



UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
GRADUATE PROGRAMS IN ELECTRICAL ENGINEERING
 2018 - 2020



COURSE	COURSE TITLE	PRE-REQUISITE	FA	WI	SP	FA	WI	SP
			18	18	19	19	19	20
CORE COURSES DSP(*)/Comm(**)/PSRE(***)								
EE 6010	Mathematical Methods for Signal Processing (*/**/****)	Calculus & Diff Eqs.	X		X		X	
EE 6020	Stochastic (*/**)	Prob & Stat or RP.		X		X		X
EE 6030	Linear Systems (*)	None		X		X		X
EE 6400	Direct Energy Conversion and Renewables (***)	None	X					
EE 6402	Market, Environmental and Public Policy Issues of Energy Systems (***)	None	X			X		
EE 6760	Digital Communications (**)	EE 5714	X		X		X	
DIGITAL SIGNAL PROCESSING ORIENTED ELECTIVES								
EE 6632	Non-Linear Control	Under. Linear Syst.		X				X
EE 6660	Advanced Robotics Manipulators	Underg. control						
EE 6720	Pattern Recognition	None				X		
EE 6740	Intelligent Control	Under. Linear Syst					X	
EE 7712	Image Processing	None			X			
EE 7716	Computer Vision	None						
EE 7730	Speech Processing	None	X					
EE 7740	Algorithms for Digital Signal Processing	None	X			X		
EE 7780	Special Topics in Signal Processing (Open Schedule, DSP/Comm, 3 Credits Maximum.)	Approval Req.	TBA	TBA	TBA	TBA	TBA	TBA
COMMUNICATION SYSTEMS ORIENTED ELECTIVES								
EE 6770	Satellite Communication Systems	EE 5714			X			X
EE 7772	Wireless Communications	EE 5714		X			X	
EE 7780	Special Topics in Signal Processing (Open Schedule, DSP/Comm, 3 Credit Maximum)	Approval Req.	TBA	TBA	TBA	TBA	TBA	TBA
POWER SYSTEMS AND RENEWABLE ENERGY ELECTIVES								
EE 6410	Smart Grids and Distributed Generation	EE 6400		X				
EE 6412	Energy Management	None					X	
EE 6420	Power Systems Transients	None			X		X	
EE 6422	Power Systems Dynamic Stability	EE 4400						X
EE 6424	Power Systems Operation, Control and Planning	None						X
EE 7410	Drives and Controls for Energy Conservation and Alternate Sources	EE 4520 & EE 6400		X				
EE 7420	Advanced Electrical Power Quality	EE 4422	X					
EE 7422	Grounding Systems	EE 4422				X		
PROJECT/THESIS								
EE 7790	Project for MEE (DSP/Comm, 3 Crd Max)	Approval Req.	TBA	TBA	TBA	TBA	TBA	TBA
EE 7791	Project Ext. for MEE (DSP/Comm, 3 Crd Max)	EE 7790	TBA	TBA	TBA	TBA	TBA	TBA
EE 7800	Thesis	Approval Req.	X	X	X	X	X	X
EE 7801	Thesis Extension	EE 7800	X	X	X	X	X	X
COMPUTER ENGINEERING / COMPUTER SCIENCE ORIENTED ELECTIVES (6 Credits Maximum)								
CECS 6120	Computer Architecture	Und. Computer			X			X
CECS 6130	Data Communication and Computer Networks	Und. Computer		X			X	
CECS 6150	Object Oriented Design	Und. OOP	X			X		
CECS 6510	Software Engineering	Und. Computer		X			X	
CECS 6010	Advanced Design and Analysis of Algorithms	Data Structure		X			X	
CECS 6240	Technology Based Start Up		X		X		X	
CECS 7550	Artificial Intelligence				X			X
ADVANCED UNDERGRADUATE REQUIRED (if not already taken)								
EE 4422	Electric Power Quality	EE 2410, EE 4400			X			X
EE 4432	Power System Protection	EE 4400	X	X	X	X	X	X
EE 4436	Distribution System Design	EE 4400	X	X	X	X	X	X
EE 4464	Generation Control Systems	EE 4400		X			X	
EE 4502	Power Electronics	EE 3600	X			X		
EE 5720	Digital Signal Processing (Required DSP)	EE 4000 & Prob.	X	X	X	X	X	X
EE 5714	Digital Communication Systems (Required DSP/Comm)	EE 4704, Co-req: EE 4710		X		X		X
OTHER COURSES								
GMP 6010	Professional Writing and Presentations	None	X	X	X	X	X	X
GMP 6050	Professional Internship through COOP Program	Director Program Approval						
GMP 6510	Research Methodology	18 Credits Approved	X	X	X	X	X	X