SOUTHERN VIRGINIA UNIVERSITY

SOUTHERN VIRGINIA UNIVERSITY · TECH PROGRAMS

Defensive IT & Cybersecurity Certificate

24 credit hours · 8 courses · CompTIA A+, Security+ & CySA+

BY THE END OF THIS PROGRAM

You become someone who defends real systems.

Not someone who studied security in theory. Someone who can troubleshoot IT, secure a network, analyze threats in a SIEM, automate security tasks, and audit a live application for vulnerabilities, backed by three industry certifications that employers screen for.

TROUBLESHOOT IT & SYSTEMS

Hardware, operating system administration, and enterprise networking, from helpdesk to infrastructure.

BUILD & SECURE NETWORKS

TCP/IP, subnetting, routing, firewalls, IDS/IPS, and cloud models, designed and hardened.

APPLY SECURITY PRINCIPLES

CIA triad, risk frameworks (NIST RMF), identity and access management, cryptography, and vulnerability management.

ANALYZE & RESPOND

Read SIEM platforms, interpret vulnerability scans, analyze network traffic, and run incident response.

AUTOMATE SECURITY

Write Python, Bash, and PowerShell to automate log parsing, auditing, and vulnerability reporting.

AUDIT APPLICATIONS

Run structured security audits with SAST, DAST, SCA, and secrets detection, and produce a formal VA report.

THE PROOF YOU GRADUATE WITH

Three industry certs, and the skills behind them.

This program is built around the credentials employers actually filter for. You don't just learn the material, you sit and pass the exams, and you leave with a hands-on portfolio and a professional vulnerability assessment report.

A+	Security+	CySA+
COMPTIA	COMPTIA	COMPTIA

Roles this prepares you for

SOC Analyst	Monitor and respond to security events
Security Analyst	Assess, harden, and defend systems
IT Support Specialist	Start in IT, move into security
Vulnerability Analyst	Scan, assess, and report findings

The capstone

A formal vulnerability assessment against a live web application, producing a professional VA report with executive summary, CVSS-rated findings, evidence, and remediation, modeled after real pentest deliverables.

Program at a Glance

CREDENTIAL **V School Certificate**	CREDIT HOURS **24 (3 per course)**
COURSES **8 sequential**	DURATION **Two semesters**
FORMAT **Online with live sessions**	CERTIFICATIONS **A+ · Security+ · CySA+**
PREREQUISITE **Technical assessment**	START TERMS **Fall · Spring · Summer**

What This Program Is

A comprehensive pathway from IT fundamentals to mid-level cybersecurity analyst competency, designed for people entering the field with no prior technical experience. Across two semesters and eight courses you earn three CompTIA certifications while building hands-on skills in security operations, scripting, and application security auditing.

Who It's For

People new to IT and security who want a real path into the field. No prior technical experience required. What you need is the willingness to do the labs, sit the exams, and prove your skills.

What You'll Walk Away With

- Three CompTIA certifications: A+, Security+, and CySA+
- A hands-on lab portfolio: SIEM analysis, vulnerability scanning, traffic analysis, incident response
- A security scripting portfolio in Python, Bash, and PowerShell
- A professional vulnerability assessment report, the program capstone

8 COURSES · 24 CREDITS · TWO SEMESTERS

Built in Sequence

Every course builds on the last. Semester one takes you from hardware and IT foundations through networking into core security, earning your CompTIA A+ along the way.

COURSE 1 · 3 CR · A+ CORE 1

Hardware Foundations & IT Troubleshooting

Computing history, IT helpdesk roles, hardware components and architecture, ticketing systems, troubleshooting methodologies, networking basics and the OSI model, and an intro to the cybersecurity landscape. Take the CompTIA A+ Core 1 exam.

COURSE 2 · 3 CR · A+ CORE 2

Software, Operating Systems & Scripting

SaaS application support, remote troubleshooting, Windows/macOS/Linux administration, SOHO network security, introductory scripting, and evolving threats. Take the A+ Core 2 exam to complete the full A+ certification.

COURSE 3 · 3 CR

Network Administration & Fundamentals

Enterprise networking: TCP/IP, subnetting, routing, network services, wireless, security architecture (firewalls, ACLs, DMZ, IDS/IPS), traffic analysis with Wireshark and Nmap, cloud models, and disaster recovery.

