**Bachelor of Science in Information Technology**

**This is a GATED PROGRAM** *Updated 5/14/2019*

**Catalog Year: 2018-2019** Total Degree Credit Hours: 121

**General Education Requirements** (See Degreeworks for Prerequisites)

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| **A-1** | **ENGL 1101** Composition I | 3 |  |
| **ENGL 1102** Composition II | 3 |  |
| **A-2** | **MATH 1112** College Trigonometry *or*  **MATH 1113** Precalculus | 3 |  |

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| **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. |

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

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| **Area B: Institutional Options (5 credit hours)**  COM 1100 is essential for IT majors. |

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

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| **Area C: Humanities, Fine Arts, and Ethics (6 cr hrs)**  Choose one course from each area. |

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| **D-1** | **MATH 1160** Elementary Applied Calculus I *or*  **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 |  |

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| **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. |

**Area F Lower Division Major Requirements**

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

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| **Area E: Social Sciences (12 credit hours)**  Choose one course from each area for E-2, E-3, & E-4. |

Prerequisites

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| **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, or 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 *or*  **STAT 1401** Elementary Statistics | MATH 1190 | 3 |  |
| MATH 1111, 1112, 1113 or 1190 |
| **MATH 2345** Discrete Mathematics *or*  **CSE 2300** Discrete Structures for Computing | MATH 1112, 1113, or 1190 | 3 |  |
| MATH 1113 & CSE 1321/L |
| **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.

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

**Free Electives (7 credit hours)**

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Prerequisites

**Upper Division Major Courses**

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| **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.

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| **Enterprise Systems**  Prerequisites | | | |  | **Mobile and Web**  Prerequisites | | | |
| **IT 4203** Advanced Web  Development | IT 3203 | 3 |  | **CSE 3203** Overview of Mobile Systems | IT 1323/L | 3 |  |
| **IT 4153** Advanced Database | CSE 3153 | 3 |  | **IT 4203** Advanced Web Development | IT 3203 | 3 |  |
| **IT 4333** Network Configuration & Administration | IT 4323 | 3 |  |
| **IT 4213** Mobile Web Development | CSE 3203 or IT 3203 | 3 |  |
| **IT 4673** Virtual IT Systems | CSE 3153 & IT 3423 & IT 4323 | 3 |  |
| **CGDD 4203** Mobile and Casual Game Development | CGDD 4003 | 3 |  |
| **IT 4713** Business Intelligence Systems | CSE 3153 | 3 |  | **IT 4490** Special Topics in Mobile and Web | Varies | 3 |  |
| **IT 4490** Special Topics in Enterprise Systems | Varies | 3 |  |  | | | |
| **Health Information Technology** | | | |
|  | | | | **IT 3503** Foundations of HIT | ENGL 1102 | 3 |  |
| **Information Assurance & Security** | | | | **IT 4513** Electronic Health Record Systems and Applications | IT 3503 | 3 |  |
| **IT 4833** Wireless Security | IT 4823 or CS 3502 | 3 |  |
| **IT 4523** Clinical Processes and Workflows | IT 3503 or concurrent | 3 |  |
| **IT 4843** Ethical Hacking for Effective Defense | IT 4323 or CS 4622 | 3 |  |
| **IT 4533** Health Information Security and Privacy | IT 3503 | 3 |  |
| **IT 4853** Computer Forensics | IT 4823 or CS 3502 | 3 |  |
| **IT 4490** Special Topics in Health Information Technology | Varies | 3 |  |
| **IT 4883** Infrastructure Defense | IT 4323 | 3 |  |
| **IT 4490** Special Topics in Information Security | Varies | 3 |  |  |  |  |  |
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