

CyberOps Associate 1.0

Product Overview

July 2020

[NetAcad.com](https://www.netacad.com)





CyberOps Associate

- Overview
- Upgrading to a better experience
- Lab Equipment
- Logistics and Timing
- Instructor Training

Response to Digital Disruption

The IT Team of the Future

World of
**Network
Engineers**



World of
**Security
Professionals**



World of
**Software
Developers**

CyberOps Associate 1.0 Course



Cisco Certified CyberOps Associate Certification



Knowledge Domains

- ☐ Security concepts
- ☐ Security monitoring
- ☐ Host-based analysis
- ☐ Network intrusion analysis
- ☐ Security policies and procedures

CyberOps Associate

Course Overview

This course introduces the core security concepts and skills needed to monitor, detect, analyze, and respond to cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations.

Benefits

Gain practical, hands-on skills needed to maintain and ensure security operational readiness of secure networked systems.

Prepare for Careers

- ✓ Develop skills for entry-level security operations center (SOC) jobs
- ✓ Prepare for CyberOps Associate certification
- ✓ Pursue a career in cybersecurity operations, a rapidly-growing, exciting new area that spans all industries

Course Details

Target Audience: Students enrolled in technology degree programs at higher education institutions; IT professionals who want to pursue a career in Security Operations

Estimated Time to Completion: 70 hours

Recommended Preparation: Introduction to Cybersecurity, Cybersecurity Essentials

Course Delivery: Instructor-led

Learning Component Highlights:

- ✓ 28 Modules and 46+ hands-on labs
- ✓ 113 interactive activities, videos, & quizzes
- ✓ 6 Cisco Packet Tracer activities
- ✓ 1 practice certification exam

Course Recognitions: Certificate of Completion, Letter of Merit, Digital Badge

Recommended Next Course: CCNA Security, IoT Security



Cybersecurity



Requirements & Resources

- **ASC Alignment Required:** Yes
- **Instructor Training Required:** Yes
- **Physical Equipment Required:** No (Uses Virtual Machines on the student's computer)
- **Voucher Availability:** Yes



Certification Aligned
[Cisco Certified CyberOps Associate](#)

CyberOps Associate: Upgrading to a better experience

Enhanced
Course Design



Aligned to Industry-
Recognized
Certification

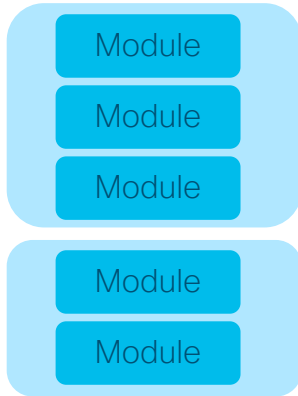


Improved
Outcomes



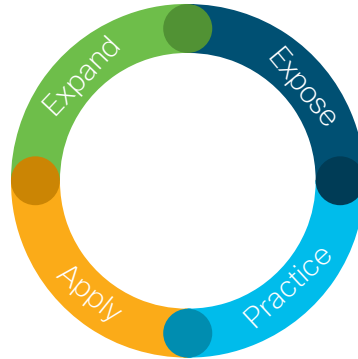


Enhanced Course Design



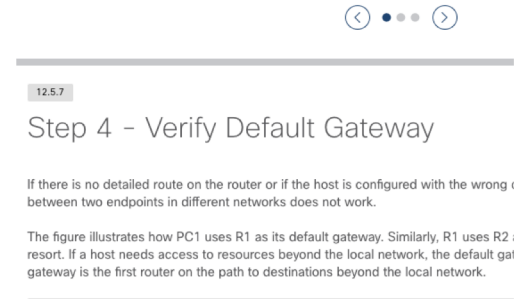
Modular Design

- ✓ Self-contained units
- ✓ Targeted learning of skills



Learning Effectiveness

- ✓ Better student engagement
- ✓ Designed for skills progression



User Experience

- ✓ Improved student view and navigation
- ✓ Easier instructor content management



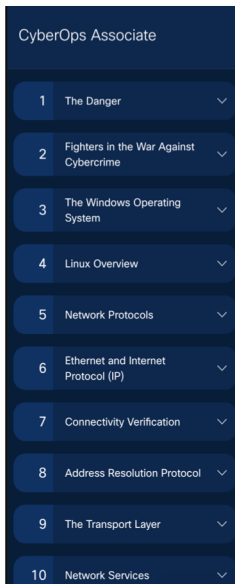
Enhanced Course Design

Introducing modules for better organization

- ✓ Topics are grouped together
- ✓ Find content more easily

A **module** is an integrated unit of learning that targets a common set of competencies or skills.

Module size depends on the competency and number of topics.



