Department of Computer Science

COLLEGE OF INFORMATICS
COMPUTATION ■ INFORMATION ■ COMMUNICATION

Bachelor of Science in:
Cybersecurity
For Students Following the:
2020-2021 catalog

Name:	
Student ID:	
Catalog Year:	

SUPPORT COURSES (12 Hours)

	Course	Pre-req	Credits	Term	Grade	OFFICE USE ONLY — Approved Exceptions
MAT 185	Introductory Discrete Mathematics	MAT 103 or placement	3			
STA 205 OR	Statistical Methods	MAT 101 and ENG 101R or RDG 110 or placement	3			**Successful Completion of STA 205 DSST**
STA 205R	Statistical Methods with Recitation		3			
MAT 483	Cryptology	MAT 234 or CSC 362 or CSC 364	3			
PHI 310	Information Ethics	Sophomore Standing or Instructor Permission	3			**Sucessful Completion of PHI 310 DSST**

INFORMATICS CORE COURSES (17 Hours)

	Course	Pre-req	Credits	Term	Grade	OFFICE USE ONLY — Approved Exceptions
INF 100	Orientation to College of Informatics	Freshman Standing or Dept. Approval	1			
INF 201	Foundations of Informatics Professionals		1			
INF 120	Elementary Programming (or placement)	MAT 102 or placement	3			**Successful INF 120 CPLE**
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			**Successful INF 286 CPLE**
BIS 300	Management Information Systems	Junior standing or BUS 101 or BIS 275; STA 212, STA 205 or STA 205R, or STA 250; & BIS 101 or BI Department Permission	3			**Successful BIS 300 DSST Exam**
BIS 382	Principles of Information Security	BIS 300	3			

CYBERSECURITY CORE COURSES (6 Hours)

	Course	Pre-req	Credits	Term	Grade	OFFICE USE ONLY — Approved Exceptions
CYS 310	Cybersecurity Risk Management	CIT 285	3			
CYS 444	Software Security	CIT 285 & CSC 362	3			

COMPUTER INFORMATION TECHNOLOGY CORE COURSES (15 Hours)

	Course	Pre-req	Credits	Term	Grade	OFFICE USE ONLY — Approved Exceptions
CIT 130	Information Technology Fundamentals	MAT 102 or placement & ENG 101R or placement	3			
CIT 285	Cybersecurity Fundamentals	CIT 130 & CIT 247 or INF 284	3			
CIT 371	Unix Systems	INF 120, CIT 130, & CIT 247 or INF 284	3			**Successful Completion of CIT 371 CPLE**
CIT 430	Computer Forensics	CIT 480 only or CIT 371 & CIT 285 or BIS 382	3			
CIT 485	Advanced Cybersecurity	CIT 371 & CIT 285 or CIT 480	3			

COMPUTER SCIENCE CORE COURSES (24 Hours)						OFFICE USE ONLY
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Approved Exceptions**
ASE 230	Server-Side Programming	INF 286	**3**			
CSC 260	Object-Oriented Programming I	MAT 103 & INF 110 or INF 120 or CSC 270	**3**			**Successful Completion of CSC 260 CPLE**
CSC 360	Object-Oriented Programming II	CSC 260 & MAT 119 (≥ B-)	**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 460	Operating Systems	CSC 362 & CSC 364	**3**			
CSC 482	Computer Security	CSC 362	**3**			

GUIDED ELECTIVES (6 Hours) - Choose 2						OFFICE USE ONLY
Only one of CSC 415 or CSC 416 may count towards this requirement.						
Course		**Pre-req**	**Credits**	**Term**	**Grade**	**Approved Exceptions**
BIS 330	IT Project Management	BIS 375 or BIS 300	**3**			
CIT 383	Scripting I	INF 120 & CIT 271 or CIT 371	**3**			
CIT 396	Computer Information Technology Practicum	Junior Standing, 2.25 GPA, Department Approval	**3**			
CIT 438	Cloud Computing	CIT 371	**3**			
CIT 470	Advanced Network 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**			
CIT 484	Network Security	CIT 247 & CIT 285 or CIT 480	**3**			
CMST370	Advanced Public Speaking	CMST101 or CMST110	**3**			
CSC 396	Computer Science Practicum	Junior Standing, 2.25 GPA, Department Approval	**1-3**			
CSC 415	Android Mobile App Development	CSC 362 or CSC 364	**3**			
CSC 416	iOS Mobile App Development	CSC 362 or CSC 364	**3**			
CSC 425	Artificial Intelligence	CSC 364 & STA 205 or STA 205R or STAT 250	**3**			
ASE 456	Cross-Platform Development	ASE 220 & Junior Standing	**3**			
CYS 330	Introduction to Ethical Hacking	CIT 285	**3**			
CYS 392	Intermediate Research Experience in CYS	Sophomore Standing & Department Permission	**3**			
CYS 394	Intermediate Topics: Cybersecurity	Varies by Topic	**3**			
CYS 396	Cybersecurity Practicum	Junior Standing, 2.25 GPA, Department Approval	**1-3**			
CYS 399	Intermediate Independent Study: CYS	Instructor Permission	**1-3**			
CYS 492	Advanced Research Experience in CYS	Senior Standing & Department Permission	**0-3**			
CYS 494	Advanced Topics: Cybersecurity	Varies by Topic	**1-3**			
CYS 499	Advanced Independent Study: CYS	Instructor Permission	**1-3**			

EXPERIENTIAL LEARNING REQUIREMENT (0-6 Hours)						OFFICE USE ONLY
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**	**Approved Exceptions**
CYS/CSC/CIT 292/392/ 492	Research Experience	See Catalog	**0-3**			
CYS/CSC/CIT 296/396	Practicum	See Catalog	**0-3**			
CEP 300	Cooperative Education		**1-3**			
SCI 393	STEM Ambassadors	First Year STEM Major Courses Complete, 3.0 GPA, Instructor Consent	**0-1**			

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 in all courses that apply to the major and a minimum 2.00 major GPA. Please consult with your advisor and the appropriate University Course Catalog for all other degree requirements.