

Faculty of Architecture and Engineering
Department of Civil Engineering
Master of Science Program, Construction Materials Profile

First Year					
First Semester					
CODE	COURSE NAME	T	P	C	ECTS
CE 421	Properties of Fresh And Hardened Concrete	2	2	3	6
CE 420	Supervised Group Study and Research	1	4	3	6
CExxx	Technical Elective	3	0	3	6
CExxx	Technical Elective	3	0	3	6
CExxx	Technical Elective	3	0	3	6
Semestral Total		12	6	15	30

First Year					
Second Semester					
CODE	COURSE NAME	T	P	C	ECTS
CE 402	Supervised Independent Study and Research	1	4	3	9
CE 490	Special Topics In Civil Engineering	3	0	3	9
CExxx	Technical Elective	3	0	3	6
CExxx	Technical Elective	3	0	3	6
Semestral Total		10	4	12	30

Second Year					
Third Semester					
CODE	COURSE NAME	T	P	C	ECTS
CE 560	Term Project	0	0	0	10
CE 591	Special Studies In Civil Engineering	3	0	3	14
CExxx	Technical Elective	3	0	3	6
Semestral Total		6	0	6	30

Second Year					
Fourth Semester					
CODE	COURSE NAME	T	P	C	ECTS
CE 500	Master Thesis	0	0	0	30
Semestral Total		0	0	0	30

List of Elective courses:

Course	Course Name	T	P	C	ECTS
CE 411	Legal Aspects in Construction Works	3	0	3	6
CE 412	Construction Site Techniques	3	0	3	6
CE 414	Construction Planning	3	0	3	6
CE 421	Properties of Fresh And Hardened Concrete	3	0	3	6
CE 446	Intermediate Fluid Mechanics	3	0	3	6
CE 451	Groundwater Engineering	3	0	3	6
CE 452	Statistical Techniques In Hydrology	3	0	3	6
CE 461	Foundation Engineering II	3	0	3	6
CE 462	Ground Improvement	3	0	3	6

CE 471	Coastal Zone Management	3	0	3	6
CE 481	Highway Design	3	0	3	6
CE 482	Traffic Safety And Accident Investigation	3	0	3	6
CE 491	Reinforced Concrete Structures	3	0	3	6
CE 492	Advanced Structural Analysis	3	0	3	6
CE 493	Prestressed Concrete	3	0	3	6
CE 494	Structural Design: Concrete Structures	3	0	3	6
CE 489	Fundamentals of Steel Design	3	0	3	6
CE 451	Water Resources Engineering	3	0	3	6
CE 448	Intermediate Structural Dynamics	3	0	3	6
CE 495	Introduction To Earthquake Resistant Design	3	0	3	6
CE 514	Special Topics in Data Collection, analysis and modelling in Construction Industry	3	0	3	7.5
CE 515	Computer Applications in Construction Management	3	0	3	7.5
CE 520	Modelling in Hydrology	3	0	3	7.5
CE 521	Fundamentals of River Engineering	3	0	3	7.5
CE 525	Computational Fluid Dynamics	3	0	3	7.5
CE 526	Water Resources Engineering	3	0	3	7.5
CE 533	Soil Improvement Techniques	3	0	3	7.5
CE 534	Geotechnical Investigations	3	0	3	7.5
CE 535	Geotechnical Earthquake Engineering	3	0	3	7.5
CE 540	Advanced Materials Science	3	0	3	7.5
CE 542	Durability of Building Materials	3	0	3	7.5
CE 543	Advanced Concrete Technology	3	0	3	7.5
CE 544	Materials Testing and Measurements	3	0	3	7.5
CE 550	Advanced Mechanics of Materials	3	0	3	7.5
CE 552	Structural Design	3	0	3	7.5
CE 553	Nonlinear Problems in Reinforced Concrete	3	0	3	7.5
CE 554	Prestressed and Prefabricated Systems	3	0	3	7.5
CE 555	Earthquake Resistant Design of Structures	3	0	3	7.5
CE 556	Matrix Methods of Structural Analysis	3	0	3	7.5
CE 557	Advanced Steel Structures	3	0	3	7.5
CE 558	Advanced Reinforced Concrete	3	0	3	7.5
CE 559	Structural Dynamics	3	0	3	7.5