Networking Academy

Today's organizations are challenged with rapidly detecting cybersecurity breaches and effectively responding to security incidents. Teams of people in Security Operations Centers (SOCs) keep a vigilant eye on security systems, protecting their organizations by detecting and responding to cybersecurity threats. CyberOps Associate v1.0 prepares learners to begin a career working as associate-level cybersecurity analysts within SOCs.

CyberOps Associate v1.0 (CA) contains 28 modules of content, labs, activities, videos and quizzes. Some of these labs use virtual machines to monitor and analyze cybersecurity threats.

When you have completed CA, you will have gained the practical experience you need to prepare for the certification exam. This course aligns with the Cisco Certified CyberOps Associate (CBROPS) certification. Candidates need to pass the 200-101 CBROPS exam to achieve the Cisco Certified CyberOps Associate certification. The CBROPS exam tests a candidate's knowledge and skills related to security concepts, security monitoring, host-based analysis, network intrusion analysis, and security policies and procedures.





Enhanced Course Design

Accessibility Enhancements



Redesigned User Interface

- ✓ Developed for Web Content Accessibility Guidelines 2.1
- ✓ New sidebar navigation
- ✓ Mobile-friendly
- ✓ Performance enhancements
- ✓ Improved color contrast



Enhancements for Screen Readers

- ✓ Media descriptions and transcripts throughout
- ✓ Descriptions & transcripts tied directly to user interface
- ✓ Conversion to HTML- screen reader can read tables, command windows, Syntax Checkers



Better Keyboard Accessibility

- ✓ 'Skip to Content' sidebar navigation
- ✓ All activities are now keyboard accessible
- ✓ New, accessible header with all user functions



Aligned to Industry-Recognized Certification

Certification Alignment

Associate Level



One Exam

- NetAcad curriculum aligns to the latest Cisco certifications, for students to prepare for the Cisco Certified CyberOps Associate certification exam.
- In CyberOps Associate, students gain critical security operations center (SOC) skills.
- The CyberOps Associate course includes practice exams, labs, and activities to prepare learners for the new exam.



Build Critical Skills for Today - and Tomorrow

Module Objectives

Module	
Module 1	The Danger
Module 2	Fighters in the War Against Cybercrime
Module 3	The Windows Operating System
Module 4	Linux Overview
Module 5	Network Protocols
Module 6	Ethernet and Internet Protocol (IP)
Module 7	Principles of Network Security
Module 8	Address Resolution Protocol
Module 9	The Transport Layer
Module 10	Network Services
Module 11	Network Communication Devices
Module 12	Network Security Infrastructure
Module 13	Attackers and Their Tools
Module 14	Common Threats and Attacks

Module	
Module 15	Observing Network Operation
Module 16	Attacking the Foundation
Module 17	Attacking What We Do
Module 18	Understanding Defense
Module 19	Access Control
Module 20	Threat Intelligence
Module 21	Public Key Cryptography
Module 22	Endpoint Protection
Module 23	Endpoint Vulnerability Assessment
Module 24	Technologies and Protocols
Module 25	Network Security Data
Module 26	Evaluating Alerts
Module 27	Working with Network Security Data
Module 28	Digital Forensics and Incident Analysis and Response



Improved Outcomes

Check Your Understanding

- Complete a topic with self-assessment
- Gives students the opportunity validate and retain critical knowledge
- Use feedback as review

Check Your Understanding – Identify the SOC Terminology



Check your understanding of SOC roles by answering the following questions.

1. Which SOC job role manages all the resources of the SOC and serves as a point of contact for the larger organization or customer?

- ☐ SME/Threat Hunter
- ☐ SOC Manager
- ☐ Cybersecurity Analyst
- ☐ Incident Responder

2. Which SOC job role processes security alerts and forwards tickets to Tier 2 if necessary?

- ☐ SME/Threat Hunter
- ☐ SOC Manager
- ☐ Cybersecurity Analyst
- ☐ Incident Responder



Improved Outcomes

Unique exams to each of your students via Dynamic Forms

- Exams are dynamically generated from pool of questions, maintaining exam integrity and validity
- Available for Module Group exams and Final course exam
- Form and Section Details indicate total items available and selected from the pool for students.
- Module Group exam items, delivered or not, are available for preview with the assessment viewer



Improved Outcomes

Secured Activation increases final exam security and provides useful insights on class performance

New Assessment Launcher

- Final exams remain secure until administered by instructor
- Replaces the Assessment Viewer
- For security & integrity, questions are not visible

Domain Level Reporting

- New Class Performance Summary report for instructors
- Replaces the Student Performance Summary
- See how your students are performing in each domain based on objectives of the modules and course



