



UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
GRADUATE PROGRAM IN COMPUTER ENGINEERING



2026- 2028

COURSE	COURSE TITLE	PRE-REQUISITE	FA	WI	SP	FA	WI	SP
			26	26	27	27	27	28
CORE COURSES								
CECS 6120	Computer Architecture	UG Computer Course			X			X
CECS 6130	Data Communication and Computer Networks	UG Computer Course		X			X	
CECS 6150	Object-Oriented Design	OOP	X			X		
CECS 6510	Software Engineering I	UG Computer Course		X			X	
CECS 6605	Advanced Database Systems	None	X	X	X	X	X	X
CECS 6760	Internet Engineering I	EE 6130 or CECS 6130	X			X		
INTERNET ENGINEERING SPECIALIZATION AREA								
CIS 6715	E-Commerce and Web Information Systems	None			X			X
CECS 7130	Advanced Computer Networks	EE 6130 or CECS 6130			X			X
CECS 7520	Human Computer Interaction	OOP		X			X	
CECS 7560	Internet Engineering II	CECS 6760	X			X		
SOFTWARE ENGINEERING SPECIALIZATION AREA								
CECS 6430	Advanced Software Architecture	OOP	X			X		
CECS 6750	Software Testing	Data Structure		X			X	
CECS 7510	Software Engineering II	EE 6510 or CECS 6510			X			X
CECS 7520	Human Computer Interaction	OOP		X			X	
DATABASE AND SECURE OPERATIONS EMPHASIS AREA								
CECS 6015	IT Auditing and Secure Operations	None	X	X		X	X	
CECS 6035	Contingency Planning	None			X			X
CECS 7240	Database Security	None		X	X		X	X
BIG DATA EMPHASIS AREA								
CECS 7410	Parallel and Distributed Processing	None		X			X	
CECS 7412	Fundamentals of Big Data Analytics	None	X			X		
CECS 7414	Big Data Analytics Programming and Applications	CECS 7412			X			X
DIGITAL EVIDENCE & AUDITING EMPHASIS AREA								
CECS 6015	IT Auditing and Secure Operations	None	X	X		X	X	
CECS 6045	Law, Investigations, and Ethics	None	X			X		
CECS 6046	Electronic Discovery and Digital Evidence	None	X		X	X		X
PROJECT OR THESIS								
CECS 7900	Project for Master in Computer Engineering	GPDA*	X	X	X	X	X	X
CECS 7901	Project Extension for Master in Computer Engineering	CECS 7900 and GPDA*	X	X	X	X	X	X
CECS 7971	Thesis	GPDA*	X	X	X	X	X	X
CECS 7972	Thesis Extension	CECS 7972 and GPDA*	X	X	X	X	X	X

* Graduate Program Director's Approval