BACHELOR COURSES IN ENGLISH - FALL SEMESTER - Q1

CODE	SUBJECT	ECTS	WEB - SYLLABUS	PROGRAM
2500010	GEOMATICS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500010&idioma=3	GEC 2020
2500011	CONSTRUCTION MATERIALS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500011&idioma=3	
2500012	VECTOR CALCULUS AND DIFFERENTIAL EQUATION	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500012&idioma=3	
2500013	MECHANICS II	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500013&idioma=3	
2500014	PROBABILITY AND STATISTICS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500014&idioma=3	
2500020	GEOTECHNICS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500020&idioma=3	
2500021	STRUCTURES	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500021&idioma=3	
2500022	TRANSPORTATION SYSTEMS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500022&idioma=3	
2500023	SURFACE AND GROUNDWATER HYDROLOGY I	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500023&idioma=3	
2500058	Project Management	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500058&idioma=3	
2500031	GEOTECHNICAL ENGINEERING	4,5	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500031&idioma=3	
2500042	ENVIRONMENTAL IMPACT ON MARITIME WORKS	4,5	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500042&idioma=3	
250562	ENVIRONMENTAL STATISTICS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=250562&idioma=3	GCITM

GEC 2020: GRAU EN ENGINYERIA CIVIL / BACHELOR IN CIVIL ENGINEERING 2020 curricula

BACHELOR COURSES IN ENGLISH - SPRING SEMESTER - Q2

CODE	SUBJECT	ECTS	WEB - SYLLABUS	PROGRAM
2500015	HYDRAULICS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500015&idioma=3	
2500016	STRENGTH OF MATERIALS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500016&idioma=3	
2500017	NUMERICAL METHODS IN ENGINEERING	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500017&idioma=3	
2500018	REPRESENTATION TECHNIQUES	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500018&idioma=4	
2500019	ENVIRONMENTAL TECHNOLOGY	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500019&idioma=4	
2500025	REINFORCED CONCRETE	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500025&idioma=4	GEC 2020
2500026	METALLIC CONSTRUCTIONS	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500026&idioma=5	
2500027	CONSTRUCTION METHODS AND ELECTRICAL ENGINEERING	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500027&idioma=5	
2500028	PUBLIC WORKS PROJECT	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500028&idioma=6	
2500029	TRANSPORTATION INFRASTRUCTURES	6	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500029&idioma=6	
2500036	MACHINE LEARNING AND DATA SCIENCE	4,5	https://ocw.camins.upc.edu/ocw/guia?codiUpcUd=2500036&idioma=6	