Improved Outcomes

Formative and Summative Assessments guide learning at strategic points

Self-Assessments

Check Your Understanding

- ✓ Multiple per module
- ✓ Correct/incorrect scoring and 'show me' option

Module Quizzes

- ✓ 1 per module
- ✓ Correct/incorrect scoring and 'show me' option

Launched by Instructor

Module Group Exams

- ✓ Multiple per course

Certification Practice Exams

- ✓ 1 per course

Final Exams

- ✓ 1 per course

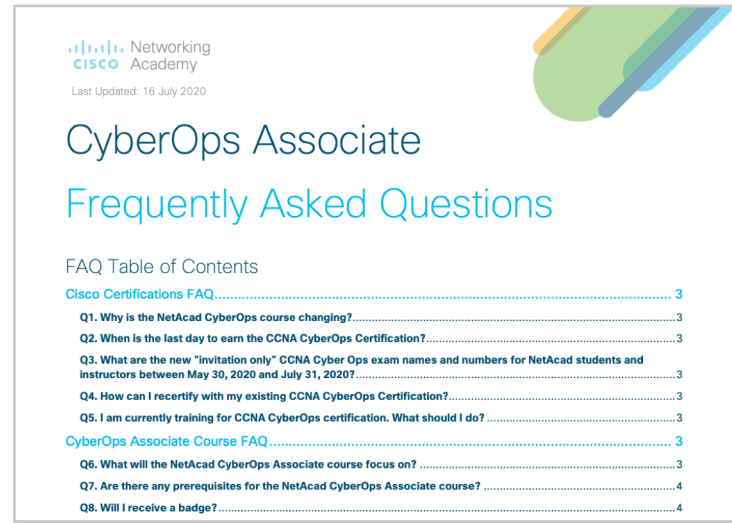
Logistics & Timing





CyberOps Associate Course Resources

- Scope and Sequence
- FAQ
- VM FAQ
- CBROPS Certification Mapping
- Release Notes
- Instructor Planning Guides
- Instructor Lab Source Files
- Instructor Packet Tracer Source Files
- Exam Design Documents
- Student/Instructor OVA for CyberSkill Challenge
- Student /Instructor Packet Tracer Activity Source Files
- Student Lab Source File
- And more...



Access Course Resource Pages through NetAcad.com

<https://www.netacad.com/portal/resources/course-resources/cyberops-associate>

CCNA CyberOps End of Life

Course	Language *	Last Class Start Date
	English	July 31st, 2021
CCNA CyberOps	End-of-life dates for translated languages will be announced when each language is released. Dates will be a minimum of 1 year after respective language course resources are available.	

Lab Equipment



CyberOps Labs – Designed for Remote Instruction

- No Hardware needed – Perfect for remote instruction
- Emulate career skills on 100% virtual labs



Options

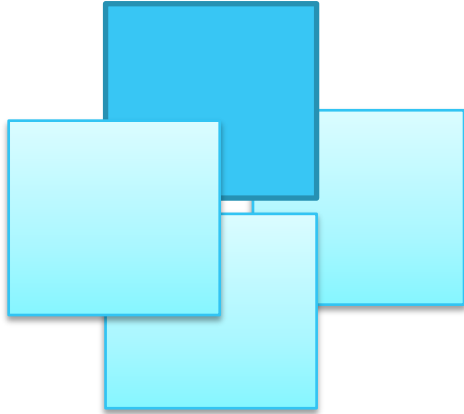
- Run Virtual Machines (VM) locally
- Netlab+ as a Service

Each module contains some way to practice and assess with a lab or Packet Tracer



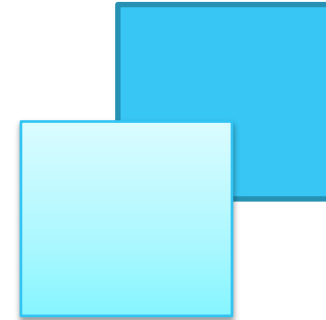
Equipment Requirements

CCNA CyberOps - 4 VM's



Simplified Lab Setup

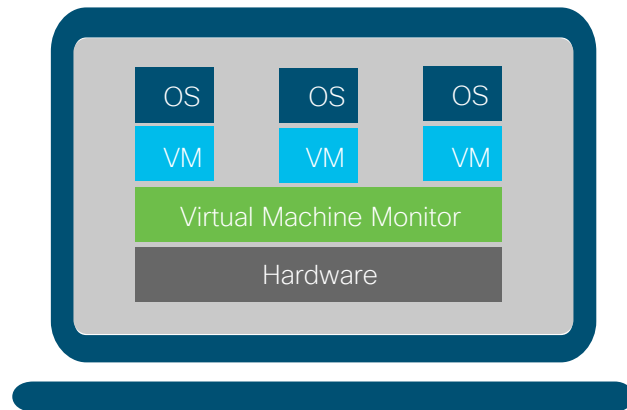
CyberOps Associate - 2 VM's





Equipment Requirements

Virtual Machine	Disk Space	RAM
CyberOps Workstation VM	7 GB	1 GB
Security Onion VM (ELK tool)	20 GB	4 GB Min /8GB Recommended



