

## Computer Information Systems (Cybersecurity) Major

### Catalog Description

While the computer science curriculum in the CSIS department provides students with algorithmic analysis, software design and implementation, the computer information systems (CIS) education focuses more on the information collection, storage and retrieval in various areas. The CIS program would prepare students with computer programming, data structures, statistics, and studies on various types of information systems. The Cybersecurity concentration provides students with an opportunity to pursue a career in a related field after graduation.

Students may NOT double major in Computer Science and Computer Information Systems.

### Major Requirements: Computer Information Systems (B.A.)

Course Number and Title	Semester Hours
CS 112: Computer Programming I CS 212: Computer Programming II	8
CS 311: Data Structures	4
Math 210: Introductory Statistics	4
<b>One of the following:</b>  ISP 101: Fundamentals of Information Systems  CS 100: Computer Concepts and Applications	4
<b>Two of the following:</b>  ISP 105: Information Systems and Computer Applications  CS 107: Introduction to Python Programming  CS 110: Introduction to Programming with Visual Basic	8

<p><b>Four of the following:</b></p> <p>MBE 335: Accounting Information Systems</p> <p>EES 300: Introduction to Geographic Information Systems</p> <p>CS 307: Data Science using Python</p> <p>CS 331: Systems Analysis and Design</p> <p>CS 389: Advanced Topics in Computer Science</p> <p>CS 401: Principles of Cybersecurity</p> <p>CS 430: Database Management Systems Design</p> <p>CS 489: Research in Computer Science</p> <p>Other courses in computer science and information systems at the 300 level or higher approved by advisor</p>	<p>16</p>
<p>Total Hours Required</p>	<p>44</p>

**Major Requirements: Computer Information Systems with concentration in Cybersecurity (B.A.)**

Course Number and Title	Semester Hours
CS 112: Computer Programming I CS 212: Computer Programming II	8
CS 311: Data Structures	4
Math 210: Introductory Statistics	4
<p><b>One of the following:</b></p> <p>ISP 101: Fundamentals of Information Systems</p> <p>CS 100: Computer Concepts and Applications</p>	4
<p><b>Two of the following:</b></p> <p>ISP 105: Information Systems and Computer Applications</p> <p>CS 107: Introduction to Python Programming</p> <p>CS 110: Introduction to Programming with Visual Basic</p>	8
CS 401: Principles of Cybersecurity	4
<p><b>One of the following:</b></p> <p>CJ 266: Criminal Procedure</p> <p>CJ 340: Forensic Accounting</p> <p>CJ 387: Criminal Law</p> <p>CJ 389: Criminal Investigation</p>	4

<p><b>Three of the following:</b></p> <p>MBE 335: Accounting Information Systems</p> <p>EES 300: Introduction to Geographic Information Systems</p> <p>CS 307: Data Science using Python</p> <p>CS 331: Systems Analysis and Design</p> <p>CS 389: Advanced Topics in Computer Science</p> <p>CS 430: Database Management Systems Design</p> <p>CS 489: Research in Computer Science</p> <p>Other courses in computer science and information systems at the 300 level or higher approved by advisor</p>	<p>12</p>
<p>Total Hours Required</p>	<p>48</p>

## Cybersecurity Minor

### Catalog Description

The minor in cybersecurity addresses the evolving threats and their potential mitigations in the cyberspace and IT infrastructure. It teaches the fundamentals of the ever-growing field of cybersecurity and the precautions taken to guard against actions that involve unauthorized access to computer systems and data connected to the Internet. Students in this minor will gain basic hands-on experience on ethical hacking techniques which allows them to think critically about interconnected systems and related security vulnerabilities.

The minor can be combined with any major except Computer Science and Computer Information Systems.

### Cybersecurity: Minor

Course Number and Title	Semester Hours
CS 112: Computer Programming I CS 212: Computer Programming II	8
CS 311: Data Structures	4
<b>One of the following:</b> CJ 266: Criminal Procedure CJ 340: Forensic Accounting CJ 387: Criminal Law CJ 389: Criminal Investigation	4
CS 401: Principles of Cybersecurity	4
<b>Total Hours Required</b>	<b>20</b>
A 2.0 GPA and a grade of C- or higher is required in all courses for the minor.	