

CIVIL AND STRUCTURAL ENGINEERING (GCC, with GI and IMI) DATA SCIENCE TRACK - 2025 2026		
YEAR 3 (M2) OF ENPC MSc IN ENGINEERING		ECTS
September 2025 : 4th & 5th	FEEDBACK ON ENGINEER INTERNSHIP - REX* (only for long internships) - 03STA	1,5
	INCEPTION WEEKS (mandatory)	4
September 2025 : 8th to 12th	Week dedicated to : Innovative materials in concrete construction - 03ATB** OR Masonry wall : conception, construction and deconstruction - 03ADL OR Building freeforms - 03ATC OR Design of an arch - 03ATT OR Earth construction - 03ATE	1,5
September 2025 : 15th to 19th	Future construction technologies : Techniques and Building Information Modeling (BIM) - CHBIM OR Challenge "Planning, Logistics, Environment" - 03AET	1
November 2025 : 17th to 21st	Department week OR ATHENS week - SEP	1,5
	DEPARTMENT MANDATORY COURSES (to be chosen on a list)	9
	3 courses (9 ects as a minimum) to be chosen in the list below and distributed over the 2 groups : materials and advanced	
	Materials (1 course at least)	
S5	Reinforced and prestressed concrete - BAEP 1 & 2 (GMM)	3
S5	Steel construction - CASME	3
	Advanced courses (1 course at least)	
S5	Advanced construction dynamics - DYNAV	3
S5	Advanced structural design - COAST	3
S5	Geomechanics and advanced geotechnics - GEOME	3
S5	Concrete rheological properties and workability - BETAV	3
	MANDATORY COURSES FROM THE DATA MASTER PROGRAMME	17
S5	Project Civil engineering and Data science - GCDAT	7,5
S5	Big Data Architecture - ABDAT	1,5
S5	Machine learning Operation Research - ROAPA (GI)	2
S5	Deep Learning - DEEPL (IMI)	3
S5	AI in human-machine collaboration - IACHM (GI)	3
	ELECTIVE COURSES	
	To be chosen, on a voluntary basis, among the courses proposed in the list below or among the whole school catalogue	
S5	Strategic management of companies - MSTR (GI)	2
S5	Buildings energy and comfort performance - APAM 1	3
S5	Structures, energy and risks - CORI 1	3
S5	Design of underground structures - COTU1	3
S5	Smart systems - SYSIN (GI)	3
S5	Operations research - REOP (GI)	3
S5	Introduction to Operations research - TIRO (TRADD Master programm) recommended for DD students	1,5
S5	LANGUAGES (mandatory)	2
S6	END-OF-STUDY PROJECT (17 weeks at least)	30
TOTAL YEAR 3 (M2)		63,5

* The 1,5 ects obtained during Feedback of Engineer internship are excluded from the required 25,5 ects

** This code is the course's code in our online catalogue (<http://gede.enpc.fr/Programme/Default.aspx?Langue=en>)

Letters in brackets stand for the department (other than GCC) which delivers the course :

GMM : Génie Mécanique et Matériaux - Mechanical Engineering and Materials Science

GI : Génie Industriel - Industrial engineering

IMI : Ingénierie Mathématique et Informatiques - Applied Mathematics and Computer science

SEGF : Sciences économiques, Gestion, Finance - Economics, Management, Finance

VET : Ville Environnement Transport - City, Environment, Transportation

SHS - Sciences Humaines et Sociales - Humanities and Social Sciences