Cybersecurity BS, Computer Science Emphasis

Emphasis Area Requirements

In addition to the 33-24 credit hours of core required coursework, the B.S. Cybersecurity degree with Computer Science emphasis requires 42-44 51-53 credit hours of emphasis specific course work. Thus, candidates for the B.S. in Cybersecurity degree with Computer Science emphasis must complete a major program of 75-77 (33 24 core + 42-44 51-53 emphasis-specific) credit hours of required courses.

For the Computer Science emphasis all general degree requirements from the College of Arts and Science apply.

- **MATH 1320**  
  Introduction to Probability and Statistics  
  3

- **MATH 1100**  
  Basic Calculus  
  3-5

  or **MATH 1800**  
  Analytic Geometry and Calculus I

- **MATH 3000**  
  Discrete Structures  
  3

- **CMP SCI 2261**  
  Object-Oriented Programming  
  3

- **CMP SCI 3010**  
  Web Programming  
  3

- **CMP SCI 3130**  
  Design and Analysis of Algorithms  
  3

- **CMP SCI 3780**  
  Software Security  
  3

- **CMP SCI 4700**  
  Computer Forensics  
  3

- **CMP SCI 4730**  
  Computer Networks and Communications  
  3

- **CMP SCI 4732**  
  Introduction to Cryptography for Computer Security  
  3

- **CMP SCI 4750**  
  Introduction to Cloud Computing  
  3

- **CMP SCI 4760**  
  Operating Systems  
  3

- **CMP SCI 4782**  
  Information Security  
  3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMP SCI 4794</td>
<td>Introduction to Security of IoT Systems</td>
<td>3</td>
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**Electives (choose 3 from following)**

Choose three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHIL 1160</td>
<td>Critical Thinking (MOTR PHIL 101)</td>
</tr>
<tr>
<td>PHIL 2254</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>CRIMIN 1100</td>
<td>Introduction to Criminology and Criminal Justice</td>
</tr>
<tr>
<td>CRIMIN 3310</td>
<td>Computers in Criminal Justice</td>
</tr>
<tr>
<td>CMP SCI 3990</td>
<td>Undergraduate Internship</td>
</tr>
<tr>
<td>CMP SCI 4020</td>
<td>Introduction to Android Apps: Android Fundamentals</td>
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<tr>
<td>CMP SCI 4220</td>
<td>Introduction to iOS Programming and Apps</td>
</tr>
<tr>
<td>CMP SCI 4222</td>
<td>iOS Apps</td>
</tr>
<tr>
<td>CMP SCI 4300</td>
<td>Introduction to Artificial Intelligence</td>
</tr>
<tr>
<td>CMP SCI 4500</td>
<td>Introduction to the Software Profession</td>
</tr>
<tr>
<td>CMP SCI 4610</td>
<td>Database Management Systems</td>
</tr>
<tr>
<td>CMP SCI 4792</td>
<td>Introduction to Mobile Computing, Networking, and Security</td>
</tr>
<tr>
<td>INFSYS 3858</td>
<td>Advanced Security and Information Systems</td>
</tr>
<tr>
<td>INFSYS 3898</td>
<td>Seminar in Information Systems</td>
</tr>
</tbody>
</table>

Other electives upon approval of Computer Science chair

**Total Hours**

51-53

Justification for request: separating pages