

Information Technology, BSIT

Program Description

The Bachelor of Science in Information Technology degree, has the primary objective of meeting the high demand for professional degrees in the strategy, development and administration of integrated computing, management, and information technology systems. The degree has core requirements, major requirements and required electives. The major contains those courses considered fundamental to the information technology field and the electives give the student some flexibility in choice.



This program is a part of the College of Computing and Software Engineering.

Accreditation

The Bachelor of Science in Information Technology degree is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

Admission, Enrollment, and Graduation Policies

Admission Requirements

This program does not have specific admission requirements and only admission to Kennesaw State University is required. For more information, please visit the Admissions section of the Catalog.

Enrollment Requirements

Progression through the program requires students to successfully complete or transfer the equivalent of IT 1114, IT 1114L, CSE 1321, and CSE 1321L with a grade of "C" or better in all four courses.

Graduation Requirements

Each student is expected to meet the requirements outlined in Academic Policies: 5.0 PROGRAM REQUIREMENTS & GRADUATION.

Program Course Requirements

Core IMPACTS Curriculum (42 Credit Hours)

General Education Core IMPACTS Curriculum

Core IMPACTS Curriculum Requirements Specific to the Major

Science Majors: Must take MATH 1113 or higher in Mathematics & Quantitative Skills and MATH 1179 or higher in Applied Math.

Science and Engineering Majors: Must take two four-hour laboratory sciences in Natural Sciences. Students must choose from CHEM 1211 / L , CHEM 1212 / L , PHYS 1111 / L *, PHYS 1112 / L , PHYS 2211 / L *, PHYS 2212 / L , BIOL 1107 / L , or BIOL 1108 / L .

*Students cannot take both PHYS 1111/L and PHYS 2211/L nor PHYS 1112/L and PHYS 2212/L.

Core Field of Study (18 Credit Hours)

Students must earn a grade of "C" or better in these courses.

- IT 1114: Programming Principles
 - IT 1114L: Programming Principles Lab
 - CSE 132I: Programming and Problem Solving I
 - CSE 132IL: Programming and Problem Solving I Laboratory
 - CSE 2300: Discrete Structures for Computing
 - or
 - MATH 2345: Discrete Mathematics
 - TCOM 2010: Technical Writing
 - STAT 2332: Probability and Data Analysis
- One (1) credit hour carried over from Natural Sciences.

Major Requirements (40 Credit Hours)

Students must earn a grade of "C" or better in these courses.

- CSE 3153: Database Systems
- CSE 380I: Professional Practices and Ethics
- IT 3003: Professional Development & Entrepreneurship
- IT 3123: Hardware and Software Concepts
- IT 3203: Introduction to Web Development
- IT 3223: Software Acquisition and Project Management
- IT 3423: Operating Systems Concepts & Administration
- IT 3883: Advanced Application Development
- IT 4323: Data Communications & Networking
- IT 4683: Management of Information Technology and Human Computer Interaction
- IT 4723: IT Policy and Laws

- IT 4823: Information Security Administration & Privacy
 - IT 4983: IT Capstone
- One (1) credit hour carried over from Applied Math.

Major Concentrations (15 Credit Hours)

Students must earn a grade of "C" or better in these courses.

Data Analytics and Technology Concentration

Required Courses (12 Credit Hours)

Select 12 credit hours from the following list of courses:

- IT 3703: Introduction to Data Analytics and Technology
- IT 4713: Business Intelligence Systems
- IT 4733: Big Data System Administration
- IT 4773: Machine Learning for Enterprise Applications
- IT 4793: Applied Data Driven Solutions

Elective Courses (3 Credit Hours)

Select 3 credit hours of 3000–4000 level coursework from the Data Analytics and Technology Concentration courses not already used as a requirement or choose from the following list of courses:

- CSE 4983: CSE Computing Internship
- IT 3503: Foundations of Health Information Technology
- IT 4153: Advanced Database
- IT 4333: Network Configuration & Administration
- IT 4403: Advanced Web and Mobile Applications
- IT 4603: Introduction to Blockchain Technologies
- IT 4673: Virtual IT Systems
- IT 4833: Wireless Security
- IT 4843: Ethical Hacking for Effective Defense
- IT 4853: Computer Forensics
- IT 4863: Web and Mobile Application Security
- IT 4883: Infrastructure Defense
- IT 4893: Internet of Things: Applications and Security
- IT 4490: Special Topics in Information Technology
- IT 4493: IT Undergraduate Research