GEC 2020: GRAU EN ENGINYERIA CIVIL / BACHELOR IN CIVIL ENGINEERING 2020 curricula

MASTER COURSES IN ENGLISH - FALL SEMESTER - Q1

CODE	SUBJECT	ECTS	WEB - SYLLABUS	PROGRAM
250401	MECHANICS OF CONTINUA	9	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250401&idioma=3	MECCP
250402	NUMERICAL MODELLING	9	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250402&idioma=3	
250405	STRUCTURAL ENGINEERING	6	http://ocw.camins.upc.edu/ocw/home.htm?p_codiUpcUd=250405&p_idIdioma=3	
250406	COMPUTATIONAL ENGINEERING	6	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250406&idioma=3	
250407	GEOMECHANICAL AND GEOTECHNICAL ENGINEERING	6	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250407&idioma=3	
250409	PLANNING AND MANAGEMENT OF TRANSPORTATION	6	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250409&idioma=3	
250430	URBAN HYDROLOGY	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250430&idioma=3	
250433	PORT AND OFFSHORE ENGINEERING	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250433&idioma=3	
250440	COMPUTATIONAL ENGINEERING FOR DESIGN AND OPERATION	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250440&idioma=3	
250450	URBAN MOBILITY	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250450&idioma=3	
250470	BUILDING STRUCTURES	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250470&idioma=3	
250471	BRIDGES		https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250471&idioma=3	
250472	ANALYSIS AND DESIGN OF STEEL STRUCTURES	5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250472&idioma=3	
250710	INSPECTION, ANALYSIS AND RESTORATION OF HISTORICAL CONSTRUCTIONS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250710&idioma=3	MEEC
250731	CONSTRUCTION METHODS AND MANAGEMENT	5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250731&idioma=3	
250728	FOUNDATION STRUCTURES	5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250728&idioma=3	
250818	CONSTITUTIVE EQUATIONS OF MATERIALS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250818&idioma=3	MET
250950	NUMERICAL METHODS FOR PDES	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250950&idioma=3	MMNE
250951	FINITE ELEMENT METHOD	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250951&idioma=3	
250952	CONTINUUM MECHANICS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250952&idioma=3	
250954	ADVANCED FLUID MECHANICS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250954&idioma=3	
250960	COMMUNICATION SKILLS 1	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250960&idioma=3	
250961	COMPUTATIONAL MECHANICS TOOLS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250961&idioma=3	
250964	ENTREPRENEURSHIP FOR ENGINEERS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250964&idioma=3	
250965	ADVANCED DISCRETIZATION METHODS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250965&idioma=3	
250967	COMMUNICATION SKILLS 2	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250967&idioma=3	
250971	REDUCED ORDER MODELLING	5		
480073	ENERGY ECONOMICS AND SUSTAINABLE ENERGY SYSTEMS	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480073&lang=ing	MCTSOST
480078	RESEARCH-ACTION WORKSHOP ON SUSTAINABILITY SCIENCE AND TECHNOLOGIES	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480042&lang=ing	
480171	COMPLEX AND SOCIO-ENVIRONMENTAL NETWORKS	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480171&lang=ing	
480511	URBAN AND REGIONAL DEVELOPMENT	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480511&lang=ing	
250911	Debris Flow Risk and Resilience Assesment	5	https://www.floodriskmaster.org/courses	MSFRM
250912	Coastal flooding: impacts, conflicts and risks	4	https://www.floodriskmaster.org/courses	
250913	Droughts Risk and Resilence assesment	3	https://www.floodriskmaster.org/courses	
250910	Fluvial Morphodynamics	5	https://www.floodriskmaster.org/courses	

250914	Flood early warning systems using hydrometeorological forecasting	3	https://www.floodriskmaster.org/courses	
250MUM003	PRODUCT OR SERVICE DEVELOPMENT PROJECT	4	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM003	MUM
250MUM006	CASE STUDIES IN URBAN MOBILITY	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM006	
250MUM021	Mobility & development	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM021	
250MUM022	Merchandise transports	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM022	
250MUM023	Traffic	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM023	
250MUM024	Airport management	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM024	
250MUM025	Vehicle routing models	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM025	
250MUM026	Smart mobility (SMART)	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM026	

MECCP: MASTER EN ENGINYERIA DE CAMINS, CANALS I PORTS / MASTER IN CIVIL ENGINEERING (CHARTERED)
MMNE: MASTER EN METODES NUMERICS EN ENGINYERIA / MASTER IN NUMERICAL METHODS IN ENGINEERING
MET: MASTER EN ENGINYERIA DEL TERRENY / MASTER IN GEOTECNICAL ENGINEERING
MEEC: MASTER ENGINYERIA ESTRUCTURAL I DE LA CONSTRUCCIÓ/ MASTER IN STRUCTURAL AND CONSTRUCTION ENGINEERING
EUROAQUAE: HYDROINFORMATICS AND WATER MANAGEMENT
MSCM: COMPUTATIONAL MECHANICS
COMEM: COASTAL AND MARINE ENGINEERING AND MANAGEMENT
MCTS: SUSTAINABILITY SCIENCE & TECHNOLOGY
MEA: MASTER'S DEGREE IN ENVIRONMENTAL ENGINEERING
MSFRM: MASTER SCIENCE ON FLOOD RISK MANAGEMENT
MUM: MASTER IN URBAN MOBILITY

