



CURRICULAR DESIGN

BACHELOR DEGREE IN INFORMATION SYSTEMS

MAJOR IN CYBERSECURITY

General Objective: To prepare students with the technical knowledge and skills needed to protect and defend computer systems and networks. To develop graduates that can plan, implement, and monitor cyber security 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 the students' knowledge, skills and abilities needed to become dynamic and productive professionals. To develop professionals with an inquisitive spirit, independently minded thoughtful people, to occupy leadership positions in the workplace.

REQUIREMENTS (Credits):

General Education (42) | Professional (27) | Major (42) | Undergraduate Project (3) | Electives (6) = **TOTAL CREDITS 120**

GENERAL EDUCATION (3 credits each | 42 total)

CSOC	100	Human Growth and Social Adaptability
ING	101	General English
CSOC	103	Human Relations
HUM	103	Literary Genres
BIOL	200	General Biology
MAT	201	Algebra
MAT	203	Geometry and Trigonometry
CSOC	204	Puerto Rico: A Contemporary Approach
ESP	208	Creative Communication
ING	300	Conversational English
CSOC	300	Psychology
HUM	300	Western Civilization: Ancient Culture
HUM	302	Western Civilization: Modern Times
AG	311	Modern Art History

PROFESSIONAL COURSES (3 credits each | 27 total)

CCO	101	Introduction to Computers & Commercial Software
ADM	104	Entrepreneurship
EST	300	Statistics
ASI	215	Administration & Management of Information Center
ASI	220	HTML Programming
ASI	308	PHP with SQL
ASI	303	Object Oriented Programming (Visual C++)
ASI	403	Object Oriented Programming (Visual Basic)
CCO	207	Database Management

MAJOR (3 credits each | 39 total)

CYS	218	Introduction to cybersecurity
CYS	301	Cybersecurity management Fundamental
CYS	308	Legal and Ethical issues
CYS	410	Digital Forensics
CYS	435	Ethical Hacking
CYS	445	Cyber Defense and Countermeasures
CYS	230	Operating System and Security
CYS	350	Secure software development and devsecops
ASI	410	Object Oriented Programming (Python)
ASI	217	Network and Data Communication
ASI	304	Advanced Data Base Management
ASI	307	System Analysis and Design
ASI	407	Auditing Information Systems

UNDERGRADUATE PROJECT (3 credits each | 6 total)

CYS	450	Seminar
CYS	476	Cybersecurity Capstone

ELECTIVES (3 credits each | 9 total)

Free Electives (3)

TOTAL CREDITS 132

Revised: 5/2026 - Business Administration with Information Systems Department