

Bachelor of Science in Information Technology



This is a GATED PROGRAM
Catalog Year: 2019-2020

Updated 5/14/2019
Total Degree Credit Hours: 121

General Education Requirements (See Degreeworks for Prerequisites)

A-1	ENGL 1101 Composition I	3	
	ENGL 1102 Composition II	3	
A-2	MATH 1112 College Trigonometry <i>or</i> MATH 1113 Precalculus	3	

Area A: Essential Skills (9 credit hours)

All Area A courses must be completed within the first 30 credit hours with a grade of C or higher.

B-1	ECON 1000 Contemporary Economic Issues	2	
B-2	COM 1100 Human Communication	3	

Area B: Institutional Options (5 credit hours)

COM 1100 is essential for IT majors.

C-1	Literature: ENGL 2110, 2111, 2112, 2120, 2121, 2122, 2130, 2131, 2132, <i>or</i> 2300	3	
C-2	Arts and Culture: ART 1107, MUSI 1107, DANC 1107, <i>or</i> TPS 1107	3	

Area C: Humanities, Fine Arts, and Ethics (6 cr hrs)

Choose one course from each area.

D-1	MATH 1160 Elementary Applied Calculus I <i>or</i> MATH 1190 Calculus I	3-4	
D-2	BIOL 1107/L, BIOL 1108/L, CHEM 1211/L, CHEM 1212/L, PHYS 1111/L, PHYS 1112/L, PHYS 2211/L, PHYS 2212/L, SCI 1101, GEOG 1112, GEOG 1113	8	

Area D: Science, Math, and Technology (11-12 cr hrs)

Information Technology majors must complete two 4-credit hour science courses. "L" denotes the corresponding lab course.

E-1	POLS 1101 American Government	3	
E-2	HIST 2111 <i>or</i> 2112 US History	3	
E-3	HIST 1100, 1111, <i>or</i> 1112 World History	3	
E-4	CRJU 1101, GEOG 1101, PSYC 1101, SOCI 1101, STS 1101, ANTH 1102, <i>or</i> ECON 2100	3	

Area E: Social Sciences (12 credit hours)

Choose one course from each area for E-2, E-3, & E-4.

Area F Lower Division Major Requirements

Prerequisites

IT 1113 Programming Principles I	None	3	
CSE 1321 Programming & Problem Solving I AND CSE 1321L Programming & Problem Solving I Lab	Co-req w/ MATH 1112, 1113, 1190, <i>or</i> CSE 1300	4	
IT 1323 Advanced Programming Principles AND IT 1323L Advanced Programming Principles Lab	'B' or better in CSE 1321/L	4	
MATH 2332 Intro to Probability and Data Analysis <i>or</i> STAT 1401 Elementary Statistics	MATH 1190 MATH 1111, 1112, 1113 <i>or</i> 1190	3	
MATH 2345 Discrete Mathematics <i>or</i> CSE 2300 Discrete Structures for Computing	MATH 1112, 1113, <i>or</i> 1190 MATH 1113 & CSE 1321/L	3	
Carryover credit hour from Area D Group 2 Science Lab	See Area D Science requirement	1	

CSE 1321 & CSE 1321L must have a minimum grade of 'B.'

Upon completing CSE 1321 & CSE 1321L with a minimum grade of 'B,' students should request to have their major changed to the fully admitted Information Technology major.

Free Electives (7 credit hours)

CSE 1300 is highly recommended for students who are new to programming and have available free elective credits to complete.

Upper Division Major Courses

Prerequisites

TCOM 2010 Technical Writing	ENGL 1102	3	
CSE 3153 Database Systems	IT 1323 & IT 1323L	3	
CSE 3801 Professional Practices and Ethics	IT 1323 & IT 1323L	2	
IT 3123 Hardware & Software Concepts	CSE 1321/L & (IT 1113/IT 1323/L) & (CSE 2300* or MATH 2345*)	3	
IT 3203 Intro to Web Development	CSE 1321/L & (IT 1323/L or IT 1113)	3	
IT 3223 Software Acquisition & Project Management	CSE 1321/L or IT 1113	3	
IT 3423 Operating Systems Concepts & Administration	IT 3123	3	
IT 4123 Electronic Commerce	IT 3203 & CSE 3153	3	
IT 4323 Data Communications & Networks	IT 3123	3	
IT 4423 Linux/Unix Administration	IT 3423	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	CSE 3153 & IT 3123 & (CSE 2300 or MATH 2345)	3	
IT 4983 IT Capstone	IT 3423, IT 3223, IT 3203 & IT 4323*, IT 4823*	3	

All major courses must have a minimum grade of 'C,' except for CSE 1321/L, which must have a minimum grade of 'B'.

* - can be done concurrently with course

Concentration (12 credit hours)

Choose **ONE** concentration. Three of the four courses must be completed from the chosen concentration. The fourth course may be from any concentration or an approved internship credit.

Enterprise Systems

Prerequisites

IT 4203 Advanced Web Development	IT 3203	3	
IT 4153 Advanced Database	CSE 3153	3	
IT 4333 Network Configuration & Administration	IT 4323	3	
IT 4673 Virtual IT Systems	CSE 3153 & IT 3423 & IT 4323	3	
IT 4713 Business Intelligence Systems	CSE 3153	3	
IT 4490 Special Topics in Enterprise Systems	Varies	3	

Mobile and Web

Prerequisites

CSE 3203 Overview of Mobile Systems	IT 1323/L	3	
IT 4203 Advanced Web Development	IT 3203	3	
IT 4213 Mobile Web Development	CSE 3203 or IT 3203	3	
CGDD 4203 Mobile and Casual Game Development	CGDD 4003	3	
IT 4490 Special Topics in Mobile and Web	Varies	3	

Information Assurance & Security

IT 4833 Wireless Security	IT 4823 or CS 3502	3	
IT 4843 Ethical Hacking for Effective Defense	IT 4323 or CS 4622	3	
IT 4853 Computer Forensics	IT 4823 or CS 3502	3	
IT 4883 Infrastructure Defense	IT 4323	3	
IT 4490 Special Topics in Information Security	Varies	3	

Health Information Technology

IT 3503 Foundations of HIT	ENGL 1102	3	
IT 4513 Electronic Health Record Systems and Applications	IT 3503	3	
IT 4523 Clinical Processes and Workflows	IT 3503 or concurrent	3	
IT 4533 Health Information Security and Privacy	IT 3503	3	
IT 4490 Special Topics in Health Information Technology	Varies	3	