



Immersion Academy Annual Report | 2019

An accelerated, intensive training and certification program that develops the real-world knowledge and hands-on skills needed to defend today's information security systems.

VetSuccess
ACADEMY

Women's
ACADEMY

Diversity Cyber
ACADEMY

CyberWorkforce
ACADEMY

United States Cyber Academy Programs

SANS | CyberTalent

GIAC
CERTIFICATIONS

As the shortage of skilled cyber professionals becomes more acute, it's clear that traditional methods of identifying, assessing, and hiring talented personnel are no longer sufficient. A few forward-looking organizations have discovered an approach that promises to provide a reliable pipeline of elite talented professionals who can successfully detect threats, protect against cyber attacks, and rapidly find and eliminate intrusions.

The United States has encountered similar challenges in the past. Faced with a critical shortage of skilled fighter pilots during WWII, for example, America opened flight schools around the nation to quickly screen potential pilots and train the most talented with the hands-on skills needed to defend our country. The Cyber Immersion Academies are the equivalent of those flight schools for our nation's cyber defense. The holistic mission of the Academies is to:

- *Assess and identify individuals with an aptitude for cybersecurity*
- *Select high-potential participants*
- *Develop new talent through training in cybersecurity expertise and hands-on skills*
- *Deploy graduates into the cybersecurity workforce*

Over the past five years, SANS has launched Immersion Academies in partnership with leading non-profit organizations that support veterans, women and minorities, as well as with various government and private sector entities. These partnerships provide talented candidates with a reliable pathway into the cybersecurity workforce, increasing diversity in the field while expanding the workforce and helping employers fill high-demand positions that require technical skills. Now, the Academies are being expanded to enable all talented college students, regardless of gender, race, or ethnicity, to find their passion for cybersecurity and develop that talent into great careers where they can make an important difference.

The Academies not only identify high-potential individuals and train them in key skills and competencies, but also provide inspiring, life-changing opportunities for participants coming from non-cyber backgrounds to enter the field. Employers engage graduates through co-op programs or entry-level hiring to fill their shortage of skilled cybersecurity professionals.

We look forward to connecting with you regarding one of these dynamic programs!

Alan Paller

Director of Research, SANS Institute

During WWII, the United States didn't have enough fighter pilots, so we launched flight schools across the country. The Immersion Academies are the equivalent for today's cyber defense.





Program Overview

The Cyber Immersion Academies are a set of immersive training programs that are producing high-quality cybersecurity professionals ready to enter information security roles immediately upon graduation. The Academies provide advanced technical training, industry-recognized certifications, and connections to jobs in cybersecurity. The Academies are 100% scholarship-based for qualified participants with an aptitude for cybersecurity who are looking to enter the field.

VetSuccess Academy

The VetSuccess Academy is a unique opportunity for transitioning military service members, active duty spouses, and veterans within five years of separation to learn in-demand cybersecurity skills and earn GIAC certifications to start a career in cybersecurity. VetSuccess was launched in 2015 with 18 students and continues to grow, offering over five cohorts per year.

Women's Immersion Academy

This Academy increases gender diversity in cybersecurity by providing women with a passion and aptitude for cybersecurity the opportunity to learn in-demand cybersecurity skills, earn GIAC certifications, and start a career in cybersecurity. The Women's Immersion Academy was launched in 2016 and runs annually.

Diversity Cyber Academy

In partnership with the International Consortium of Minority Cybersecurity Professionals (ICMCP), the Diversity Cyber Academy increases diversity in cybersecurity by providing minorities with a passion and aptitude for cybersecurity the opportunity to learn in-demand cybersecurity skills, earn GIAC certifications, and launch a career in cybersecurity.

Cyber Workforce Academy

Additional SANS Cyber Workforce Academies may be designed via partnerships with corporate sponsors and grant programs.

Cyber Workforce Academy – Maryland

This Academy is funded in part by funds received from EARN Maryland, a grant program of the Maryland Department of Labor. Launched in 2018 and set to run through 2021, the Academy trains Maryland residents, with a focus on U.S. military veterans, minorities, and women in highly sought-after cybersecurity skills. The aim is to provide them with a pathway into the cybersecurity workforce. EARN Maryland is a state program dedicated to the workforce needs of Maryland's cybersecurity and IT industries.

Employer Benefits

- Access to pre-screened candidates and highly trained, certified graduates
- The opportunity to support veterans and diversity in the InfoSec industry
- The opportunity to create a cybersecurity-focused workforce development program

100% SCHOLARSHIP-BASED
PARTICIPANTS ATTEND AT NO COST

Learn more at sans.org/cybertalent



Students complete up to three technical courses and industry-leading GIAC certifications

CORE SANS COURSE

SEC401 SANS Security Essentials Boot Camp Style

SEC504 Hacker Techniques, Exploits & Incident Handling

Third course is elective. Typical selections include:

ICS410 ICS/SCADA Security Essentials

FOR500 Windows Forensic Analysis

SEC501 Advanced Security Essentials, Enterprise Defender

SEC503 Intrusion Detection In-Depth

SEC511 Continuous Monitoring and Security Operations

SEC542 Web App Penetration Testing and Ethical Hacking

SEC560 Network Penetration Testing and Ethical Hacking

GIAC CERTIFICATION

GSEC GIAC Security Essentials Certification

GCIH GIAC Certified Incident Handler

GICSP Global Industrial Cyber Security Professional

GCFE GIAC Certified Forensic Examiner

GCED GIAC Certified Enterprise Defender

GCIAC GIAC Certified Intrusion Analyst

GMON GIAC Continuous Monitoring Certification

GWAPT GIAC Certified Web Application Penetration Tester

GPEN GIAC Certified Penetration Tester

Any set of SANS courses may be combined to create a custom curriculum for your organization's needs.

