

Cybersecurity Academy

COURSE OVERVIEW:

The Academy was founded and designed specifically to provide aspiring individuals with basic networking and programming experience with a high quality, direct path to cybersecurity career options in a minimum amount of time. Outside the Academy, the evolution from a general IT to a cybersecurity specialty typically takes five to ten years of on the job experience and self-teaching. The Academy enables this transition in five months.

The Academy is a full time, five-month cybersecurity skills and theory educational program.

We prepare our students for an entry-level position in a cybersecurity related field as a security analyst or an engineer. Our curriculum is designed in conjunction with industry partners and potential employers of our graduates to satisfy current hiring requirements. Our training emphasizes hands-on exercises to build skills across the products currently in use by the industry. The Academy course includes CISSP (or CISSP Associate) and Security+ certifications.

Scholarships and Financing Is Available

WHO WILL BENEFIT FROM THIS COURSE?

The primary target audience for this Academy is:

- Network Engineers and/or Programmers

PREREQUISITES:

It is recommended that prior to enrollment, that a student will have adequate knowledge in the fundamentals of networking and/or programming.

COURSE OBJECTIVES:

The Academy is a five-month intensive program designed to give you the tools to get a job, or a better job, in cybersecurity. We're educating a group of well-trained people that will make meaningful contributions to the field of cybersecurity for years to come. Your instructors are the best technical experts from across the country.

The Academy includes hands on instruction in our state-of-the-art labs, guided production training and essential certifications. There is remarkable access to an array of the products used in security operations. At the end of five months you'll be ready to begin or resume your cybersecurity career with a decided edge.

COURSE OUTLINE:

SecureSet Academy employs world class instructors who are at the top of their game who educate according to our industry-vetted, proprietary curriculum. We understand that cybersecurity is a broad field with multiple domains. This makes it difficult for anyone person to have mastered them all. As a result, we find domain experts who not only excel in their individual domains but can also relate their expertise back to the broader field. In this manner we are able to offer a comprehensive curriculum in cybersecurity from top level experts. Below are six modules that are part of our broader curriculum for our Academy program.

MODULE 1: NETWORK SECURITY

This course will focus on core ideas in network security. The first portion of the class will review basic network protocols: Ethernet, 802.11 (wifi), IP, UDP, TCP, ARP, DHCP, DNS, ICMP, BGP, SMTP, POP/IMAP, FTP, HTTP, IGMP, etc. Then we will introduce attacks on these basic technologies: TCP hijacking, ARP cache poisoning and domain spoofing, as well as countermeasures. We will then explain sniffing and port scanning, firewalls, IDSes and NIDSes. We will cover wireless protocols and their security. Then we will segue into AppSec with a focus on web security. Finally, we will look at denial of service and attack payloads.

MODULE 2: SYSTEM SECURITY

This course will focus on core ideas in system security. The first portion of the class will review the three central desktop OSes: Windows, OS X, and Linux, along with the two preeminent mobile OSes: Android and iOS. We will cover basic configuration of standard services and what happens when this is not done correctly. We will study Windows Security, then Linux Security. We will cover standard attacks such as buffer and heap overflows, heap spraying, format string exploits and race conditions. Finally, we will talk about payloads and persistent access.

MODULE 3: STRATEGY & ANALYSIS

This course will cover a wide range of topics consisting of security culture, ethics, security economics, security professionalism, psychology of analysis, criminal psychology, threat intelligence and much more. The purpose of this course is to help students gain an appreciation of what it means to be a security professional and how to operate in the profession ethically and effectively.

MODULE 4: APPLIED CRYPTOGRAPHY

This course will focus on core primitives of cryptography (block ciphers, public key algorithms, and hashing), and then work upwards toward modes-of-operation, encryption and authentication primitives. Finally we will understand high level secure protocols built from these underlying components; this includes SSL/TLS, SSH, Electronic Voting, and Crypto Currencies. We will also study vulnerabilities and misconfigurations of these technologies to best understand where practitioners often go wrong during an implementation.

MODULE 5: DETECTION & LOG MANAGEMENT

This course will instruct students on computer information systems security monitoring, intrusion detection, and crisis management. It includes topics such as alarm management, signature configuration, sensor configuration, and troubleshooting components. It also emphasizes identifying, resolving, and documenting network crises and activating the response team.

MODULE 6: POLICY & REGULATIONS

This course is designed to teach students how to engage all functional levels within the enterprise to deliver information system security. To this end, the course will address a range of topics, each of which is vital to securing the modern enterprise. These topics include inter alia plans and policies, enterprise roles, security metrics, risk management, standards and regulations, physical security, and business continuity. Each piece of the puzzle must be in place for the enterprise to achieve its security goals; adversaries will invariably find and exploit weak links.

SUNSET LEARNING INSTITUTE (SLI) DIFFERENTIATORS:

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their cloud technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

- You have the option to attend classes at any of our established training facilities or from the convenience of your home or office with the use of our HD-ILT network (High Definition Instructor Led Training)
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

Outstanding Customer Service

- Dedicated account manager to suggest the optimal learning path for you and your team
- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience