

# Bachelor of Science in Information Technology



This is a GATED PROGRAM  
Catalog Year: 2018-2019

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 <b>AND</b> 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 <b>AND</b> 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

<b>TCOM 2010</b> Technical Writing	ENGL 1102	3	
<b>CSE 3153</b> Database Systems	IT 1323 & IT 1323L	3	
<b>CSE 3801</b> Professional Practices and Ethics	IT 1323 & IT 1323L	2	
<b>IT 3123</b> Hardware & Software Concepts	CSE 1321/L & (IT 1113/IT 1323/L) & (CSE 2300* or MATH 2345*)	3	
<b>IT 3203</b> Intro to Web Development	CSE 1321/L & (IT 1323/L or IT 1113)	3	
<b>IT 3223</b> Software Acquisition & Project Management	CSE 1321/L or IT 1113	3	
<b>IT 3423</b> Operating Systems Concepts & Administration	IT 3123	3	
<b>IT 4123</b> Electronic Commerce	IT 3203 & CSE 3153	3	
<b>IT 4323</b> Data Communications & Networks	IT 3123	3	
<b>IT 4423</b> Linux/Unix Administration	IT 3423	3	
<b>IT 4683</b> Management of IT & Human Computer Interaction	CSE 3153	3	
<b>IT 4723</b> IT Policy and Law	IT 3123 & IT 3223	3	
<b>IT 4823</b> Information Security Administration	CSE 3153 & IT 3123 & (CSE 2300 or MATH 2345)	3	
<b>IT 4983</b> 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

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

### Mobile and Web

#### Prerequisites

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

### Information Assurance & Security

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

### Health Information Technology

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