

# INTEGRATED INFORMATION TECHNOLOGY, B.S.

The BS Integrated Information Technology program is accredited by the Computing Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and the Information Technology and Similarly Named Computing Programs Criteria.

## Learning Outcomes

1. Students will analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Students will design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the IT discipline.
3. Students will communicate effectively in a variety of professional contexts.
4. Students will recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Students will function effectively as a member or leader of a team engaged in activities appropriate to the IT discipline.
6. Students will use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.

## Academic Standards

### Program GPA

Program GPA requirement policies are described in the College of Engineering and Computing (<https://academicbulletins.sc.edu/undergraduate/engineering-computing/>) section of this bulletin. For the purpose of these policies, the following courses are used to determine the Program GPA for the Integrated Information Technology B.S. program: all Lower Division Integrated Information Technology courses, all Integrated Information Technology Major courses and all Major Elective courses.

### Minimum Course Grades

The Integrated Information Technology B.S. program requires that a grade of "C" or better be earned in MATH 174 and all ITEC courses applied to the degree.

## Admissions

### Entrance Requirements

Admission requirements and processes for freshman, transfer students, and former students seeking readmission are managed by the Office of Undergraduate Admissions ([http://sc.edu/about/offices\\_and\\_divisions/undergraduate\\_admissions/](http://sc.edu/about/offices_and_divisions/undergraduate_admissions/)).

Transfer applicants from regionally accredited colleges and universities must have a cumulative 2.75 GPA on a 4.00 scale to enter the College of Engineering and Computing. In addition, transfer applicants for the Aerospace Engineering, Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, or Mechanical Engineering majors must also have completed a four

semester-hour calculus course equivalent to MATH 141 with a grade of "C" or better.

Current University of South Carolina students who wish to enter the College of Engineering and Computing, and former students seeking readmission, must have an institutional GPA of 2.50 or better on at least 15 hours earned at USC. In addition, such applicants for the Aerospace Engineering, Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, or Mechanical Engineering majors must also have completed a four semester-hour calculus course equivalent to MATH 141 with a grade of "C" or better.

## Degree Requirements (120 hours)

See College of Engineering and Computing (<https://academicbulletins.sc.edu/undergraduate/engineering-computing/>) for progression requirements and special academic opportunities.

### Program of Study

Requirements	Credit Hours
1. Carolina Core	34-43
2. College Requirements	0
3. Program Requirements	41-50
4. Major Requirements	36

### Founding Documents Requirement

All undergraduate students must take a 3-credit course or its equivalent with a passing grade in the subject areas of History, Political Science, or African American Studies that covers the founding documents including the United State Constitution, the Declaration of Independence, the Emancipation Proclamation and one or more documents that are foundational to the African American Freedom struggle, and a minimum of five essays from the Federalist papers. This course may count as a requirement in any part of the program of study including the Carolina Core, the major, minor or cognate, or as a general elective. Courses that meet this requirement are listed here (<https://academicbulletins.sc.edu/undergraduate/founding-document-courses/>).

## 1. Carolina Core Requirements (34-43 hours)

### CMW – Effective, Engaged, and Persuasive Communication: Written (6 hours)

- ENGL 101 - *must be passed with a grade of C or higher*
- ENGL 102

### ARP – Analytical Reasoning and Problem Solving (6 hours)

- MATH 174 - *must be passed with a grade of C or higher*
- STAT 201, STAT 205, or STAT 206

### SCI – Scientific Literacy (7 hours)

- two CC-SCI courses (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>) from the natural sciences including one laboratory selected from Astronomy, Biology, Chemistry, Environmental Science, Geology, Marine Science or Physics

## GFL – Global Citizenship and Multicultural Understanding: Foreign Language (0-6 hours)

Score two or better on foreign language placement test; or complete the 109 and 110 courses in FREN, GERM, LATN or SPAN; or complete the 121 course in another foreign language.