525+ scholarships awarded
90% employed within six months of graduation

Core Curriculum Student Performance from 2015 to June 2019



93% success rate
Highest score of **99%**
37% of those passing scored \geq **90%**
85% overall average
86% average for those passing



92% success rate
Highest score of **99%**
20% of those passing scored \geq **90%**
82% overall average
84% average for those passing

\$8,000,000 Approximately \$8 million contributed in scholarships from 2015-June 2019

360 HOURS Students receive up to 360 hours of hands-on training and skills building

Learn more at sans.org/cybertalent

Employers that have hired Academy Graduates

amazon

blackpoint

Booz | Allen | Hamilton

CACI
EVER VIGILANT

Carbon Black.

CISCO

citi

Deloitte.

GEICO

IronNet Cybersecurity

Microsoft

NTT Security

OPTIV

PLEX

ThermoFisher
SCIENTIFIC

US Army
Cyber Protection
Brigade

Walmart

JOB TITLES EARNED

SOC Analyst
Information Security Analyst
Security Consultant
Penetration Tester
Incident Handler
Intrusion Analyst
InfoSec Specialist
Forensics Examiner
Incident Response Team
Cyber Threat Intel Associate

EMPLOYERS

"AJ joined the BB&T Cyber Threat Management team and had an immediate positive impact. AJ has quickly garnered the respect of her teammates as she is able to apply the skills acquired through the SANS Women's Immersion Academy daily to the benefit of BB&T."

– **Hartwell Watkins**

VP, Manager-Cyber Threat Operations
Center and Threat Intelligence, BB&T

"As a veteran, I think it is wonderful that the SANS Institute has created this program and I thank the State of Maryland for its support as well. We expect a significant shortage of cybersecurity talent in the future, so this is excellent news."

– **John O'Keefe**

CISO, GEICO Corporation

"The SANS Institute is renowned and respected for its world-class cyber training. CACI is pleased to team with SANS on this critical workforce development initiative, which will help fill a pressing need for cybersecurity experts in industry and government."

– **Mike Mourelatos**

CACI Vice President and Chief Technology
Officer of National Services

"We've been thrilled with the opportunity to participate in the VetSuccess Academy. I can't say enough about the cooperation and tireless efforts by SANS to make this program successful for both veterans and employers. We're extremely impressed with the professionalism and advanced skill sets that our first hire from the Academy has brought to our company. We're looking forward to hiring more VetSuccess graduates."

– **Arlin Halstead**

Director of Human Resources,
NTT Security

"The SANS Cyber Immersion Academy provided a great opportunity for us to hire qualified cybersecurity professionals with technical, hands-on skills and GIAC certifications. The graduates are already making a difference in the company and eager to learn more. The Academies are a great resource for employers seeking to hire new cybersecurity talent."

– **SOC Manager**

Fortune 500 Financial Services Firm



STUDENTS

"Last year, I was lucky enough to be one of the 24 women chosen to participate in the SANS Women's Immersion Academy 2017. While I'm relatively new to InfoSec (and self-taught at that), the Women's Academy allowed me to formalize my knowledge through its top-notch training programs. I could not be prouder to be a part of this group of impressive and talented women."

– **Kelly Albrink**

Security Analyst at Bishop Fox,
Women's Academy Graduate

"I believe that the opportunity to network with like-minded professionals, secure industry-recognized certifications, and learn from world-class educators sets the Academy apart from all other cyber training programs. Certifications from SANS GIAC set me apart from my peers, and they have certainly propelled my career forward."

– **Wacey Lanier**

Senior Cybersecurity Advisor,
The Garrett Group,
VetSuccess Academy Graduate

"Before I was a stay-at-home mom for 12 years, I worked as a Unix Engineer. I knew I needed to update my skills before getting back into the workforce. I signed up for a certificate program and then learned about the Cyber Workforce Academy – Maryland. The SANS Cyber Workforce Academy was a great way to learn about today's cyber technology. The fast-paced courses brought me up to speed with current industry technology. The instructors, materials and labs all worked together to provide a comprehensive study of where cyber technology is today. The certifications earned, GSEC and GCIH, allowed me to reenter the workforce in stride."

– **A. Riley**

Associate System Engineer,
Top 5 U.S. Auto Insurance Company,
Cyber Workforce Academy –
Maryland Graduate

"Cybersecurity is a great field because there are so many opportunities and you are constantly learning new things."

– **Alden Chavarria**

Senior Consultant,
InfoReliance
VetSuccess Academy Graduate

"The GIAC certifications I earned in the Academy really helped open doors for me as a cybersecurity professional."

– **Justin Sappington**

Information Security Analyst,
Umpqua Bank,
VetSuccess Academy Graduate

Learn more at sans.org/cybertalent

SANS | CyberTalent

To learn how the SANS Immersion Academies can help your organization assess, train, certify, and hire highly skilled cybersecurity talent faster and more efficiently, please contact:

Max Shuftan

Email: mshuftan@sans.org

www.sans.org/cybertalent

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