ENPC

Academic track for UPC students

Bachelor in Civil Engineering 2020 GEC (2020) Specialty in Technology Applied to Civil constructions	1st year	Escola de Camins (1st year Public Works Eng. Bachelor)
	2nd year	Escola de Camins (2nd year Public Works Eng. Bachelor)
	3rd year	Escola de Camins (3rd year Public Works Eng. Bachelor)
	4t year	ENPC 2nd year Engineer
	4th year	TFG to be enrolled and defended at UPC
Master in Civil Engineering, Specialty in Structural & construction engineering	1st year	ENPC 3rd year Engineer
	1st year	Escola de camins, Master UPC S1/S2
	2nd year	Escola de camins, Master UPC S1/S2+TFM

Institution	Subjects	Academic track BCN	ECTS at host institution	2nd course ENPC					3rd course ENPC				
		50		10	20	8	6	6	7	10,5	9	9	30
				Geology and Geomechanics (Engineering geology Week, Solid and Rock Mechanics, Design of Geotechnical Structures)	Structural Mechanics (Calculation and behavior of materials, Introduction to building materials, Structural Mechanics, Dynamics of Structures and Constructions, Design of Structures,Shells and advanced structures)	Management, history and law (Business Management, Introduction to law, Techniques and architecture of Civil Engineering works)	Continuum Mechanics (Fluid Mechanics, Plasticity and calculation at breakage)	Information Technologies and Statistics (Drawing and Computer Graphics, Introduction to Drawing and Computer Graphics, Practice of Statistical Methods)	Project and Structural Management (Civil Engineering Project Management and Economics, Construction site of the Future: Methods/BIM, Structures, energy and	Bridge design (Bridge design and construction, Bridge project)	Advanced Structural typologies (Advance Concrete, Reinforced and Advanced Concrete, Steel construction)	Structural design (Advanced Structural Design, Advanced Construction Dynamics, Design of	Graduation Project
UPC (1st year BsC)	**Total**	**60**	-										
UPC (2nd year BsC)	**Total**	**60**	-										
UPC (3rd year BsC)	**Total**	**60**	-										
ENPC (4th year BsC)	Maritime Constructions	4,5	4,5		3								1,5	
	Geotechnical Engineering	4,5	4,5		3								1,5	
	Structural Design	6	6				6							
	Construction of Bridges and other Structures	6	6								6			
	Building Construction and Prefabrication	7,5	7,5				2			2		3,5		
	Itinerary elective courses (two subjects, 9 ECTS)													
	2500039 - Prestressed concrete	4,5	4,5									4,5		
	2500047 - Introduction to structure management	4,5	4,5			4,5								
	Common optional courses (3 subjects, 13,5 ECTS)													
	2500033 - GIS & remote sensing	4,5	4,5		3			1,5						
	2500035 - Social impact of public constructions	4,5	4,5			3,5				1				
	2500032 - Graphic design & numerical analysis	4,5	4,5					4,5						
	2500057-Bachelor's thesis (TFG) to be enrolled and defended at UPC	12												
	Total	**63**	**51**											
ENPC (2nd year MECCP)	**Mandatory courses**													
	250470 - Building structures (S3/S4)	5	5				5							
	250472 - Analysis & design of steel structures (S3/S4)	5	5										5	
	250473 - Advanced design of concrete structures (S3/S4)	5	5				1					2	2	
	250471 - Bridges (S4)	5	5								5			
	Elective courses													
	250474 - Structural management (S3)	5	5							5				
	250475 - Mixed & composite structures (S3)	5	5				2		3					
	250476 - Seismic risk assessment & reduction (S4)	5	5		1		4							
	ENPC Gradutation Project	-	30											30
	Total	**35**	**65**											
UPC (1st year MECCP)	250401 - Mechanics of continua (S1)	9	-											
	250402 - Numerical modelling (S1)	9	-											
	250403 - Structural analysis (S1)	7,5	-											
	250404 - Hydraulic infrastructure (S1)	4,5	-											
	250405 - Structural engineering (S1/S2)	6	-											
	250406 - Computational engineering (S1/S2)	6	-											
	250407 - Geomechanical & geotechnical engineering (S1/S2)	6	-											
	250408 - Water engineering (S1/S2)	6	-											
	250409 - Planning & management of transportation (S1/S2)	6												
	TFM	25												
	Total	**85**	-											