INTEGRATED INFORMATION TECHNOLOGY, B.S.

Accreditation


Learning Outcomes

- Students will demonstrate the ability to function effectively on teams to accomplish a common goal. (d)
- Students will demonstrate the ability to communicate effectively with a range of audiences. (f)
- Students will use and apply current technical concepts and practices in the core information technologies. (j)
- Students will recognize the need for and be able to engage in continuing professional development. (h)
- Students will demonstrate an ability to analyze a problem and identify and define the computing requirements appropriate to its solution. (b)
- Students will demonstrate an understanding of professional, ethical, legal, security, and social issues and responsibilities. (e)
- Students will demonstrate the ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. (c)
- Students will demonstrate the ability to identify / analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems. (k)
- Students will demonstrate the ability to effectively integrate IT-based solutions into the user environment. (l)
- Students will demonstrate the ability to analyze the local and global impact of computing on individuals, organizations, and society. (g)
- Students will demonstrate the ability to assist in the creation of an effective project plan. (n)
- Students will demonstrate the ability to use current techniques, skills, and tools necessary for computing practice. (i)
- Students will demonstrate the ability to apply knowledge of computing and mathematics appropriate to the discipline. (a)
- Students are able to identify IT best practices and standards and their application, (m)

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/).

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 UofSC. 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

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Carolina Core</td>
<td>31-43</td>
</tr>
<tr>
<td>2. College Requirements</td>
<td>0</td>
</tr>
<tr>
<td>3. Program Requirements</td>
<td>41-53</td>
</tr>
<tr>
<td>4. Major Requirements</td>
<td>36</td>
</tr>
</tbody>
</table>

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 States 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 (31-43 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 or STAT 205

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 1 (3 hours)
- SPCH 140, SPCH 145, or SPCH 230

INF – Information Literacy 1 (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 1 (0-3 hours)
- any overlay or stand-alone CC-VSR course (https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/)

1 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 (41-53 hours)
Supporting Courses (39-41 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 224</td>
<td>Introduction to Economics 1</td>
<td>3</td>
</tr>
<tr>
<td>SPTE 240</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 242</td>
<td>Business Communications</td>
<td></td>
</tr>
<tr>
<td>ENGL 462</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 463</td>
<td>Business Writing</td>
<td></td>
</tr>
<tr>
<td>MGMT 250</td>
<td>Professional Communication</td>
<td></td>
</tr>
<tr>
<td>RETL 261</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>&amp; 262</td>
<td>and Principles of Accounting II</td>
<td></td>
</tr>
<tr>
<td>or ACCT 222</td>
<td>Survey of Accounting</td>
<td></td>
</tr>
<tr>
<td>HRTM 344</td>
<td>Personnel Organization and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 371</td>
<td>Principles of Management</td>
<td></td>
</tr>
</tbody>
</table>

Lower Division Integrated Information Technology
Must be passed with a grade of C or higher:
- ITEC 101 | Thriving in the Tech Age | 3 |
- ITEC 233 | Introduction to Computer Hardware and Software | 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 204 | Program Design and Development & ITEC 352 | Program Design and Development and Software Design |
- ITEC 204 | Program Design and Development & 352 | Program Design and Development and Software Design |
- CSCE 145 | Algorithmic Design I & 146 | Algorithmic Design II |

Total Credit Hours 36-38

1 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 (0-17 hours)
The IIT curriculum includes 0-17 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEC 301</td>
<td>Professional Internship Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 362</td>
<td>Introduction to Web Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 370</td>
<td>Database Systems in Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 444</td>
<td>Introduction to Human Computer Interaction</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 445</td>
<td>Advanced Networking</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 447</td>
<td>Management of Information Technology</td>
<td>3</td>
</tr>
</tbody>
</table>
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)**

Any 3-credit ITEC course numbered 400 or above that is not used to satisfy a major or minor requirement.

**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.**