Enterprise Systems Concentration

Required Courses (12 Credit Hours)

Select 12 credit hours from the following list of courses:

- IT 3503: Foundations of Health Information Technology
- IT 4153: Advanced Database
- IT 4333: Network Configuration & Administration
- IT 4403: Advanced Web and Mobile Applications
- IT 4673: Virtual IT Systems

Elective Courses (3 Credit Hours)

Select 3 credit hours of 3000–4000 level coursework from the Enterprise Systems Concentration courses not already used as a requirement or choose from the following list of courses:

- CSE 4983: CSE Computing Internship
- IT 3703: Introduction to Data Analytics and Technology
- IT 4603: Introduction to Blockchain Technologies
- IT 4713: Business Intelligence Systems
- IT 4833: Wireless Security
- IT 4843: Ethical Hacking for Effective Defense
- IT 4853: Computer Forensics
- IT 4863: Web and Mobile Application Security
- IT 4883: Infrastructure Defense
- IT 4893: Internet of Things: Applications and Security
- IT 4490: Special Topics in Information Technology
- IT 4493: IT Undergraduate Research

Cyber Operations Security Concentration

Required Courses (12 Credit Hours)

Select 12 credit hours from the following list of courses:

- IT 4833: Wireless Security
- IT 4843: Ethical Hacking for Effective Defense
- IT 4853: Computer Forensics
- IT 4863: Web and Mobile Application Security
- IT 4883: Infrastructure Defense
- IT 4893: Internet of Things: Applications and Security

Elective Courses (3 Credit Hours)

Select 3 credit hours of 3000–4000 level coursework from the Cyber Operations Security Concentration courses not already used as a requirement or choose from the following list of courses:

- CSE 4983: CSE Computing Internship
- IT 3503: Foundations of Health Information Technology
- IT 3703: Introduction to Data Analytics and Technology
- IT 4153: Advanced Database
- IT 4333: Network Configuration & Administration
- IT 4403: Advanced Web and Mobile Applications
- IT 4603: Introduction to Blockchain Technologies
- IT 4673: Virtual IT Systems
- IT 4713: Business Intelligence Systems
- IT 4490: Special Topics in Information Technology
- IT 4493: IT Undergraduate Research

Technology and Innovation Concentration

Required Courses (12 Credit Hours)

Select 12 credit hours from the following list of courses:

- IT 4603: Introduction to Blockchain Technologies
- IT 4613: Machine Learning Technology in Banking and Investment
- IT 4623: Blockchain Technologies Security & Privacy
- FTA 4001: Foundations of FinTech
- FTA 4002: Financial Technologies
- FTA 4005: Introduction to Financial Data Analytics

Elective Courses (3 Credit Hours)

Select 3 credit hours of 3000–4000 level coursework from the Technology and Innovation Concentration courses not already used as a requirement or choose from the following list of courses:

- CSE 4983: CSE Computing Internship
- IT 3503: Foundations of Health Information Technology
- IT 3703: Introduction to Data Analytics and Technology
- IT 4153: Advanced Database
- IT 4333: Network Configuration & Administration

- IT 4403: Advanced Web and Mobile Applications
- IT 4633: IT Technology Systems Internship
- IT 4673: Virtual IT Systems
- IT 4713: Business Intelligence Systems
- IT 4833: Wireless Security
- IT 4843: Ethical Hacking for Effective Defense
- IT 4853: Computer Forensics
- IT 4863: Web and Mobile Application Security
- IT 4893: Internet of Things: Applications and Security
- IT 4490: Special Topics in Information Technology
- IT 4493: IT Undergraduate Research

University Electives (5 Credit Hours)

In accordance with KSU Graduation Policy, students must earn a grade of "D" or better in these courses while maintaining minimum 2.00 cumulative GPA.

Free Electives (5 Credit Hours)

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

Program Total (120 Credit Hours)