



CYBERSECURITY ESSENTIALS

*Technology changes fast.
Security fundamentals do not.*



Building the Future Together



Cyber Brain Academy is committed to shaping the future of education by delivering world class training in cybersecurity, information technology, and professional certifications. Built on the belief that access to high quality learning creates life changing opportunities, we empower students, professionals, and lifelong learners to gain the skills that lead to lasting success.

Our academy serves as a trusted partner for individuals, universities, and organizations that want to strengthen their academic and professional programs. With expert instructors, carefully structured courses, and a focus on measurable outcomes, we transform education into practical knowledge that is recognized and valued across industries.

The demand for skilled professionals continues to grow, and the gap between education and workforce readiness is a challenge faced by institutions everywhere. Cyber Brain Academy stands at the center of this challenge, offering pathways that connect classroom achievement with industry credentials and meaningful careers.





Program Overview



Cybersecurity Essentials is a structured, self-paced CompTIA Security+ preparation course designed to support professional skill development and certification readiness. The program combines instructional content, hands-on lab simulations, performance-based questions, and domain assessments





What's Included



- 28 domain-aligned learning modules
- 5 comprehensive student guides
- Hands-on lab simulations across all domains
- Performance-based questions mapped to real scenarios
- Flashcards for every domain
- 5 section assessments
- 3 full final exams
- Detailed answers and explanations for all quizzes and exams
- Complete study guide, exam objectives, and exam tips



8-Week Program Syllabus

Week 1: General Security Concepts I

Instruction

- Cybersecurity Essentials Program Overview (2:20)
- Section 1 Student Guide
- Module 1: Types of Security Controls (7:07)
- Module 2: Fundamental Security Concepts (36:51)

Practice

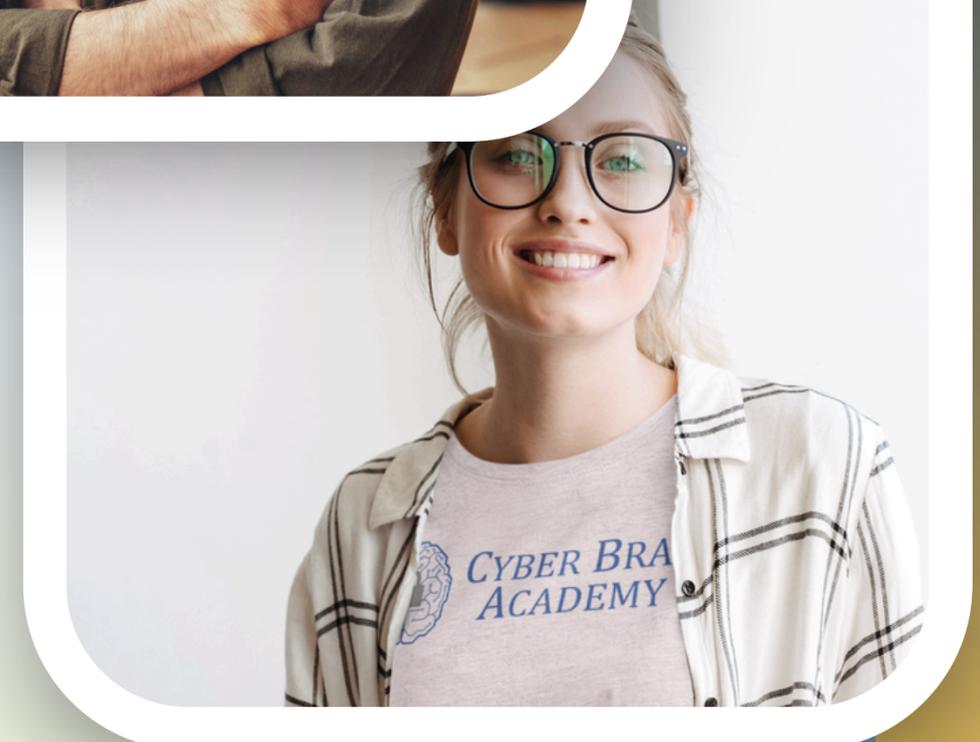
- General Security Concepts Flashcards

Performance-based Question

- Compare and Contrast Security Control and Framework Types

Labs

- Use Steganography to Hide a File
- Hide Files with OpenStego



Week 2: General Security Concepts II

Instruction

Module 3: Change Management Processes (44:47)

Module 4: Cryptographic Solutions (32:37)



Performance-based Question

Identify Cryptographic Modes of Operation Performance-based Question

Labs

Encrypt Files with EFS

Configure BitLocker with a TPM

Compare an MD5 Hash

Manage Certificates

Review and Assessment

Section 1 Review Video (5:09)