Lab Setup

Instructor Training

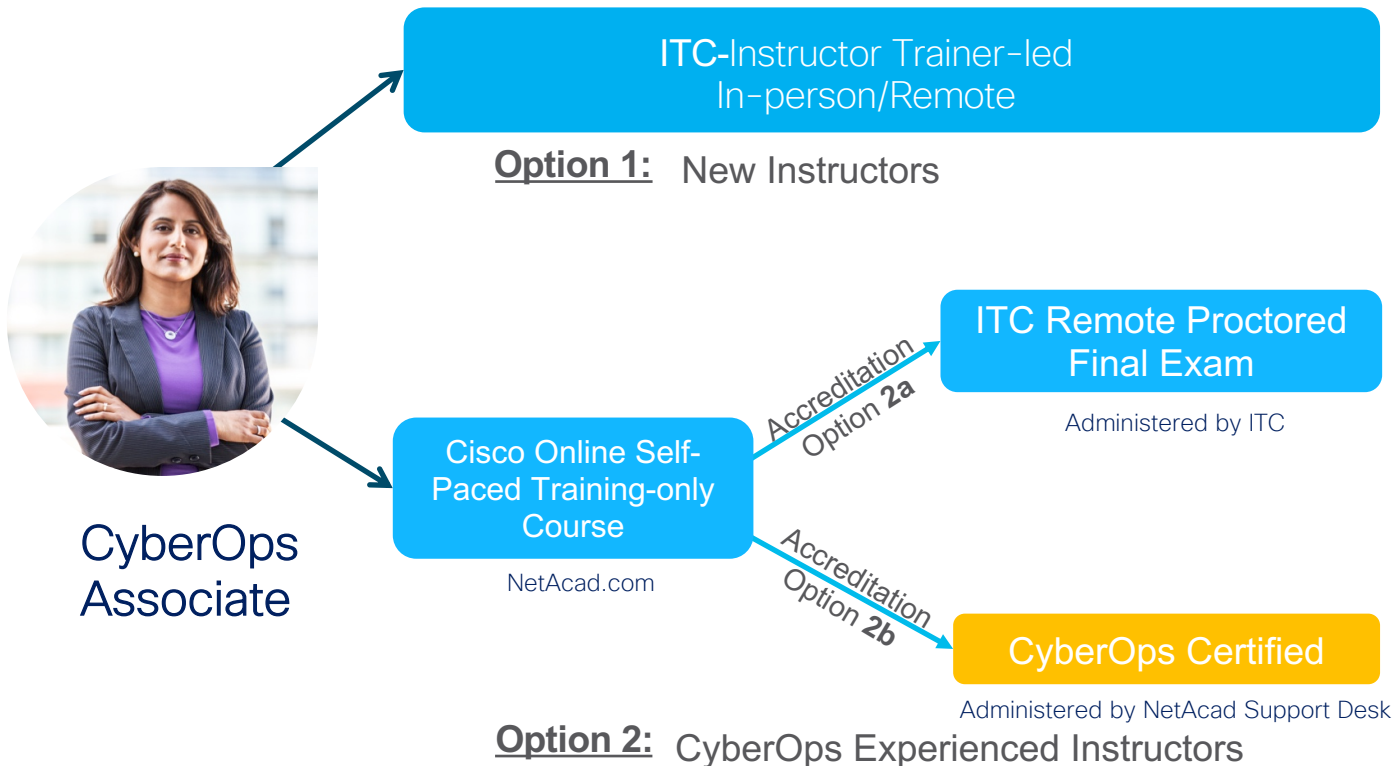


CyberOps Associate Instructor Training Model

Guiding Principles

- Protecting and differentiating our partner ecosystem
- Suitable for In-person & Remote Training
- Accelerate Instructor Onboarding
- Provide Incentive for self starters who are CyberOps certified

CyberOps Associate Instructor Training



Highlights

Opportunity to obtain:

- ✓ Accreditation to Teach
- ✓ Certificate of Course Completion
- ✓ Letter of Merit
- ✓ Learning Badge
- ✓ Certification Voucher

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CyberOps Associate prepares students for Jobs



CyberOps Associate

- Detecting Intrusions
- Monitoring, analyzing
- First response

Alignment with National Institute of
Standards and Technology (NIST)
Cybersecurity Framework

Typical Associate Positions

- SOC Analyst
- Incident Responder
- Digital Forensics
- Auditor

