COLLEGE OF INFORMATICS
COMPUTATION ■ INFORMATION ■ COMMUNICATION

Bachelor of Science in: Cybersecurity

For students on the following catalogs: 2025-2026

Name:	
Student ID:	
Catalog Year:	

SUPPORT COURSES (9 Hours)						
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Notes**
MAT 185	Introductory Discrete Mathematics	MAT 103 or placement	**3**			
STA 205 **OR** STA 205R	Statistical Methods Statistical Methods with Recitation	MAT 101 or placement	**3** **3**			**Successful Completion of STA 205 DSST**
PHI 310	Information Ethics	Sophomore Standing or Instructor Consent	**3**			**Successful Completion of PHI 310 DSST**

INFORMATICS CORE COURSES (14 Hours)						
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Notes**
INF 100	Orientation to College of Informatics	Freshman Standing or Dept. Approval	**1**			
INF 201	Foundations of Informatics Professionals	Sophomore Standing	**1**			
INF 120	Elementary Programming (or placement)	MAT 102 or MAT 114 or placement	**3**			**Successful INF 120 CPLE**
INF 284*	Introduction to Computer Networks	MAT 102 or placement & INF 110 or INF 120 or CIT 130	**3**			
INF 286	Introduction to Web Development	MAT 103 & INF 110 or INF 120 or CSC 260 (pre-req or co-req)	**3**			**Successful INF 286 CPLE**
ISBA300	Management Information Systems	Sophomore standing; STA 205 or STA 205R or STA 250; & ISBA101 or BI Department Consent	**3**			**Successful ISBA300 DSST Exam**

CYBERSECURITY CORE COURSES (18 Hours)						
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Notes**
CYS 285*	Cybersecurity Fundamentals	CIT 130, CIT 171 & CIT 247 or INF 284	**3**			
CYS 310	Cybersecurity Risk Management	CYS 285 or CYS 320	**3**			
CYS 330	Introduction to Ethical Hacking	CYS 285	**3**			
CYS 385	Cybersecurity Analysis I	INF 120 & CYS 285	**3**			
CYS 444	Software Security	CYS 285 or CYS 320 & CSC 362	**3**			
CYS 485	Cybersecurity Analysis II	CYS 385	**3**			

COMPUTER INFORMATION TECHNOLOGY CORE COURSES (7 Hours)						
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Notes**
CIT 130	Information Technology Fundamentals	MAT 101 or placement & ENG 101 Ready	**3**			
CIT 171	Introduction to Linux	ENG 101 Ready	**1**			
CIT 371*	Linux System Administration	INF 120, CIT 130, & CIT 171	**3**			**Successful Completion of CIT 371 CPLE**

COMPUTER SCIENCE CORE COURSES (27 Hours)						
Course		Pre-req	Credits	Term	Grade	Notes
CSC 260	Object-Oriented Programming I	MAT 103 & INF 110 or INF 120 or CSC 270	**3**			**Successful Completion of CSC 260 CPLE**
CSC 325	Introduction to Machine Learning	STA 205 or STA 205R or STA 250 or MAT 103 & INF 120	**3**			
CSC 360	Object-Oriented Programming II	CSC 260 & MAT 119	**3**			**Successful Completion of CSC 360 CPLE**
CSC 350	Database Programming	CSC 360	**3**			
CSC 362	Computer Systems	CSC 360	**3**			
CSC 364	Data Structures and Algorithms	CSC 360	**3**			
CSC 425	Artificial Intelligence	CSC 364 & STA 205 or STA 205R or STA 250	**3**			
CSC 460	Operating Systems	CSC 362 & CSC 364	**3**			
CSC 482	Computer Security	CSC 362	**3**			

