



**UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
GRADUATE PROGRAMS IN COMPUTER SCIENCE
2018 - 2020**



COURSE	COURSE TITLE	PRE-REQUISITE	FA	WI	SP	FA	WI	SP
			18	18	19	19	19	20
CORE COURSES								
CECS 6010	Advanced Design and Analysis of Algorithms	Data Structure		X			X	
CECS 6030	Computational Theory	Calculus II, Discrete Structure	X			X		
CECS 6230	IT Operations	None		X			X	
CECS 6430	Advance Software Architecture	Object Oriented Programming	X		X		X	
CECS 6750	Software Testing	Object Oriented Programming		X		X		X
IT MANAGEMENT AND INFORMATION ASSURANCE (ITMIA)								
CECS 7230	Network Security	None		X			X	
CECS 7235	Computer Forensics	None	X	X		X	X	
CECS 7570	Computer Security	EE 6130		X	X	X	X	X
KNOWLEDGE DISCOVERY AND DATA MINING (KDDM)								
CECS 6605	Data Base Management Systems	None		X		X		X
CECS 7530	Data Mining and Data Warehousing	CECS 6605		X			X	
CECS 7550	Artificial Intelligence	Data Structure			X			X
COMPUTER GRAPHICS & GAME TECHNOLOGY (CGGT)								
CECS 7010	Computer Graphics	Calculus II	X			X		
CECS 7020	Advanced Computer Graphics	CECS 7010		X			X	
CECS 7550	Artificial Intelligence	Data Structure			X			X
PROJECT OR THESIS								
CECS 7950	Project for Master in Computer Science	Approval Req.	X	X	X	X	X	X
CECS 7951	Project Extension for Master in Computer Science	CECS 7950	X	X	X	X	X	X
CECS 7980	Thesis	Approval Req.	X	X	X	X	X	X
CECS 7990	Thesis Extension	CECS 7980	X	X	X	X	X	X
ADDITIONAL ELECTIVES COURSES								
CECS 6005	Principles of Information Security	None	X	X	X	X	X	X
CECS 6015	IT Auditing and Secure Operations	None	X			X		
CECS 6035	Contingency Planning	None			X			X
CECS 6045	Law, Investigations and Ethics	None	X			X		
CECS 6046	Electronic Discovery and Digital Evidence	None	X		X	X		X
CECS 6120	Computer Architecture	Circuit Logic, Statistics & Probabilities, Calculus II			X			X
CECS 6130	Data Communications Networks	None		X			X	
CECS 6150	Object Oriented Design (OOD)	Data Structure	X			X		
CECS 6240	Technology Based Startups	None	X			X		
CECS 6510	Software Engineering I	None		X			X	
CECS 6760	Internet Engineering I	EE 6130	X			X		
CECS 6824/A	Special Topics in ITMIA	Approval Req.	X			X		
CECS 6824/B	Special Topics in KDDM	Approval Req.		X			X	
CECS 6824/C	Special Topics in CGGT	Approval Req.			X			X
CECS 7130	Advanced Computer Networks	EE 6130			X			X
CECS 7237	Advanced Computer Forensics	CECS 7235			X			X
CECS 7240	Database Security	None			X			X
CECS 7410	Parallel and Distributed Processing	None		X			X	
CECS 7420	Modeling and Simulation	None			X			X
CECS 7510	Software Engineering II	EE 6510			X			X
CECS 7520	Human-Computer Interaction (HCI)	Object Oriented Programming	X			X		
CECS 7760	Internet Engineering II	CECS 6760		X			X	
GMP 6010	Professional Writing and Presentations	None	X	X	X	X	X	X
GMP 6050*	Professional Internship through COOP Program	None						
GMP 6510	Research Methodology	18 Credits Approved	X	X	X	X	X	X