse block HSS

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