COURSE 4 · 3 CR

Cybersecurity Essentials

Core security concepts: CIA triad, PKI, IAM, the threat landscape, risk management frameworks (NIST RMF), business continuity and incident response, OWASP Top 10, DevSecOps, and vulnerability management.

CERTS, OPERATIONS, AND THE CAPSTONE

From Security+ to the SOC.

Semester two earns your Security+ and CySA+, runs you through a live security operations lab, and finishes with a real vulnerability assessment.

COURSE 5 · 3 CR · SECURITY+

CompTIA Security+ (SY0-701)

Comprehensive Security+ preparation across all five exam domains, through CertMaster Learn lessons, hands-on labs, and intensive practice exams. Take the proctored Security+ SY0-701 exam.

COURSE 6 · 3 CR

Applied Security Operations Lab

Lab-intensive practicum: SIEM log analysis (Splunk/ELK), vulnerability scan interpretation (Nessus/OpenVAS), traffic analysis, incident response simulation, and MITRE ATT&CK mapping. Culminates in an integrated SOC simulation.

COURSE 7 · 3 CR · CYSA+

CompTIA CySA+ (CS0-003)

Comprehensive CySA+ preparation across all four exam domains, through CertMaster Learn and Labs with scenario-based practice. Take the proctored CySA+ CS0-003 exam.

COURSE 8 · 3 CR · CAPSTONE

Security Scripting & Application Auditing

Python, Bash, and PowerShell for security automation; OWASP Top 10 exploitation with ZAP and Burp Suite; auditing applications with SAST/DAST/SCA pipelines. Culminates in a formal vulnerability assessment against a vulnerable web application.

How This Program Works

You learn by doing the labs and proving competency, then sit the same industry exams employers trust.

Mastery-Based

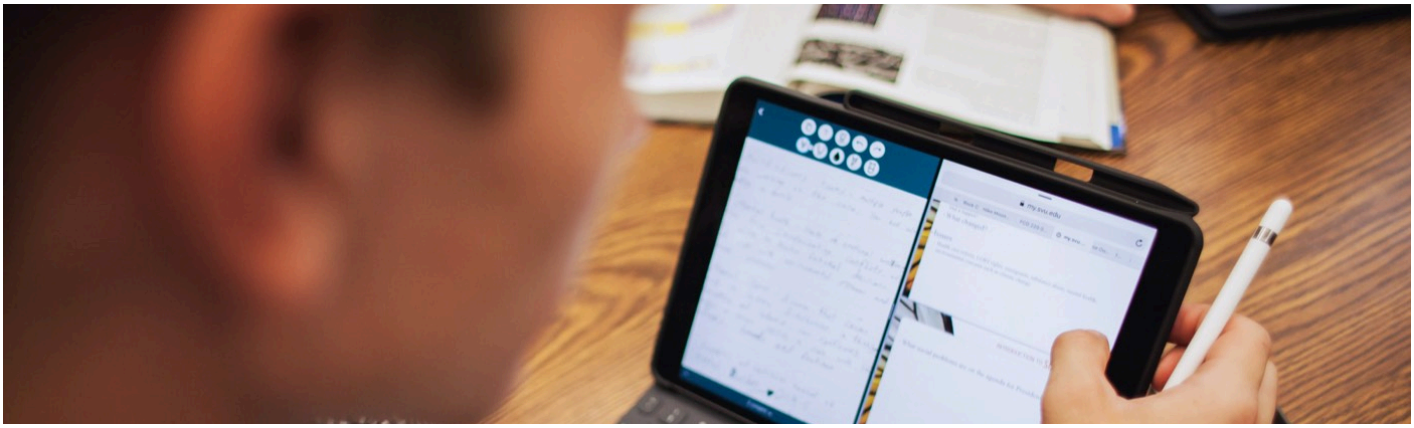
You advance by passing instructor level gates (1-on-1 competency reviews) and industry certification exams, not by logging hours. Every level verifies you can actually do the work.

- Performance-based lab assessments
- Instructor level gates
- Proctored CompTIA exams

Online with Live Sessions

Delivered online with scheduled live lectures and lab sessions, so you get real-time instruction and hands-on practice, not just videos.

- Live lectures & lab sessions
- Hands-on labs (TryHackMe and more)
- Direct instructor support



Is This Right for You?

This isn't a list of requirements. It's an honest look at what separates the students who thrive from the ones who struggle.

