The Cybersecurity Basic Certificate program provides foundational knowledge and skill set for beginning students pursuing career opportunities in cybersecurity. With a hands-on approach to learning in this program, students acquire essential to cybersecurity technical knowledge of current and emerging cyber threats, vulnerabilities, and technologies. Students learn to script and code, use and administer current operating systems, and acquire core knowledge in digital networking. Equipped with proper foundation, students learn how to identify security threats and incorporate best practices in detecting and responding to global threats in a forensically sound manner.

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Program Core</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 103</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 116</td>
<td>Operating System I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 255</td>
<td>Operating Systems II</td>
<td>3</td>
</tr>
<tr>
<td>COMPSFI 101</td>
<td>Networking Essentials or Net Tec 121</td>
<td>3</td>
</tr>
<tr>
<td>COMPSFI 102</td>
<td>Information Security Essentials</td>
<td>3</td>
</tr>
<tr>
<td>COMPSFI 202</td>
<td>Cybercrime and Incident Response</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Semester-by-Semester Program Plan for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 116</td>
<td>Operating System I (CompTIA A+ Software)</td>
<td>3</td>
</tr>
<tr>
<td>COMPSFI 101 or NET TEC 121</td>
<td>Networking Essentials or Internetworking I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Fundamentals of Programming (using Python)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 255</td>
<td>Operating Systems II</td>
<td>3</td>
</tr>
<tr>
<td>COMPSFI 102</td>
<td>Information Security Essentials (CompTIA Security+)</td>
<td>3</td>
</tr>
<tr>
<td>COMPSFI 202</td>
<td>Cybercrime and Incident Response</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours 18

Choose your courses with your College Advisor.

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (https://www.ccc.edu/departments/Pages/Career-Services.aspx).

Information Security Analysts

Job Description

Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. Assess system vulnerabilities for security risks and propose and implement risk mitigation strategies. May ensure appropriate security controls are in place that will safeguard...
digital files and vital electronic infrastructure. May respond to computer security breaches and viruses.

**Salary Based on Experience Level**

Take a look at the average hourly/annual earnings for this career in Cook County

Emsi earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

**Annual Wages**

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Entry-Level</th>
<th>Median</th>
<th>Senior-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th Percentile</td>
<td>$64,631</td>
<td>$115,224</td>
<td>$164,819</td>
</tr>
<tr>
<td>50th Percentile</td>
<td>$64,631</td>
<td>$115,224</td>
<td>$164,819</td>
</tr>
<tr>
<td>90th Percentile</td>
<td>$164,819</td>
<td>$164,819</td>
<td>$164,819</td>
</tr>
</tbody>
</table>

**Hourly Wages**

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Entry-Level</th>
<th>Median</th>
<th>Senior-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th Percentile</td>
<td>$31</td>
<td>$55</td>
<td>$79</td>
</tr>
<tr>
<td>50th Percentile</td>
<td>$31</td>
<td>$55</td>
<td>$79</td>
</tr>
<tr>
<td>90th Percentile</td>
<td>$31</td>
<td>$55</td>
<td>$79</td>
</tr>
</tbody>
</table>

**Annual Job Openings**

164 annual openings in Cook County

**National Education Attainment**

Here, you can see the level of education that people in this career complete.

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>% of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A high school diploma or less</td>
<td>0.00%</td>
</tr>
<tr>
<td>A certificate</td>
<td>7.16%</td>
</tr>
<tr>
<td>Some college</td>
<td>2.01%</td>
</tr>
<tr>
<td>An Associate degree</td>
<td>12.87%</td>
</tr>
<tr>
<td>A Bachelor’s degree</td>
<td>75.16%</td>
</tr>
<tr>
<td>A Master’s or Professional degree</td>
<td>2.80%</td>
</tr>
<tr>
<td>A Doctoral degree or more</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

77.96% continue their education beyond an associate degree