Because of the influence and leadership roles we expect graduates to have, our students will be encouraged to develop high moral and ethical standards as well as being conversant with and compliant with professional performance standards. They will understand and wisely use new technologies as they become available. Broadly educated at the university level, these professionals have acquired balance in their lives and depth of understanding in technology and its relevance in the broader technological educational triumvirate (knowing, thinking, doing) are included. IT professionals from this discipline are proficient in understanding user needs and communicating technical issues to the organizations and people affected by the computer system. They are “anxiously engaged” in lifelong learning to visualize, structure, and implement complex technical solutions.

**University Core and Graduation Requirements**

<table>
<thead>
<tr>
<th>University Core Requirements</th>
<th>Suggested Sequence of Courses</th>
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<tbody>
<tr>
<td><strong>Core Enrichment: Electives</strong></td>
<td><strong>FRESHMAN YEAR</strong></td>
</tr>
<tr>
<td>Religion Electives</td>
<td>1st Semester</td>
</tr>
<tr>
<td>Open Electives</td>
<td>First-year Writing or American Heritage</td>
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<tr>
<td></td>
<td>IT&amp;C 101</td>
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<tr>
<td></td>
<td>CS 142</td>
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<td></td>
<td>MATH 112</td>
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<tr>
<td></td>
<td>Religion Cornerstone course</td>
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<tr>
<td></td>
<td>Total Hours</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>15.0</td>
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</tbody>
</table>

**Skills**
- First Year Writing
- Advanced Written and Oral Communications
- Quantitative Reasoning
- Languages of Learning (Math or Language)

**Arts, Letters, and Sciences**
- Civilization 1
- Civilization 2
- Arts
- Letters
- Biological Science
- Physical Science
- Social Science

**Core Enrichment: Electives**
- Religion Electives
- Open Electives

FOR UNIVERSITY CORE QUESTIONS AND PROGRAM QUESTIONS SEE SCHOOL OF TECHNOLOGY ADVISOR IN 250 SNLB.

**Graduation Requirements:**
- Minimum residence hours required: 30.0
- Minimum hours needed to graduate: 120.0

*HiST 220 or PLSc 110 combined with the required Econ 110 course can fill the American Heritage requirement.

Note: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits significantly increases the cost and the number of semesters to complete the program.
BS in Information Technology (396526)
2021-2022 Program Requirements (77 Credit Hours)

REQUIREMENT 1 Complete 8 courses
C S 142 - Introduction to Computer Programming 3.0
C S 235 - Data Structures and Algorithms 3.0
C S 236 - Discrete Structures 3.0
*MATH 112 - Calculus 1 4.0
PHYS 121 - Introduction to Newtonian Mechanics 3.0
STAT 201 - Statistics for Engineers and Scientists 3.0
TECH 112 - Exploration in Innovation Design Techniques 1.0
*WRTG 116 - Technical Communication 3.0

REQUIREMENT 2 Complete 1 course
ENG T 231 - (Not currently offered) 3.0

REQUIREMENT 3 Complete 1 course
ECON 110 - Economic Principles and Problems 3.0
PSYCH 111 - Introduction to Psychological Science 3.0

REQUIREMENT 4 Complete 13 courses
NOTE: IT&C 210B and 252 must be completed with a C or higher grade

IT&C 210B - Fundamentals of Web-Based Information Technology 3.0
IT&C 210A - Fundamentals of Web-Based Information Technology 3.0
IT&C 231 - (Not currently offered) 3.0
IT&C 291R - Seminar 3.0
IT&C 447 3.0
IT&C 446 3.0
IT&C 350 3.0
IT&C 252 3.0
IT&C 124 3.0
IT&C 101 3.0
PSYCH 111 3.0
ECON 110 3.0
IT&C 231 3.0
ENG T 231 - (Not currently offered) 3.0

You may take up to 1 credit hour.

REQUIREMENT 5 Complete 3.0 credit hours from the following course(s)
IT&C 441 - Embedded Computer Systems 3.0
IT&C 450 - Database Administration 3.0
IT&C 492R - Special Problems in Information Technology & Cybersecurity 3.0
IT&C 515R - Special Topics in Information Technology & Cybersecurity 3.0
IT&C 529 - Advanced Networking 3.0
IT&C 544 - System Administration 3.0
IT&C 548 - Cyber-Physical Systems 3.0
IT&C 555 - Advanced Human-Computer Interaction 3.0
IT&C 566 - Digital Forensics 3.0
IT&C 567 - Cybersecurity and Penetration Testing 3.0

REQUIREMENT 7 Students must complete 200 hours of pre-approved information technology-related work after declaring the major and must submit a signed letter from an employer during the IT&C 447 course.

REQUIREMENT 8 Complete department packet and exit interview.

THE DISCIPLINE:
Information technology (IT), the technical discipline that solves problems using computing resources, will be taught through a combination of strong theoretical course work and practical application to ensure that all three aspects of the technological educational triumvirate (knowing, thinking, doing) are included. IT professionals from this discipline are competent to design computing systems with due consideration of the performance and compatibility aspects of hardware, software, and digital communication and networking. They can visualize, structure, and implement complex technical solutions.

Professionals in this discipline are also proficient in understanding user needs and communicating technical issues to the organizations and people affected by the computer system. They are “anxiously engaged” in lifelong learning to understand and wisely use new technologies as they become available. Broadly educated at the university level, these professionals have acquired balance in their lives and depth of understanding in technology and its relevance in the broader world context.

Because of the influence and leadership roles we expect graduates to have, our students will be encouraged to develop high moral and ethical standards as well as being conversant with and compliant with professional performance standards.

CAREER OPPORTUNITIES:
Career opportunities are plentiful and rewarding in both large and small companies in technical fields. Graduates will find careers in computer networking, testing, embedded intelligence, digital communications, computer system development, and integration.

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MAP DISCLAIMER
While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.