Cybersecurity & Networking - Bachelor of Science in Information Technology

The Bachelor of Science in Information Technology with a major in Cybersecurity & Networking addresses the technology and processes used by IT and Network professionals to protect an organizations' computer systems and networks from digital attacks. This program provides hands on instruction in computing, routers and switches with a focus on security including designing secure networks, penetration testing, cryptography, and ethical hacking. Additionally, students who complete the program will obtain a strong background in technology including database, problem-solving, systems analysis, and project management skills as well as a foundation in the politics of cybersecurity. Students are prepared for the following professional certifications: Certified Ethical Hacker, Cisco CCNA Routing & Switching, Cisco CCNA Security, CompTIA Cybersecurity Analyst, CompTIA Network+, CompTIA Security +, ICAgile ICP, ICAgile ICP-FDO, and Microsoft MCSE.

Program Requirements

Code	Title	Credit Hours
Information Technology Core		
CIT 168	Information Technology Tools and Techniques for Organizations	4
CIT 205	Agile Launchpad I	3
CIT 214	Database Design and Development	3
CIT 262	Technology, Ethics, and Global Society	3
CIT 268	Introduction to Human-Computer Interaction	3
CIT 273	Web Application Development	3
CIT 348	Information Management and Retrieval	3
CIT 357	Current Practices in Information Technology	3
CIT 376	IT for Organizations	3
CIT 448	Global and Strategic Issues in Information Technology	3
CIT 457	IT Project Lifecycle I: Requirements and Design	3
CIT 458	IT Project Lifecycle II: Implementation and Deployment	4
CSE 163	Introduction to Computer Concepts and Programming	3
Technical Electives		
Select 6 hours from the following: [1]		6
CIT 102	Digital Media and Design Tools	
CIT 201	Advanced Spreadsheets and Analytics	
CIT 231	Healthcare Information Technology Around the World	
CIT 253	Contemporary Programming Languages	
CIT 306	Agile: Business Value Analysis	
CIT 307	Agile: Project Management	
CIT 331	Healthcare Workflow and Process Improvement	
CIT 338	Business Intelligence Tools	
CSE 153	Introduction to C/C++ Programming	
CSE 174	Fundamentals of Programming and Problem Solving	
CSE 271	Object-Oriented Programming	
CSE 274	Data Abstraction and Data Structures	
Cybersecurity & Networking Major		
CIT 225	Fundamentals of DevOps [ICAgile]	3
CIT 258	Introduction to Global Cybersecurity	3
CIT 263	Advanced Topics in Programming	3
CIT 281	Enterprise Network Infrastructure	3
CIT 284	Enterprise Server Installation and Configuration	3
CIT 358	Information Technology Assurance and Security	3
CIT 386	Designing/Deploying Secure Networks	3
CIT 480	Advanced Topics in Cybersecurity	3
POL 271	World Politics	3
POL 388	Politics of Cybersecurity	3
Other Required Courses		
EGS 305	Integrative Writing in Global Contexts	3
ENG 111	Composition and Rhetoric	3
ENG 313	Technical Writing	3
or EGS 215	Workplace Writing	
MTH 122	College Algebra (or higher)	3
STA 261	Statistics	4
or STA 301	Applied Statistics	
STC 135	Principles of Public Speaking	3
Total Credit Hours		**96**

[1] May not select courses used to meet other program requirements. Other technical electives must be pre-approved.