Section 1 Assessment



Week 3: Threats, Vulnerabilities, and Mitigations I

Instruction

Section 2 Student Guide

Module 5: Common Threat Actors and Motivations (12:11)

Module 6: Common Threat Vectors and Attack Surfaces (16:03)

Practice

Threats, Vulnerabilities, and Mitigations Flashcards

Performance-based Question

Identify Types of Vulnerabilities Performance-based Question

Labs

Use the Social Engineer Toolkit

Perform Reconnaissance with Nmap

Implement Physical Security



Week 4: Threats, Vulnerabilities, and Mitigations II

Instruction

Module 7: Various Types of Vulnerabilities (13:03)

Module 8: Indicators of Malicious Activity (22:13)

Module 9: Mitigation Techniques to Secure the Enterprise (8:44)



Performance-based Question

Social Engineering Tickets Performance-based Question

Labs

Analyze Network Traffic

Poison ARP and Analyze with Wireshark

Poison DNS

Configure Rogue Host Protection

Harden a Wireless Network

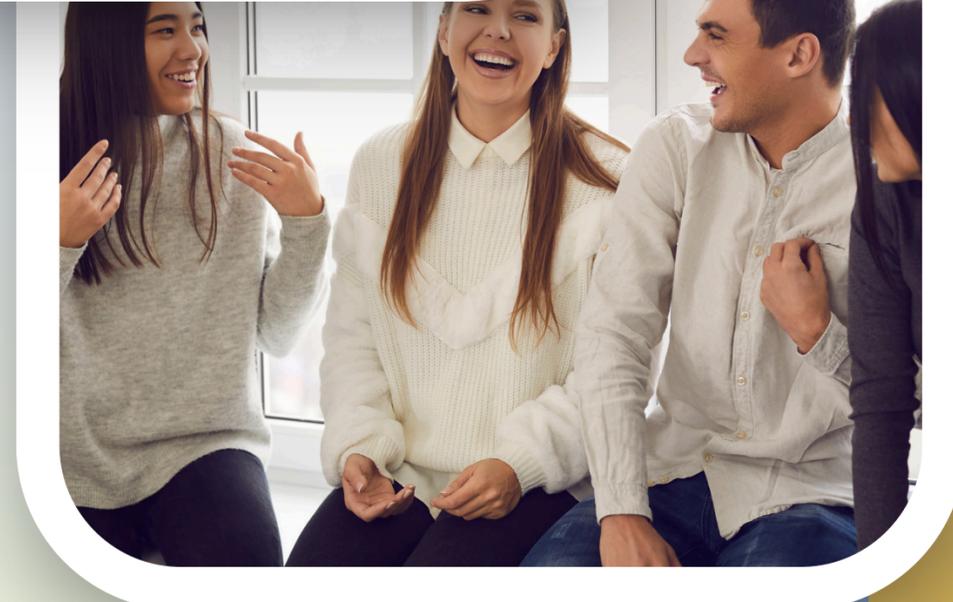
Configure a Perimeter Firewall

Configure a Screened Subnet

Review and Assessment

Section 2 Review Video (3:41)

Section 2 Assessment



Week 5: Security Architecture

Instruction

Section 3 Student Guide

Module 10: Security Implications of Different Architecture Models (8:45)

Module 11: Security Principles to Secure Enterprise Infrastructure (6:08)

Module 12: Concepts and Strategies to Protect Data (4:59)

Module 13: Resilience and Recovery in Security Architecture (5:32)



Practice

Security Architecture Flashcards

Performance-based Question

Implement Secure Remote Access Protocols Performance-based Question

Incorporate Redundancy Strategies Performance-based Question

Labs

Implement an Access Control Model

Configure NTFS Permissions

Restoring Server Data from Backup

Backup a Domain Controller

Hardware Clustering

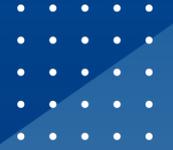
Examine a Forensic Drive Image with Autopsy

Review and Assessment

Section 3 Review Video (3:30)

Section 3 Assessment





Week 6: Security Operations I

Instruction

Section 4 Student Guide

Module 14: Common Security Techniques to Computing Resources (4:25)



Module 15: Security Implications of Proper Hardware, Software, and Data Asset Management (4:00)

Module 16: Vulnerability Management Activities (3:26)

Module 17: Security Alerting and Monitoring Concepts and Tools (2:48)

Practice

Security Operations Flashcards

Performance-based Question

Implement an Access Control Model Performance-based Question

Labs

Scanning a Network with Nessus

Configure Account Password Policies



Week 7: Security Operations II

Instruction

Module 18: Enterprise Capabilities to Enhance Security (15:58)

Module 19: Identity and Access Management (14:01)

Module 20: Automation and Orchestration Related to Secure Operations (8:51)

Module 21: Appropriate Incident Response Activities (8:17)

