

Business and government organizations experience thousands of cyber attacks every day, increasing the already urgent need for knowledgeable cyber security professionals.

CYBER SECURITY IMMERSION ACADEMY

Learn in a Simulated Environment

The *Cyber Security Immersion Academy* is a simulation-based, online program designed to provide the core skill set needed to work in the information security field. Equipped with the latest cyber security tools, learners are immersed in an authentic simulation environment and must complete the tasks embedded in the realistic, but fictional, context of work as an entry-level employee of a government cyber operations agency. This “learn by doing” educational format has a proven track record for successfully preparing students for a career in the cyber security field.

What You'll Get

- **One-on-One Mentoring:** You'll work through tasks in an online private cloud environment, getting help and feedback from expert mentors at every step.
- **Flexible Progress Paths:** The program is divided into three courses, so you can make progress at the pace that's right for you.
- **Real-World Training:** Developed in partnership with Department of Defense industry experts, the curriculum is designed for today's InfoSec careers.

INDUSTRY FACTS

The demand for cyber security professionals has never been higher:

- Cyber Security Ventures predicts there will be 3.5 million unfilled cyber security jobs by 2021
- Cyberseek.org reports that there are currently about 400,000 open cyber security jobs in the U.S., approximately 36,000 of which are in California
- Current unemployment rate is 0%

VISIT OUR WEBSITE

To learn more and enroll:

cpe.ucdavis.edu/cyber

Courses in the Program

Course 1 – Cyber Security: Immediate Immersion

This course is designed to impart basic cyber security skills in three intense weeks of study (approximately 25 hours per week) to help students decide if a career in cyber security is right for them. In this course, you'll learn how to:

- Think like an attacker
- Exploit common website vulnerabilities
- Analyze network traffic at the packet level
- Recognize malware being transferred to a host
- Recognize the identifying features of an exploit kit attack

Students must successfully complete this course to be eligible to enroll in the next course in this program.

Course 2 – Cyber Security Defense

Build on the defensive skills and experience you gained in Cyber Security: Immediate Immersion. The course is designed to impart a strong foundation of defensive information security skills in 11 weeks of study (approximately 25 hours per week). In this course, you'll learn how to:

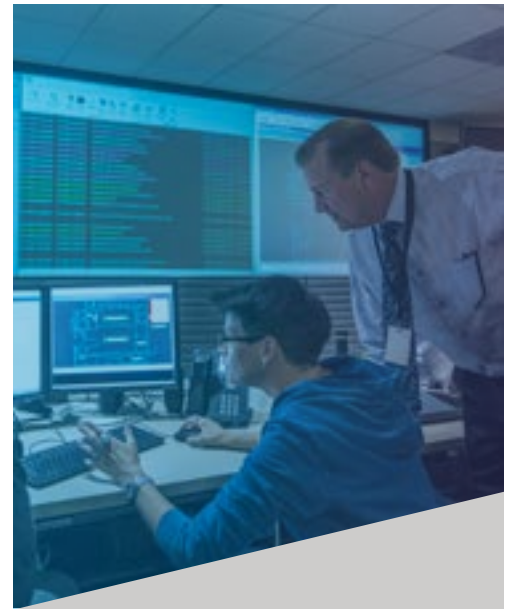
- Analyze network traffic
- Analyze network and system logs using a security information and event monitoring system (SIEM)
- Cross-correlate log information and network packet traffic
- Analyze malware using online “sandboxes”
- Compile indicators of compromise to guide forensics analysis
- Examine a compromised host's memory
- Conduct a forensic disk examination
- Report appropriately to technical and non-technical stakeholders

Course 3 – Cyber Security Attack

The final course in the program focuses on key offensive skills, and starts you on the path to becoming an offensive cyber operations professional. In this course, you'll learn how to:

- Reverse engineer unknown binary (i.e., executable) files
- Conduct open source intelligence gathering
- Exploit server and application software
- Evade antivirus software
- Exploit a database and exfiltrate data
- Plan and execute a complex cyber operations mission

This 15-week course, requiring 25 hours of work per week, will start students on the path to becoming penetration testers or offensive cyber operations professionals. Upon successful completion, students will have end-to-end experience working in all key areas of information security.



STUDENT REVIEWS

“Before enrolling in the Cyber Academy, I was working as the digital marketing manager for an e-commerce website... [and] had very little understanding of information security. The Cyber Academy has had a resounding impact on my professional career, and I was able to secure employment within the information security field in less than one year.”

—Clif

“When I enrolled, I wasn't expecting to make a massive career change within a few months. Within a month of completing Cyber Academy, I had a full-time job with benefits for the first time in my life—and I've never felt happier or felt more fulfilled.”

—Alice

MORE INFORMATION

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