You Like Solving Puzzles

Troubleshooting and threat analysis are detective work. The students who thrive enjoy chasing a problem until it gives up its answer.

You Can Protect the Time

Between live sessions, labs, and exam prep, this program asks for real, consistent hours. Be honest with yourself about the time before you start.

You'll Sit the Exams

Three proctored CompTIA exams are part of the program, not optional. Students who thrive treat each one as the goal, not a hurdle.

You Can Sit with Confusion

Every week puts you somewhere you don't fully understand. The students who thrive try something, read the error, and try again, instead of waiting to be told the answer.

You're Comfortable with a Computer

You don't need IT experience. You do need to install software, navigate a file system, and work comfortably across operating systems.

You Have a Specific Reason

Students who finish have a reason beyond "this sounds interesting": a career they're building toward, a gap they're closing. Know what you're working toward.

What Does NOT Matter

- **Your degree, or lack of one.** The program starts from foundations.
- **Your IT background.** Everything is taught from scratch.
- **Whether you've touched security before.** Course 1 starts at hardware.
- **How fast you learn.** Mastery-based, you advance when ready.

You're Not Doing This Alone

LIVE INSTRUCTION
Scheduled live lectures and lab sessions with direct instructor support through the parts where you get stuck.

EXAM VOUCHERS INCLUDED
CompTIA certification exam vouchers are covered through the institutional partnership.

HANDS-ON LABS
Real lab environments (TryHackMe and more) so you practice on systems, not slides.

LEVEL GATES
One-on-one competency reviews make sure you actually have the skill before you move on.

A Credential That Holds Weight

This certificate is awarded by V School, the program's credentialing partner. You earn it through for-credit coursework at Southern Virginia University, a private liberal arts university in Buena Vista, Virginia, accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

That accreditation, paired with three industry CompTIA certifications, is the difference between a course and a credential. You earn for-credit university coursework backed by a real institution, inside a close-knit, values-driven community.

> *"Our best days are ahead of us."*
>
> Aaron Hale, President, Southern Virginia University

FUNDING YOUR CERTIFICATE

Ways to Pay for It

Cost should not be the thing that stops you. SVU admissions will help you map the funding that fits your situation before you commit. Common paths:

VA EDUCATION BENEFITS

If you've served, talk to admissions about applying your VA education benefits toward this program.

FINANCIAL AID

SVU's financial aid team can walk you through federal aid and payment options available for the certificate.

CREST CREDIT

Credit for Recognized Experience, Service, or Training. Missionary and military service may translate into credit toward your path at SVU.

EXAM VOUCHERS INCLUDED

CompTIA exam vouchers are covered through the institutional partnership, so the certifications are built into your tuition.

One conversation

Bring your questions about benefits, aid, and timing to a single admissions call. You'll leave knowing exactly what your path costs and how to fund it.

What You Need

COMPUTER

Apple or Windows laptop, 2022 or newer, with at least 8 GB of RAM.

LAB PLATFORM

Budget around $50/month for lab subscriptions (TryHackMe) beyond institutional licensing.

INTERNET

A reliable connection for live sessions and online labs.

PREREQUISITE

Complete a preliminary technical assessment before enrolling. No prior IT or security experience required.

Start Terms

The certificate runs over two semesters. You may begin in Fall, Spring, or Summer, subject to SVU's published academic calendar.

ENTRY TERM	COURSES 1–4	COURSES 5–8
Fall 2026	Fall 2026	Spring 2027
Spring 2027	Spring 2027	Summer 2027
Summer 2027	Summer 2027	Fall 2027

Attendance, grading, withdrawal, refund, academic-integrity, and accommodation policies are governed by SVU's institutional policies as published in the current academic catalog.

Ready to Start?

Here's how to get in.

1. **Take the Technical Assessment**
   A short preliminary assessment so you and we can confirm this is the right starting point. No prior experience expected.

2. **Talk to Admissions**
   We'll walk you through enrollment, funding options, and how the certificate fits your path, and answer your questions.

3. **Pick Your Start Term**
   Choose Fall, Spring, or Summer based on your timeline.

4. **Start Building**
   From Course 1 you learn by doing. By the end you have three CompTIA certifications, a lab portfolio, and a professional vulnerability assessment report.

Talk to SVU Admissions

No commitment. Let's talk about the program, funding, and your start date.

APPLY NOW