CYBERSECURITY - MINOR

The Cybersecurity Minor is designed to appeal to both less technically-oriented and more technically-oriented undergraduate students, across multiple departments, in multiple colleges. All students who enroll in the minor will acquire a basic understanding of programming, and a firmly grounded understanding of cybersecurity, to include cyber ethics. The inclusion of these courses in the minor will allow students to specialize in the area of cybersecurity that is most closely aligned with their respective interests and their degree plans.

Program Requirements

Select one of the following tracks:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
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<tbody>
<tr>
<td></td>
<td>Engineering Track</td>
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<td></td>
<td><strong>Code</strong></td>
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<tr>
<td></td>
<td>CSCE 313</td>
<td>Introduction to Computer Systems</td>
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<tr>
<td></td>
<td>CSCE 315</td>
<td>Programming Studio</td>
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<tr>
<td></td>
<td>CSCE 410</td>
<td>Operating Systems</td>
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<tr>
<td></td>
<td>CSCE 465</td>
<td>Computer and Network Security</td>
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<td></td>
<td>CSCE 451</td>
<td>Software Reverse Engineering</td>
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<tr>
<td></td>
<td>CSCE 463</td>
<td>Networks and Distributed Processing</td>
</tr>
<tr>
<td></td>
<td>ECEN 424</td>
<td>Fundamentals of Networking</td>
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<td></td>
<td><strong>Total Semester Credit Hours</strong></td>
<td><strong>16</strong></td>
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<tr>
<td></td>
<td><strong>Technology track</strong></td>
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<tr>
<td></td>
<td>ESET 269</td>
<td>Embedded Systems Development in C</td>
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<tr>
<td></td>
<td>ESET 315</td>
<td>Local-and-Metropolitan-Area Networks</td>
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<td></td>
<td>ESET 415</td>
<td>Advanced Network Systems and Security</td>
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<tr>
<td></td>
<td>TCMG 308</td>
<td>Cybersecurity and Digital Ethics</td>
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<td></td>
<td>ESET 435</td>
<td>Data Communications</td>
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<td>ESET 456</td>
<td>Embedded Sensors and Internet of Things (IoT) Systems</td>
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<td>TCMG 303</td>
<td>Unix System Administration Practices</td>
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<td>TCMG 476</td>
<td>Technical Network Capstone</td>
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<tr>
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<td><strong>Interdisciplinary Track</strong></td>
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<td>CSCE 110</td>
<td>Programming I</td>
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<td>CSCE 111</td>
<td>Introduction to Computer Science Concepts and Programming</td>
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<td>CSCE 121</td>
<td>Introduction to Program Design and Concepts</td>
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<tr>
<td></td>
<td>CSCE 206</td>
<td>Structured Programming in C</td>
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<td>CSCE 221</td>
<td>Data Structures and Algorithms</td>
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<td>ESET 269</td>
<td>Embedded Systems Development in C</td>
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<td>BMEN 428/</td>
<td>Embedded Systems for Medical Applications</td>
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<td>CSCE 461</td>
<td>Computer-Human Interaction</td>
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<td>ECEN 424</td>
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<td></td>
<td>ESET 349</td>
<td>Microcontroller Architecture</td>
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Minimum required GPA to declare minor is a 2.5.

Must make a grade of ‘C’ or better in each course used towards minor.

Must achieve an overall GPA of 2.5 in approved minor coursework.

Minimum of 6 hours at 300-400 level.