Module 22: Data Sources to Support an Investigation (6:15)

Performance-based Question

Incident Response Procedures Performance-based Question

Labs

Shells and Scripting

Use Elasticsearch Logstash Kibana

Monitoring Data and Metadata

Configuring Remote Logging on Linux

Review and Assessment

Section 4 Review Video (3:27)

Section 4 Assessment



Week 8: Security Program Management and Final Exam

Instruction

Section 5 Student Guide

Module 23: Elements of Effective Security Governance (5:44)

Module 24: Elements of the Risk Management Process (5:10)

Module 25: Third-party Risk Assessment and Management (5:09)

Module 26: Elements of Effective Security Compliance (4:49)

Module 27: Types and Purposes of Audits and Assessments (4:17)

Module 28: Implement Security Awareness Practices (8:11)

Practice

Security Program Management and Oversight Flashcards

Labs

Auditing the Windows Security Log

Configure Advanced Audit Policy

Auditing Device Logs on a Switch

Enable Device Logs

Review and Assessment

Section 5 Review Video (3:37)

Section 5 Assessment

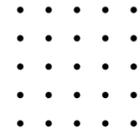
Final Exam

Final Exam 2

Final Exam 3



Building Skills That Employers Value



Cybersecurity Essentials is a comprehensive training program designed to help you master core cybersecurity concepts, develop real-world skills, and prepare for the CompTIA Security+ certification exam. Built for beginners and aspiring cybersecurity professionals alike, Cybersecurity Essentials offers a structured, easy-to-follow learning path that transforms complex topics into clear, actionable knowledge.

Whether you are new to technology, transitioning careers, or strengthening your existing IT skills, this program gives you the foundation, tools, and confidence to succeed in the cybersecurity field.



Designed specifically for undergraduates and non-IT majors who want to build a strong foundation in security concepts before moving on to advanced certifications.

Every section concludes with a review video and a graded assessment to reinforce comprehension and track progress.

We provide students with the confidence and practical experience needed not only to earn certifications but also to apply their knowledge in real-world environments.

Limits of Traditional Education

Employers are clear about what they need. A degree alone is no longer enough. Our certification programs have become a baseline requirement for many roles, serving as proof that candidates can meet the demands of modern security challenges.

The University Challenge



Where Institutions Struggle

For universities, this creates a difficult reality. While they excel at delivering academic knowledge, many institutions face challenges in offering certification-aligned programs.



Bridging the Academic Gap

Building these programs in-house requires specialized instructors, continuous content updates, and significant financial investment. Without these resources, universities risk falling short of preparing students with the career-ready credentials that employers demand.



From the Classroom to Career Advancement

Cyber Brain Academy provides a direct answer to the growing demand for career-ready education. Our training programs are fully certification aligned, covering the most sought-after credentials such as Security+, CISSP, CAPM, and many others. Delivered through live online sessions, flexible evening formats, and on-demand access, our approach ensures that learners can engage with content in a way that fits their schedule while still receiving the highest quality instruction.

A Record of Excellence in Certification Training

We bring a proven track record of success, having trained professionals, veterans, and government clients who consistently achieve their certification goals and advance in their careers. Our instructors combine decades of industry expertise with practical teaching methods, ensuring that every student is prepared not just to pass an exam but to excel in the workplace.



Here's What Real Students Are Saying



**"One of the
best
experiences"**

**"Well
Structured"**



I can say that I had one of the best experiences as far as school is concerned. The teacher had a lot of knowledge of the subject, if we needed something, he took the time to explain it to us and he even stayed after my class for people who had questions.

I recently completed a security course with Cyber Brian Academy, and I couldn't be more impressed with the experience. The course was thorough, well-structured, and delivered by a knowledgeable instructor who really knew their stuff.

The World's Most Recognized Credentials



Certified Associate in Project Management



Project Management Professional



PMI Risk Management Professional



Program Management Professional



PMI Agile Certified Practitioner



Portfolio Management Professional



PMI Professional in Business Analysis



PMI Construction Professional



Certified Cybersecurity Operations Analyst.



Certified Information Systems Auditor.



Certified in Risk and Information Systems Control.



Certified Information Security Manager.



Cyber Brain Academy



Certified Data Privacy Solutions Engineer.



Certified in the Governance of Enterprise IT.



Certified Ethical Hacker



Certified Chief Information Security Officer





REAL STUDENTS. REAL RESULTS.

Jesse Margarini

“Thanks to Cyber Brain Academy, I was officially able to get certified in Security+.”

View Jesse’s Testimonial on





REAL STUDENTS. REAL RESULTS.

Ibrahim Swaray

“If I’m going to recommend Cyber Brain Academy, I’d put them as top-notch”

View Ibrahim’s Testimonial on

