Program Description
The Cyber Defense Certificate is designed to enable students to obtain knowledge, skills, and competencies in the challenging cybersecurity field. The certificate is designed in a compressed format so that students complete four courses per semester. Students completing the certificate are able to combine these credits toward the completion of the Information Assurance and Cybersecurity A.A.S. degree to satisfy their individual goals.

Program Goals
Upon successful completion of this program of study, students will be able to:

1. Apply software patches to operating systems and applications
2. Assess a computer system's security vulnerabilities using appropriate resources
3. Use standard software tools to detect attempted security breaches of computer systems
4. Implement computer network security defenses
5. Prepare for industry recognized certifications

Employment Information
According to the Occupational Outlook Handbook, national employment is expected to increase by as much as 31% through 2029 in the cybersecurity field. Demand is expected to be very high, as these individuals will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks.

The Maryland Occupational Projections from the Maryland Department of Labor project an employment increase of 39% in the state through 2028 in the cybersecurity field.

The Courses listed in the Cyber Defense Certificate are designed to align with the competencies identified and desired by employers. Students successfully completing are prepared to pursue industry certifications such as Net+, Sec+, Linux+, CCENT.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ISS 105</td>
<td>Intro to Cybersecurity (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 114</td>
<td>Introduction to Computer User Support</td>
<td>3</td>
</tr>
<tr>
<td>or ISS 222</td>
<td>Computer Forensics</td>
<td></td>
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