



UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
GRADUATE PROGRAM IN COMPUTER ENGINEERING
2018 – 2020



COURSE	COURSE TITLE	PRE-REQUISITE	FA	WI	SP	FA	WI	SP
			18	18	19	19	19	20
GENERAL COURSES								
CECS 6120	Computer Architecture	Circuit Logic, Statistics & Probabilities, Calculus II			X			X
CECS 6130	Data Communication Networks	Admission		X			X	
CECS 6150	Object-Oriented Design	Data Structure	X			X		
CECS 6510	Software Engineering (I)	Admission		X			X	
CECS 6605	Advanced Database Systems	Admission		X		X		X
CECS 6760	Internet Engineering I	Admission	X			X		
INTERNET ENGINEERING COURSES								
CECS 7130	Advanced Computer Networks	CECS 6130			X			X
CECS 7230	Network Security	Approval Req.		X			X	
CECS 7570	Computer Security	Admission		X	X	X	X	X
CECS 7760	Internet Engineering II	CECS 6760		X			X	
CECS 7804	Special Topics in Internet Engineering	Approval Req.	X			X		
SOFTWARE ENGINEERING COURSES								
CECS 6750	Software Testing	Admission		X		X		X
CECS 7510	Software Engineering II	CECS 6510			X			X
CECS 7520	Human Computer Interaction	Admission	X			X		
CECS 7530	Data Mining & Warehousing	Admission		X			X	
CECS 7802	Special Topics in Software Engineering	Approval Req.			X			X
DIGITAL SIGNAL PROCESSING COURSES (SCHEDULED BY MSEE)								
EE 5720	Digital Signal Processing	Admission	X	X	X	X	X	X
EE 6010	Math. Methods for Signal Processing	Admission	X		X		X	
EE 6020	Stochastic Processes	Rand. Proc.		X		X		X
EE 6030	Linear Systems	Admission		X		X		X
EE 6632	Non-Linear Control	EE 6030		X				X
EE 6660	Advanced Robotics Manipulators	Und. Control						
EE 6720	Pattern Recognition	EE 6010/6020				X		
EE 6740	Intelligent Control	EE 6030					X	
EE 7712	Image Processing	EE 6010, EE 6020			X			
EE 7716	Computer Vision	EE7712						
EE 7740	Algorithms for DSP	EE 6010/6020	X			X		
THESIS or PROJECT								
CECS 7900	Project for Master in Computer Engineering	Approval Req.	X	X	X	X	X	X
CECS 7901	Project Extension for Master in Computer Engineering	CECS 7900, Approval Req.	X	X	X	X	X	X
CECS 7971	Thesis	Approval Req.	X	X	X	X	X	X
CECS 7972	Thesis Extension	CECS 7972, Approval Req.	X	X	X	X	X	X
ELECTIVES RELATED TO MORE THAN ONE AREA OF INTEREST								
CECS 6240	Technology Based Start-up	Req. Project Option	X			X		
CECS 6430	Advanced Software Architectures	Admission	X		X		X	
CECS 7010	Computer Graphics	Admission	X			X		
CECS 7020	Advanced Computer Graphics	CECS 7010		X			X	
CECS 7550	Artificial Intelligence	Approval Req.			X			X
GMP 6010	Professional Writing and Presentations	None	X	X	X	X	X	X
GMP 6050*	Professional Internship through COOP Program							
GMP 6510	Research Methodology	18 Credits Approved	X	X	X	X	X	X

* Department Head Approval