Bachelor of Science in Information Technology

Catalog Year: 2024-2025

Total Degree Credit Hours: 120

Area	Classes / Credits	Required		Options
I Institutional Priority	**2 Classes** 5 Credit Hours	**Complete the following course:** ECON 1000	AND	**Complete one course from the following:** AMST 1102, ASIA 1102, BLCK 1102, COMM 1100, GWST 1102, LALS 1102, LDRS 2300, PAX 1102, ISD 2700, POLS 2401, RELS 1102
M Mathematics & Quantitative Skills	**1 Class** 3-4 Credit Hours	**Complete the following course:** MATH 1113 *Computing-related Science Majors: Students must take MATH 1113 or higher* *Computing-related Engineering Majors: Students must take MATH 1190 or higher*		
P Political Science and U.S. History	**2 Classes** 6 Credit Hours	**Complete the following course:** POLS 1101	AND	**Complete one course from the following:** HIST 2111, HIST 2112
A Arts, Humanities, and Ethics	**2 Classes** 6 Credit Hours	**Select one course from the following:** CHIN 1001 **or** CHIN 1002, ENGL 2110, ENGL 2120, ENGL 2130, ENGL 2140, FREN 1001 **or** FREN 1002, GRMN 1001 **or** GRMN 1002, HEBR 1001 or HEBR 1002, ITAL 1001 **or** ITAL 1002, JAPN 1001 **or** JAPN 1002, KOR 1001 **or** KOR 1002, LATN 1001 **or** LATN 1002, PHIL 2010, PORT 1001 **or** PORT 1002, RUSS 1001 **or** RUSS 1002, SPAN 1001 **or** SPAN 1002, WLC 1002, WLC 2209	AND	**Complete one course from the following:** ART 1107, DANC 1107, MUSI 1107, TPS 1107
C Communication in Writing	**2 Classes** 6 Credit Hours	**Complete the following course:** ENGL 1101	AND	**Complete the following course:** ENGL 1102
T Technology, Mathematics, and Science	**3 Classes** 10-12 Credit Hours	**Complete one course from the following:** MATH 1190, MATH 2202 *Computing-related Science Majors: Students must take MATH 1190 or higher* *Computing-related Engineering Majors: Students must take MATH 2202*	AND	**Science Majors and Engineering Majors**: Select two course pairs from the following (8 Credit Hours) CHEM 1211 **and** CHEM 1211L CHEM 1212 **and** CHEM 1212L PHYS 1111 **and** PHYS 1111L PHYS 1112 **and** PHYS 1112L PHYS 2211 **and** PHYS 2211L PHYS 2212 **and** PHYS 2212L BIOL 1107 **and** BIOL 1107L BIOL 1108 **and** BIOL 1108L *Please note: Students cannot take both PHYS 1111/L and PHYS 2211/L nor PHYS 1112/L and PHYS 2212/L.*
S Social Sciences	**2 Classes** 6 Credit Hours	**Complete one course from the following:** HIST 1100, HIST 1111, HIST 1112	AND	**Complete one course from the following:** CRJU 1101, GEOG 1101, PSYC 1101, SOCI 1101, STS 1101, ANTH 1102, ECON 2106

Core Field of Study

	Prerequisites		
IT 1114 Programming Principles **AND** **IT 1114L** Programming Principles lab	Lecture & Lab must be taken at the same time	4	
CSE 1321 Programming & Problem Solving I **AND** **CSE 1321L** Programming & Problem Solving I Lab	Lecture & Lab must be taken at the same time	4	
TCOM 2010 Technical Writing	ENGL 1102	3	
STAT 2332 Probability and Data Analysis	MATH 1190 or MATH 1179	3	
MATH 2345 Discrete Mathematics *or*	MATH 1113 or 1190 or 1179	3	
CSE 2300 Discrete Structures for Computing	(MATH 1113 or 1190) & CSE 1321/L with 'B' or better		
+ 1 hour from Technology, Mathematics, and Sciences	See IMPACTS requirements	*1*	

Students should start in IT 1114 & IT 1114L then move on to CSE 1321 & CSE 1321L.

'C' or better grade required for all major courses

Free Electives

Select 5 credit hours of 1000-4000 level coursework from the University Catalog.

Major Core Requirements

	Prerequisites		
CSE 3153 Database Systems	IT 1114/L or CSE 1322/L	3	
CSE 3801 Professional Practices and Ethics	IT 1114/L or CSE 1322/L	2	
IT 3123 Hardware & Software Concepts	IT 1114/L or CSE 1321/L	3	
IT 3003 Professional Development & Entrepreneurship	IT 3123*	3	
IT 3203 Intro to Web Development	IT 1114/L or CSE 1321/L	3	
IT 3223 Software Acquisition & Project Management	IT 1114/L or CSE 1321/L	3	
IT 3423 Operating Systems Concepts & Administration	IT 3123 or CS 3503	3	
IT 3883 Advanced Application Development	(IT 1114/L or CSE 1321/L) and CSE 3153	4	
IT 4323 Data Communications & Networks	IT 3123 or CS 3503	3	
IT 4683 Management of IT & Human Computer Interaction	CSE 3153	3	
IT 4723 IT Policy and Law	IT 3123 & IT 3223	3	
IT 4823 Information Security Administration & Privacy	(CSE 2300 or MATH 2345) & IT 3123	3	
IT 4983 IT Capstone	IT 3423, IT 3223, IT 3203 & IT 4323*, IT 4823*	3	
+ 1 hour from Technology, Mathematics, and Sciences		1	

All major courses must have a minimum grade of 'C.'

* - can be done concurrently with course

Concentration (15 credit hours)

Choose **ONE** concentration. Four of the five courses must be completed from the chosen concentration. The fifth course may be from the same or any concentration, IT 4490 Special Topics, IT 4493 Research, or CSE 4983 Computing Internship.

Enterprise Systems   Prerequisites

IT 3503 Foundations of Health IT	ENGL 1102	3	
IT 4153 Advanced Database	CSE 3153	3	
IT 4333 Network Configuration & Administration	IT 4323 or ECET 3400 or CS 4622	3	
IT 4673 Virtual IT Systems	(IT 3423 or CS 3502), CSE 3153 & IT 4323	3	
IT 4403 Advanced Web and Mobile Applications	IT 3203	3	

Data Analytics and Tech.   Prerequisites

IT 3703 Introduction to Data Analytics and Technology	IT 3123 & CSE 3153*	3	
IT 4713 Business Intelligence Systems	IT 3703	3	
IT 4733 Big Data System Administration	IT 3703	3	
IT 4773 Machine Learning for Enterprise Applications	IT 3703	3	
IT 4793 Applied Data Driven Solutions	IT 3703	3	

* - can be done concurrently with course

Cyber Operations Security   Prerequisites

IT 4833 Wireless Security	IT 4323 or ECET 3400 or CS 4622	3	
IT 4843 Ethical Hacking for Effective Defense	IT 4323 or ECET 3400 or CS 4622	3	
IT 4853 Computer Forensics	IT 4323 or ECET 3400 or CS 4622	3	
IT 4883 Infrastructure Defense	IT 4323 or ECET 3400 or CS 4622	3	
IT 4893 Internet of Things: Applications & Security	IT 4823 & IT 4323	3	
IT 4863 Web and Mobile Application Security	IT 3203	3	