- CC-GFL courses (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

## GHS – Global Citizenship and Multicultural Understanding: Historical Thinking (3 hours)

- any CC-GHS course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

## GSS – Global Citizenship and Multicultural Understanding: Social Sciences (3 hours)

- any CC-GSS course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

## AIU – Aesthetic and Interpretive Understanding (3 hours)

- any CC-AIU course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

## CMS – Effective, Engaged, and Persuasive Communication: Spoken Component <sup>1</sup> (3 hours)

- SPCH 140, SPCH 145, or SPCH 230

## INF <sup>1</sup> – Information Literacy (0-3 hours)

- any overlay or stand-alone CC-INF course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

## VSR – Values, Ethics, and Social Responsibility (3 hours)

- ITEC 101

<sup>1</sup> **Carolina Core Stand Alone or Overlay Eligible Requirements** – Overlay-approved courses offer students the option of meeting two Carolina Core components in a single course. A maximum of two overlays is allowed. The total Carolina Core credit hours for this program must add up to a minimum of 31 hours.

## 2. College Requirements (0 hours)

*No college-required courses for this program.*

## 3. Program Requirements (41-50 hours)

### Supporting Courses (36-41 hours)

Course	Title	Credits
<b>Foundational Courses</b>		
Select one of the following:		3-6
RETL 261 & 262	Principles of Accounting I and Principles of Accounting II	
	or ACCT 222 Survey of Accounting	
ECON 224	Introduction to Economics <sup>1</sup>	3
SPTE 240	Business Law	3
	or ACCT 324 Survey of Commercial Law	

HTMT 344	Personnel Organization and Supervision	3
or MGMT 371	Principles of Management	
Select one of the following:		3
ITEC 242	Business Communications	
ENGL 462	Technical Writing	
ENGL 463	Business Writing	
MGMT 250	Professional Communication	

### Lower Division Integrated Information Technology

Must be passed with a grade of C or higher.

ITEC 233	Introduction to Computer Hardware and Software	3
ITEC 293	Cybersecurity Operations	3
ITEC 245	Introduction to Networking	3
ITEC 264	Computer Applications in Business I	3
ITEC 265	Introduction to Databases	3

### Software Programming Language

Select one of the following sequences:		6-8
CSCE 104 & ITEC 352	Program Design and Development and Software Design	
ITEC 204 & 352	Program Design and Development and Software Design	
CSCE 145 & 146	Algorithmic Design I and Algorithmic Design II	

<sup>1</sup> ECON 224 may be satisfied by completing both ECON 221 and ECON 222, if they were taken prior to the student becoming an IIT major or through transient enrollment.

## Electives (0-14 hours)

The IIT curriculum includes 0-14 hours of electives depending on how students fulfill the Carolina Core requirements. Any course in the university can be used to satisfy the elective requirement (including additional electives in the major).

## 4. Major Requirements (36 hours)

*Must be passed with a grade of C or higher.*

### Major Courses (33 hours)

Course	Title	Credits
ITEC 301	Professional Internship Seminar	3
ITEC 362	Introduction to Web Systems	3
ITEC 370	Database Systems in Information Technology	3
ITEC 444	Introduction to Human Computer Interaction	3
ITEC 445	Advanced Networking and Security	3
ITEC 447	Management of Information Technology	3
ITEC 493	Information Technology Security for Managers	3
ITEC 495	Professional Internship	6
ITEC 560	Project Management Methods	3
ITEC 564	Capstone Project for Information Technology	3

**Total Credit Hours**

**33**

### Major Elective (3 hours)

Students must take 3 credit hours of Integrated Information Technology electives. Undergraduate courses that may be used to satisfy this requirement are listed below. In addition, ITEC courses numbered 700

and above may be used to satisfy this requirement, provided the student is admitted to an Accelerated Bachelor's/Graduate Program.

Course	Title	Credits
ITEC 475	Mainframe Systems	3
ITEC 476	Job Control Language	3
ITEC 490	Special Topics in Information Technology	3
ITEC 510	Emerging Information Technology Trends	3
ITEC 534	Advanced Human Computer Interaction	3
ITEC 544	Training Systems	3
ITEC 545	Telecommunications	3
ITEC 552	Linux Programming and Administration	3
ITEC 562	Advanced Web Support Systems	3
ITEC 570	Database Management and Administration	3
ITEC 590	Special Topics in Integrated Information Technology	3

## Major Map

A major map is a layout of required courses in a given program of study, including critical courses and suggested course sequences to ensure a clear path to graduation.

Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.

**Integrated Information Technology, B.S.**