

CURRICULAR SEQUENCE OF BACHELOR IN INFORMATION SYSTEMS MAJOR IN CYBERSECURITY

REQUIREMENTS (Credits): GE = General Education (42) | P = Professional (33) | M = Major (30) | E = Electives (9) **UP** = Undergraduate Project (6) | (AT = Academic Term) (**Pre** = prerequisites) | **TOTAL CREDITS: 120**

Academic Term (AT)	Course Code	Name	Category	PRE	Credit hours
1 st	UNIV 100	Introduction to University Life	GE		3
	CCO 101	Introduction to Computers	P		
	CYS 220	Introduction to Cybersecurity	P	CCO 101	
	MAT 201	Algebra	GE		
2 nd	CCO 103	Commercial Software Management	P	CCO 101	3
	ASI 220	HTML Programming	M		
	HUM 103	Literacy Genres	GE		
	ING 101	General English	GE	CCO 101	
3 rd	CCO 207	Database Management	M	CCO 101	3
	ASI 308	PHP with SQL Programming	M	CCO 101, ASI 220	
	CYS 308	Legal and Ethical Issues in Cybersecurity	P	CYS 220	
	ESP 208	Creative Communication	GE		
4 th	ASI 303	Object Oriented Programming (Visual C++)	M	CCO 101, CCO 207	3
	ASI 217	Network and Data Communication	P	CCO 101	
	CYS 301	Cybersecurity Management Fundamentals	M	CCO 101, CYS 220	
	MAT 203	Geometry and Trigonometry	GE		
5 th	ASI 410	Python	M	CCO 101, 103, 207, ASI 220, 303, 308	3
	ADM 304	Entrepreneurship	P		
	BIOL 105	General Biology	GE		
	ELECTIVE	Elective	E		

GENERAL OBJECTIVE: To prepare students with the technical knowledge and skills needed to protect and defend computer systems and networks. To develop graduates who can plan, implement, and monitor cybersecurity mechanisms to help ensure the protection of information technology assets. To strengthen the students' analytical capabilities to solve problems, make decisions, and cope with the challenges that arise in managerial positions in a constantly evolving world. To improve students' knowledge, skills, and abilities, they need to become dynamic, productive professionals. To develop professionals with an inquisitive spirit, independent-minded, thoughtful people, to occupy leadership positions in the workplace.

Academic Term (AT)	Course Code	Name	Category	PRE	Credit hours
6 th	CYS 410	Digital Forensics	M	CYS 220, CYS 301, CCO 207, ASI 410	3
	ASI 304	Advanced Database Management	M	CCO 101, CCO 207	
	ASI 403	Object-Oriented Programming (Visual Basic)	M	CCO 101, CCO 103, CCO 207	
	EST 300	Statistics	P		
7 th	CYS 435	Ethical Hacking	M	CYS 410, CYS 308	3
	ADM 400	Management Information System	M		
	ASI 215	Administration of the Information Center	P	CCO 101	
	CSOC 300	Psychology	GE		
8 th	CYS 445	Cyber Defense and Countermeasures	M	CYS 410, CYS 435	3
	ASI 307	System Analysis and Design	P	CCO 101, CCO 207, ASI 217, ASI 303, ASI 308	
	ASI 407	Auditing Information Systems	M	CCO 101, ADM 400	
	ING 300	Conversational English	GE		
9 th	ADM 419	Seminar	UP	105 Credits Approved in Major	3
	HUM 311	Modern Art History	GE		
	HUM 300	Western Civilization: Ancient Culture	GE		
	ELECTIVE	Elective	E		
10 th	CYS 476	Cybersecurity Capstone	UP	CYS 435, CYS 445	3
	HUM 302	Western Civilization: Modern Times	GE		
	CSOC 204	Puerto Rico: A Contemporary Approach	GE		
	ELECTIVE	Elective	E		