



**UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
GRADUATE PROGRAMS IN CIVIL ENGINEERING
2018 – 2020**



COURSE	COURSE TITLE	2018-2019			2019-2020		
		FA	WI	SP	FA	WI	SP
GEOTECHNICAL ENGINEERING							
CE 6100	Soil Shear Strength	X					
CE 6110	Earth Retaining Structures					X	
CE 6114	Shallow Foundation						X
CE 6120	Deep Foundations		X				
CE 6140	Slope Stability				X		
CE 6150	Seepage & Drainage			X			
CE 6230	Groundwater Hydrology	X					
CE 6270	Sedimentation Engineering				X		
CE 6335	Advanced Foundations			X			
CE 6370	Finite Element Methods in Engineering		X			X	
CE 6395	Nonlinear Analysis of Soil-Structure Interaction						X
CE 6430	Remediation in Contaminated Subsurface Environments		X				
STRUCTURAL ENGINEERING							
CE 6300	Structural Engineering Laboratory	X					
CE 6305	Simulation Engineering Laboratory			X			
CE 6315	Analysis of Plates and Shells		X				
CE 6320	Advanced Strength of Materials	X					
CE 6325	Principles of Structural Stability				X		
CE 6330	Advanced Topics in Structural Engineering				X		
CE 6335	Advanced Foundations			X			
CE 6340	Advanced Bridge Design		X				
CE 6345	Design of Reinforced Masonry Structures				X		
CE 6350	Dynamics of Structures					X	
CE 6355	Advanced Earthquake Engineering						X
CE 6357	Wind Engineering						X
CE 6360	Bridge Inspection, Rehabilitation, Repair and Management			X			
CE 6370	Finite Element Methods in Engineering		X			X	
CE 6378	Advanced Reinforced Concrete Design	X					
CE 6380	Nonlinear Behavior of Concrete Structures					X	
CE 6385	Advanced Steel Design		X				
CE 6395	Nonlinear Analysis of Soil-Structure Interaction						X
WATER RESOURCES AND TREATMENT							
CE 6210	Probability and Statistics in Water Resources		X		X		
CE 6230	Groundwater Hydrology	X					
CE 6240	Urban Drainage				X		
CE 6250	Advanced Hydrologic and Hydraulic Models					X	
CE 6260	Analysis and Restoration of Fluvial Systems			X			
CE 6270	Sedimentation Engineering				X		
CE 6280	Reservoir Analysis and Design						X
CE 6410	Water and Wastewater Treatment Applications (Summer)						
CE 6420	Fate and Transport of Contaminants in Soils			X			
CE 6430	Remediation in Contaminated Subsurface Environments		X				
CE 6440	Physical and Chemical Treatment Processes of Water and Wastewater					X	
CE 6450	Biological Wastewater Treatment Processes						X
CE 6460	Water Quality Control and Management	X					
CONSTRUCTION ENGINEERING							
CE 6512	Value Engineering						X
CE 6520	Construction Contracting and Procurement				X		
CE 6530	Schedule Impact Analysis		X				
CE 6532	Construction Cost Control			X			
CE 6540	Construction Equipment Administration	X					
CE 6542	Construction Material Management				X		
CE 6544	Hazardous Material Management					X	
CE 6550	Construction Inspections						X
CE 6560	Construction Safety Regulations			X			
CE 6570	Modern Construction Materials		X				
CE 6580	Temporary Structures in Construction			X			
CE 6585	Site Planning and Design					X	
REQUIRED COURSE FOR THESIS OPTION							
GMP 6510	Research Methodology	X	X	X	X	X	X
OTHER COURSES							
GMP 6010	Professional Writing and Presentations	X	X	X	X	X	X
GMP 6050*	Professional Internship through COOP Program						
THESIS AND DESIGN PROJECT COMPONENT							
CE 6901	Thesis	X	X	X	X	X	X
CE 6902	Thesis Extension	X	X	X	X	X	X
CE 6905	Project	X	X	X	X	X	X
CE 6906	Project Extension	X	X	X	X	X	X