

Teachers, credits and course period are subject to change.					
CODE	SUBJECTS	TEACHERS subject to modification	COURSE BOOKLET	CREDIT S ECTS	COURSE PERIOD
Specialization "Structural Engineering"				75	
CIVIL-443	Advanced Composites in Engineering Structures	Vassilopoulos	GC	3	A
CIVIL-414	Design of precast concrete structures	Fernandez-Ordonez	GC	3	P
CIVIL-435	Advanced steel design	Lignos/Skiadopoulos	GC	3	P
CIVIL-438	Analyse et gestion de risques	Defert	GC	2	A
CIVIL-464	Composites design and innovation	Vassilopoulos/Molinari	GC	3	P
CIVIL-433	Conception des constructions en bois	Natterer	GC	3	P
CIVIL-425	Continuum mechanics and applications	Lecampion/Molinari	GC	6	E
CIVIL-468	Dynamics of structures	Lignos/Beyer/Molinari	GC	4	A
CIVIL-511	Engineering of existing structures	Denarié/Nussbaumer	GC	4	A
CIVIL-424	Innovation for construction and the environment	Terzis	GC	3	A
CIVIL-426	Machine learning for predictive maintenance applications	Fink	GC	4	A
CIVIL-532	Matériaux et structures	Denarié	GC	3	A
CIVIL-449	Nonlinear analysis of structures	Beyer K. / Lignos / Saloustros	GC	6	A
CIVIL-430	Ponts en béton	Muttoni	GC	3	A
CIVIL-510	Quantitative imaging for engineers	Ando	GC	3	A
CIVIL-512	Reinforced concrete structures - Advanced topics	Ruggiero	GC	4	P
CIVIL-465	Research skills for engineers (Pas donnée en 23-24)	Beyer/Althaus/Weil	GC	2	A
CIVIL-522	Seismic engineering	Beyer K. / Lignos / Saloustros	GC	6	P
CIVIL-527	Selected topics in mechanics of solids and structures (Not given in 23-24)	Molinari J.-F.	GC	3	A
CIVIL-369	Structural stability	Lignos D./Heredia Rosa/Sousa	GC	4	P
CIVIL-526	Structures en métal, chapitres choisis	Nussbaumer	GC	3	A

SGC - Spécialisation

Hydraulic & Energy (E)

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Specialization "Hydraulics and Energy"				71	
CIVIL-438	Analyse et gestion des risques	Defert	GC	2	A
CIVIL-534	Computational systems thinking for sustainable eng.	Sonta	GC	4	P
CIVIL-411	Dam Engineering	Manso/Mouvet	GC	3	A
CIVIL-425	Continuum mechanics and applications	Lecampion/Molinari	GC	6	E
ENG-470	Droit de la construction pour ingénieurs I	Mouvet/Müller/Di Cicco	GC	2	A
ENG-471	Droit de la construction pour ingénieurs II	Müller/Di Cicco	GC	2	P
ENV-418	Éco-morphologie fluviale	Gostner/De Cesare	GC	3	A
CIVIL-427	Flow monitoring technology in water engineering	De Cesare/Perona/Hurther	GC	3	P
ME-409	Energy conversion and renewable energy*	Maréchal, Moret	GM	3	A
CIVIL-444	Energy geostructures	Laloui	GC	4	P
ENG-474	Études d'impact	Schmidt F./Devanthery/Helfer	GC	3	A
CIVIL-470	Geothermal Resource Development	Kushnir	GC	3	A
CIVIL-410	Hydraulique fluviale et aménagement des cours d'eau	G. De Cesare/André/Arborino	GC	3	A
ENV-417	Hydrologie urbaine *	Rossi L.	SIE	4	P
CIVIL-460	Indoor air quality and ventilation	Licina	GC	4	P
CIVIL-469	Hydropower schemes and pumped-storage	Manso/De Cesare	GC	4	A
CIVIL-515	Ondes de crue et de rupture de barrage	Ancey	GC	3	P
ENV-524	Risques hydrologiques et aménagements*	Ancey	SIE	3	A
CIVIL-450	Thermodynamics of comfort in buildings	Khovalyg	GC	3	P
CIVIL-404	Travaux souterrains	Seingre/Sandrone	GC	3	P
CIVIL-413	Urban hydraulic systems	Pfister M.	GC	3	P
CIVIL-466	Water Ressources Management	Perona/Bieri Leite Ribeiro+Perona	GC	3	P

Legend:

* = courses outside the curriculum for students not majoring.

F = Fall, S = Spring - 1 semester includes 14 weeks