MASTER COURSES IN ENGLISH - SPRING SEMESTER - Q2

CODE	SUBJECT	ECTS	WEB - SYLLABUS	PROGRAM
250401	MECHANICS OF CONTINUA	9	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250401&idioma=3	MECCP
250402	NUMERICAL MODELLING	9	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250402&idioma=3	
250403	STRUCTURAL ANALYSIS	7,5	http://ocw.camins.upc.edu/ocw/home.htm?p_codiUpcUd=250403&p_idIdioma=3	
250405	STRUCTURAL ENGINEERING	6	http://ocw.camins.upc.edu/ocw/home.htm?p_codiUpcUd=250405&p_idIdioma=3	
250406	COMPUTATIONAL ENGINEERING	6	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250406&idioma=3	
250407	GEOMECHANICAL AND GEOTECHNICAL ENGINEERING	6	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250407&idioma=3	
250409	PLANNING AND MANAGEMENT OF TRANSPORTATION	6	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250409&idioma=3	
250422	INTERACTION BETWEEN GROUNDWATER AND CIVIL WORKS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250422&idioma=3	
250439	NUMERICAL MODELS IN CIVIL AND STRUCTURAL ENGINEERING	5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250439&idioma=3	
250443	MACHINE LEARNING AND MODELS FOR DECISION MAKING	5	https://portal.camins.upc.edu/public/guia?codiUpcUd=250443&curs=2018&idIdioma=3	
250470	BUILDING STRUCTURES	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250470&idioma=3	
250473	ADVANCED DESIGN OF CONCRETE STRUCTURES	5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250473&idioma=3	
250706	STRUCTURAL ANALYSIS SEMINARS	2.5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250706&idioma=3	MEEC
250727	PERFORMANCE BASED SEISMIC DESIGN AND ASSESSMENT OF STRUCTURES	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250727&idioma=3	
250714	STRUCTURAL TECHNOLOGY SEMINARS	2,5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250714&idioma=3	
250725	STRUCTURAL ENGINEERING	6	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250725&idioma=3	
250730	STRUCTURAL OPTIMIZATION	5	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250730&idioma=3	
250700	FUNDAMENTALS OF STRUCTURAL DESIGN	6	https://portal.camins.upc.edu/ocw/guia?codiUpcUd=250700&idioma=3	
250955	PROGRAMMING FOR ENGINEERS AND SCIENTISTS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250955&idioma=3	MMNE
250956	COMPUTATIONAL SOLID MECHANICS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250956&idioma=3	
250957	FINITE ELEMENTS IN FLUIDS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250957&idioma=3	
250958	COMPUTATIONAL STRUCTURAL MECHANICS AND DYNAMICS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250958&idioma=3	
250963	COUPLED PROBLEMS	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250963&idioma=3	
250970	DOMAIN DESCOMPOSITION AND LARGE SCALE SCIENTIFIC COMPUTING	5	https://portal.camins.upc.edu/ocw/guia.htm?codiUpcUd=250970&idioma=3	
480071	BIODIVERSITY AND SOCIO-ECOLOGICAL SYSTEMS	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480071&lang=ing	MSOST
480081	URBAN METABOLISM AND ECOLOGICAL URBANISM	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480081&lang=ing	
480093	SOCIO-ENVIRONMENTAL DATA SCIENCE	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480093&lang=ing	
480152	SUSTAINABLE DESIGN OF PRODUCTS AND SERVICES	5	http://www.upc.edu/estudispdf/guia_docent.php?codi=480152&lang=ing	
250MUM007	DATA MANAGEMENT FOR TRANSPORTATION	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM007	MUM
250MUM016	Public transport	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM016	
250MUM017	Optimization models for transportation networks	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM017	
250MUM018	Traffic simulation models	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM018	
250MUM019	Railway transport	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM019	
250MUM020	Sustainable mobility	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM020	
250MUM027	Port management & maritime transport	5	https://www.upc.edu/content/master/guiadocent/pdf/eng/250MUM027	

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