



**Bachelor of Science in:  
Cybersecurity**

**For Students Following the:  
2023-2024 catalog**

<b>Name:</b>
<b>Student ID:</b>
<b>Catalog Year:</b>

<b>SUPPORT COURSES (9 Hours)</b>					
<b>Course</b>		<b>Pre-req</b>	<b>Credits</b>	<b>Term</b>	<b>Grade</b>
MAT 185	Introductory Discrete Mathematics	MAT 103 or placement	3		
STA 205	Statistical Methods	MAT 101 or placement	3		
OR STA 205R	Statistical Methods with Recitation		3		
PHI 310	Information Ethics	Sophomore Standing or Instructor Consent	3		

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Approved Exceptions
Successful Completion of STA 205 DSST
Successful Completion of PHI 310 DSST

<b>INFORMATICS CORE COURSES (17 Hours)</b>					
<b>Course</b>		<b>Pre-req</b>	<b>Credits</b>	<b>Term</b>	<b>Grade</b>
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		
INF 284*	Introduction to Computer Networks	MAT 103 & 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		
BIS 300	Management Information Systems	Junior standing or BUS 101 or BIS 275; STA 205 or STA 205R, or STA 250; & BIS 101 or BI Department Consent	3		
BIS 382	Information Security Management	BIS 300	3		

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Successful INF 120 CPLE
Successful INF 286 CPLE
Successful BIS 300 DSST Exam

<b>CYBERSECURITY CORE COURSES (18 Hours)</b>					
<b>Course</b>		<b>Pre-req</b>	<b>Credits</b>	<b>Term</b>	<b>Grade</b>
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, CIT 271 or CIT 371, & CYS 285	3		
CYS 444	Software Security	CYS 285 or CYS 320 & CSC 362	3		
CYS 485	Cybersecurity Analysis II	CYS 385	3		

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<b>COMPUTER INFORMATION TECHNOLOGY CORE COURSES (7 Hours)</b>					
<b>Course</b>		<b>Pre-req</b>	<b>Credits</b>	<b>Term</b>	<b>Grade</b>
CIT 130	Information Technology Fundamentals	MAT 101 or placement & ENG 101R or placement	3		
CIT 171	Introduction to Linux	ENG 101 or ENG 101R or placement	1		

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CIT 371*	Unix Systems	INF 120, CIT 130, CIT 171 & CIT 247 or INF 284	3		
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**Successful Completion of CIT 371 CPLE**

<b>COMPUTER SCIENCE CORE COURSES (24 Hours)</b>					
Course		Pre-req	Credits	Term	Grade
ASE 230	Server-Side Programming	INF 286 & CSC 260 or CIT 383 (pre-req or co-req)	3		
CSC 260	Object-Oriented Programming I	MAT 103 & INF 110 or INF 120 or CSC 270	3		
CSC 360	Object-Oriented Programming II	CSC 260 & MAT 119 (≥ B-)	3		
CSC 350	Database Programming	CSC 360	3		
CSC 362	Computer Systems	CSC 360	3		
CSC 364	Data Structures and Algorithms	CSC 360	3		
CSC 460	Operating Systems	CSC 362 & CSC 364	3		
CSC 482	Computer Security	CSC 362	3		

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Successful Completion of CSC 260 CPLE

Successful Completion of CSC 360 CPLE

<b>GUIDED ELECTIVES (6 Hours) - Choose 2</b>					
Course		Pre-req	Credits	Term	Grade
ASE 456	Cross-Platform Development	ASE 220 or ASE 230 & Junior Standing	3		
BIS 330	IT Project Management	BIS 275 or BIS 300	3		
CIT 381	Raspberry PI Based IoT	INF 120	3		
CIT 383	Scripting I	INF 120 & CIT 271 or CIT 371	3		
CIT 396	Computer Information Technology Practicum	CIT Major, Junior Standing & Department Approval	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	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 425	Artificial Intelligence	CSC 364 & STA 205 or STA 205R or STA 250	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 BIS 382	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	Cryptography	MAT 234 or CSC 362 or CSC 364	3		

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**EXPERIENTIAL LEARNING REQUIREMENT (0-6 Hours)**

***Students are required to enroll in & pass one experiential learning experience. There is no minimum***

Course		Pre-req	Credits	Term	Grade
CYS/CSC/CIT 292/392/492	Research Experience	See Catalog	<b>0-3</b>		
CYS/CSC/CIT 296/396	Practicum	See Catalog	<b>0-3</b>		
CYS 305	Peer Teaching Assistant Training	See Catalog	<b>3</b>		
CEP 300	Cooperative Education		<b>1-3</b>		
SCI 393	STEM Ambassadors	First Year STEM Major Courses Complete, 3.0 GPA, Instructor Consent	<b>0-1</b>		

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\* 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

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.