

Double Degree Master Programme between Università Roma La Sapienza and Universitat Politècnica de Catalunya-UPC

This DD master program consists of several courses taken from the existing masters programs "Safety and Civil Protection Engineering" (Università Roma La Sapienza) and "Civil Engineering" (Universitat Politècnica de Catalunya-UPC). The latter degree is a chartered program in Spain that allows graduates to enroll the Spanish Civil Engineer Association (professional degree).

Academic track for UPC students to UniROMA

Master in Civil Engineering	1st year	E. Camins: S2 (30 ECTS Mandatory courses) + S3 (30 ECTS Electives/Electives from specialization)
Master in Safety and Civil Protection Engineering-Civil	2nd year	UNIROMA: 42 ECTS electives + 17 Master thesis +1 Training

Students may choose among 6 available specialisations at UPC . Different electives must be taken through the whole DD program in order to fulfill the skills of each specialisation:

Specialisation in Environment and Sustainability Engineering

	ECTS		
1st year at UPC MECCP	250405-Structural engineering	6	Mandatory course
	250406-Computational engineering	6	Mandatory course
	250407- Geomechanical and Geotechnical Engineering	6	Mandatory course
	250408-Water engineering	6	Mandatory course
	250409- Planning and Management of Transportation	6	Mandatory course
	250460 Water treatment	5	Elective 1 from Specialization
	250461 Environmental modelling	5	Elective 2 from Specialization
	250462 Life-Cycle Analysis and Sustainability Assessment	5	Elective 3 from Specialization
	Electives from other specialisations	15	
Total	60		
2nd year UNIROMA Safety and Civil Protection Engineering (SCPE)	1041800- Progettazione della difesa dai rischi naturali (Evaluation of Natural Hazard)	9	Recognition of Elective 4 from Specialization: 250463- Sustainability and Development Engineering
	Mandatory courses and electives from 2nd year SCPE-Civile ¹	33	
	AAF1015-Master thesis (to be presented at both institutions)	17	
	AAF1039-Training	1	
	Total	60	

Specialisation in Water Engineering

	ECTS		
1st year at UPC MECCP	250406-Computational engineering	6	Mandatory course
	250405-Structural engineering	6	Mandatory course
	250408-Water engineering	6	Mandatory course
	250407- Geomechanical and Geotechnical Engineering	6	Mandatory course
	250409- Planning and Management of Transportation	6	Mandatory course
	250430- Urban Hydrology	5	Elective 1 from Specialization
	250433-Port and Offshore Engineering	5	Elective 2 from Specialization
	250432-Coastal Engineering and Management	5	Elective 3 from Specialization
	250431- River Dynamics	5	Elective 4 from Specialization
	Electives from other specialisations	10	
Total	60		
2nd year UNIROMA Safety and Civil Protection Engineering (SCPE)	Mandatory courses and electives from 2nd year SCPE-Civile ¹	42	
	AAF1015-Master thesis (to be presented at both institutions)	17	
	AAF1039-Training	1	
	Total	60	

Specialisation in Structural Engineering

ECTS

1st year at UPC MECCP	250406-Computational engineering	6	Mandatory course
	250405-Structural engineering	6	Mandatory course
	250408-Water engineering	6	Mandatory course
	250407- Geomechanical and Geotechnical Engineering	6	Mandatory course
	250409- Planning and Management of Transportation	6	Mandatory course
	250470_ Building structures	5	Elective 3 from Specialization
	250471_Bridges	5	Elective 4 from Specialization
	Electives from other specialisations	20	
Total		60	
2nd year UNIROMA Safety and Civil Protection Engineering (SCPE)	1047764- Analisi forensi sui materiali metallici	6	Recognition of Elective 1 from Specialization: 250472_Analysis and Design of Steel Structures
	1031907-Progettazione strutturale antiincendio	6	Recognition of Elective 2 from Specialization: 250473_Advanced Design of Concrete Structures
	Mandatory courses and electives from 2nd year SCPE-Civile ¹	30	
	AAF1015-Master thesis (to be presented at both institutions)	17	
	AAF1039-Training	1	
Total		60	

(1) This course is taken from Industrial Safety mention, not from Civil Safety

Specialisation in Transportation Engineering

ECTS

1st year at UPC MECCP	250406-Computational engineering	6	Mandatory course
	250405-Structural engineering	6	Mandatory course
	250408-Water engineering	6	Mandatory course
	250407- Geomechanical and Geotechnical Engineering	6	Mandatory course
	250409- Planning and Management of Transportation	6	Mandatory course
	250452- High-Speed Rail Line Management	5	Elective 3 from Specialization
	250451- Road Network Planning and Operation	5	Elective 4 from Specialization
	Electives from other specialisations	20	
Total		60	
2nd year UNIROMA Safety and Civil Protection Engineering (SCPE)	1034919-Geofisica applicata e zonazione del territorio	6	Recognition of Elective 1 from Specialization: 250453_Urban Planning and Urban Service Infrastructure
	1044891-Progettazione dei Trasporti in Emergenza	6	Recognition of Elective 2 from Specialization: 250450_Urban Mobility
	Mandatory courses and electives from 2nd year SCPE-Civile ¹	30	
	AAF1015-Master thesis (to be presented at both institutions)	17	
	AAF1039-Training	1	
Total		60	

Specialisation in Geotechnical Engineering

ECTS

1st year at UPC MECCP	250406-Computational engineering	6	Mandatory course
	250405-Structural engineering	6	Mandatory course
	250408-Water engineering	6	Mandatory course
	250407- Geomechanical and Geotechnical Engineering	6	Mandatory course
	250409- Planning and Management of Transportation	6	Mandatory course
	250422-Interaction Between Groundwater and Civil Works	5	Elective 3 from Specialization
	250421- Geomechanics of Breakage	5	Elective 4 from Specialization
	Electives from other specialisations	20	
Total		60	
2nd year UNIROMA Safety and Civil Protection Engineering (SCPE)	1031906-Progettazione della Sicurezza Geotecnica	6	Recognition of Elective 1 from Specialization: 250420_Geotechnical Design and Construction
	10589176-Safety regulations in mining and petroleum activities	6	Recognition of Elective 2 from Specialization: 250423_Tunnels and Rock Mechanics
	Mandatory courses and electives from 2nd year SCPE-Civile ¹	30	
	AAF1015-Master thesis (to be presented at both institutions)	17	
	AAF1039-Training	1	
	Total		60

Safety and Civil Protection Engineering (SCPE) course catalogue: <https://corsidilaurea.uniroma1.it/it/corso/2017/28227/cds>

¹ Subjects to be specified individually in each learning agreement and accordingly to MECCP and SCPE study plan requirements and competences