



# Study Cybersecurity with the Cleveland State Cyber Bootcamp

Learn to protect and defend networks with the Cleveland State Cyber Bootcamp powered by Fullstack Academy.

- ♦ Add in-demand cyber skills to your resume
- ♦ Kick-start or upskill a lucrative cybersecurity career
- ♦ Get job search support to help you get hired
- ♦ Learn using an industry-driven curriculum and interactive labs
- ♦ Receive preparation for the CompTIA Security+ certification exam\*

## Curriculum

<b>Cybersecurity Fundamentals</b>	Learn the fundamentals of cybersecurity and virtualization technologies while building a security mindset.	<ul style="list-style-type: none"> <li>♦ Orientation</li> <li>♦ The security mindset</li> <li>♦ Confidentiality, integrity and availability (CIA) triad</li> <li>♦ Threats, vulnerabilities, and risks</li> <li>♦ Virtualization</li> </ul>
<b>Asset and Inventory Management</b>	Gain a working knowledge of the Linux operating system (OS) as you learn knowledge and skills to apply throughout bootcamp and your career.	<ul style="list-style-type: none"> <li>♦ Linux Command Line</li> <li>♦ File systems</li> <li>♦ Users and groups</li> <li>♦ Bash scripting</li> </ul>
<b>Career Simulation 1</b>	Put your cybersecurity skills to the test as a SOC Analyst 1 for a fictitious company, where you'll work to solve and report a configuration file problem.	<ul style="list-style-type: none"> <li>♦ Modifying configuration files</li> <li>♦ Identifying configuration file recommendations</li> </ul>
<b>Network Systems</b>	Understand the mechanics of how network connected devices transmit and receive data.	<ul style="list-style-type: none"> <li>♦ Networking</li> <li>♦ Wireshark</li> <li>♦ Encoding and encryption</li> <li>♦ Open Systems Interconnection model (OSI model)</li> <li>♦ Firewalls</li> </ul>
<b>Programming with Python</b>	Explore Python, a versatile programming language that can be used for a multitude of cybersecurity functions, including malware analysis, scanning, penetration testing tasks, and more.	<ul style="list-style-type: none"> <li>♦ Variables, loops, and conditionals</li> <li>♦ String and list methods</li> <li>♦ Dictionaries</li> <li>♦ Regular expressions</li> <li>♦ Log parsing</li> </ul>

Please note that this is a sample curriculum and is subject to change.

\*Students will receive a voucher for one CompTIA Security+ exam attempt.

## Curriculum

<p><b>System Administration</b></p>	<p>Become a Windows and PowerShell powerhouse by learning to identify and address security concerns for operating systems.</p>	<ul style="list-style-type: none"> <li>• Windows administration and management</li> <li>• Active directory</li> <li>• Group policy</li> </ul>
<p><b>Career Simulation 2</b></p>	<p>Implement a new onboarding process as part of a simulated exercise in new user configuration.</p>	<ul style="list-style-type: none"> <li>• Configure new users and their computers</li> </ul>
<p><b>Red Team (Offense)</b></p>	<p>Gain offensive security skills to protect computer systems, networks, individuals, and their data from attacks.</p>	<ul style="list-style-type: none"> <li>• Web vulnerabilities</li> <li>• Penetration testing</li> <li>• OWASP Top 10</li> <li>• Social engineering</li> <li>• Burp Suite</li> <li>• Cross-site Scripting</li> <li>• SQL injection</li> <li>• Metasploit</li> </ul>
<p><b>Career Simulation 3</b></p>	<p>Practice offensive security and run a mock penetration test.</p>	<ul style="list-style-type: none"> <li>• Offensive security</li> <li>• Penetration testing</li> </ul>
<p><b>Blue Team (Defense)</b></p>	<p>Secure companies against data breaches and attacks by becoming familiar with cybersecurity defense and Security Information and Event Management (SIEM) solutions.</p>	<ul style="list-style-type: none"> <li>• Logs/log analysis</li> <li>• Splunk and Security information and event management (SIEMs)</li> <li>• Digital forensics</li> <li>• NIST Cybersecurity Framework</li> <li>• Incident response</li> <li>• Cloud Foundations</li> </ul>
<p><b>Career Simulation 4</b></p>	<p>Choose a real-world scenario and solution related to blue or purple team concepts.</p>	<ul style="list-style-type: none"> <li>• Critical thinking and evaluation</li> </ul>
<p><b>Career Success</b></p>	<p>Throughout bootcamp and beyond you'll receive career preparation assistance and job search support.</p>	<ul style="list-style-type: none"> <li>• Build a technical resume and craft cover letters</li> <li>• Optimize your LinkedIn profile and network within the industry</li> <li>• Interview and negotiation training</li> </ul>

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