GUIDED ELECTIVES (6 Hours) - Choose 2						
Course		Pre-req	Credits	Term	Grade	Notes
ASE 456	Cross-Platform Development	ASE 220 or ASE 230 & Junior Standing	**3**			
ISBA330	IT Project Management	ISBA300	**3**			
CIT 381	Raspberry PI Based IoT	INF 120	**3**			
CIT 383	Scripting I	INF 120 & CIT 271 & CIT 371	**3**			
CIT 396	Computer Information Technology Practicum	CIT Major, Junior Standing & Instructor Permission	**0-3**			
CIT 438	Cloud Computing	CIT 371	**3**			
CIT 470	Advanced Network and System Administration	CIT 271, CIT 371 & CIT 383	**3**			
CIT 472	Database Administration	INF 282, CIT 271 & CSC 260 or CIT 383	**3**			
CIT 483	Scripting II	CIT 371 & CIT 383	**3**			
CMST370	Advanced Public Speaking	CMST101 or CMST110 or HNR 101 & HNR 102	**3**			
CSC 396	Computer Science Practicum	CSC Major, Junior Standing & Department Approval	**0-3**			
CSC 415	Mobile App Development	CSC 362 or CSC 364	**3**			
CSC 481	Blockchain & Ethereum Development	INF 120, INF 284 & CSC 260	**3**			
CYS 305	Peer Teaching Assistant Training	See Catalog	**3**			
CYS 392	Intermediate Research Experience in CYS	Sophomore Standing & Department Consent	**0-3**			
CYS 394	Intermediate Topics: Cybersecurity	Varies by Topic	**1-3**			
CYS 396	Cybersecurity Practicum	CYS Major, Junior Standing & Department Approval	**0-3**			
CYS 399	Intermediate Independent Study: CYS	Instructor Consent	**1-3**			
CYS 430	Computer Forensics	CIT 371 & CYS 285, CYS 320, or ISBA382	**3**			
CYS 439	Cloud Security	CYS 285 & CIT 371	**3**			
CYS 484	Network Security	INF 284 & CYS 285	**3**			
CYS 492	Advanced Research Experience in CYS	Senior Standing & Department Consent	**0-3**			
CYS 494	Advanced Topics: Cybersecurity	Varies by Topic	**1-3**			
CYS 499	Advanced Independent Study: CYS	Instructor Consent	**1-3**			
MAT 483	Cryptology	MAT 234 or CSC 362 or CSC 364	**3**			

EXPERIENTIAL LEARNING REQUIREMENT (0-6 Hours)						
Students are required to enroll in & pass one experiential learning experience. There is no minimum number of credit hours for this requirement. The experiential component can be used to fulfill one of the Guided Elective Requirements above if taken for credit.						
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Notes**
CYS/CSC/ CIT 292/ 392/ 492	Research Experience	See Catalog	**0-3**			
CYS/CSC/ CIT 296/ 396	Practicum	See Catalog	**0-3**			
CYS 305	Peer Teaching Assistant Training	See Catalog	**3**			
CEP 300	Cooperative Education		**1-6**			
SCI 393	STEM Ambassadors	First Year STEM Major Courses Complete, 3.0 GPA, Instructor Permission	**0-1**			

*** Students with the current certification** (at the time of registering the class(es)) can have course credits based on the following course mappings:**

- **CompTIA Linux+ → CIT 371 Unix Systems**
- **CompTIA Network+ → INF 284: Introduction to Computer Networks**
- **CompTIA Security+ → CYS 285: Cybersecurity Fundamentals**
- **CompTIA A+ → CIT 130: Information Technology Fundamentals**
- **OCA Oracle Certified Associate → CIT 472: Database Administration**
- **CCNP Security Core Exams → CYS 484: Network Security**

Students need to have a copy of their certification stored in their student file to obtain the above course credits.

Students must have a grade of "C-" or better to meet pre-requisites for all courses unless otherwise indicated.
Students also must earn a grade of "C-" or better and a 2.00 GPA in all courses that apply to the major.
Please consult with your advisor and the appropriate University Course Catalog for all other degree requirements.