Higher Demands on Cyber Professionals

As cyber attacks increase in volume and complexity, and organizations scramble to keep pace, the career path for cybersecurity professionals is being transformed.

Leading an organization’s security efforts now requires more than technical competence. In fact, cybersecurity professionals with advanced degrees now outnumber those with only a bachelor’s degree, and information security professionals in management positions are 60% more likely to hold an advanced degree than only a bachelor’s.

Higher Degree of Learning

The SANS Technology Institute offers practical, rewarding, and effective education programs that prepare cybersecurity professionals to meet these new demands for career advancement.

Master of Science Degrees

The master’s programs of the SANS Technology Institute provide the foremost education for cyber professionals.

- Master of Science in Information Security Engineering (MSISE)
- Master of Science in Information Security Management (MSISM)

Graduate Certificates

The certificate programs offer individuals the opportunity to earn a post-baccalaureate, graduate level credential by completing a series of 3 to 4 related, technical courses.

- Cybersecurity Engineering (Core)
- Penetration Testing and Ethical Hacking
- Incident Response

Accreditation

The SANS Technology Institute is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267-284-5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Coursework to Meet Real World Demands

70% Technical Expertise with Application Emphasis
- Rigorous technical excellence
- Hands-on skills emphasis
- Hyper-current content
- Real-world application

15% Management and Communication
- Leadership and strategy
- Organizational effectiveness & managing people
- Mobilizing and implementing

15% In-Practice Leading and Learning
- Team exercises and scenario response
- Group project development and management
- Presentation simulation

Flexible Course Options to Meet Your Schedule

Live Immersive Instruction
Attend class during SANS events held around the world throughout the year. Meet fellow students and instructors in person.

OnDemand
Online, self-paced instruction optimizes flexibility, allowing you to learn at your own pace from home or work.

vLive
Log in twice weekly for two months, meet with your class and instructor in an interactive, virtual classroom.

Working graduate students can choose any option with confidence. Each learning mode provides the same high level of quality and satisfaction.

World-Class Faculty with Exceptional Skills

The Elite SANS Instructors
Fewer than 75 faculty have qualified to teach for SANS, globally. A rigorous, multi-year selection process certifies fewer than 1 in 1,200.

Cutting-Edge Workplace Experience
Faculty average 15 years information security experience. Not IT generalists.

Extraordinary Teaching Skills
10+ years average teaching experience. Rare combination of technical expertise and student engagement skills.

Tuition Reimbursement
The SANS Technology Institute is approved to accept and/or certify Veterans for education benefits.
Programs also typically qualify for corporate tuition reimbursement plans.

Industry Recognized Certifications
Students earn GIAC certifications during most technical courses.
Prepare to lead. The MSISE program is a rigorous, challenging, and rewarding experience that provides you with the rare combination of an elite technical mastery and the leadership capability to mobilize people, organizations, and resources.

With a focus on ensuring your ability to apply knowledge and skills in real-world situations, the MSISE program prepares you to make an immediate and lasting impact on your team and your career.

Program Highlights:

SANS Technical Core
- Layered, Defensive Techniques
- Study of Hacker Techniques (Offense informs defense)
- Intrusion Detection, & Incident Response

Deep, Advanced Elective Catalog
- Penetration Testing
- Digital Forensics
- Advanced Defense classes

- Advanced Labs & Real-life Simulations
- NetWars Cyber Range Testing
- PMP®/Project Management

Research Relevant to Your Job
- Reviewed by Industry Experts
- Present at SANS Conferences
- Security Awareness Programs

Focus: NetWars Cyber Range
Government agencies, military, law enforcement, and commercial entities deploy this cyber range (and its cousin, SANS CyberCity) continuously to train their teams and enable hands-on learning. Graduate students get months of continuous access to hone and practice their skills.

Sample Schedule
- Year 1: 4-5 courses, 14-15 credits
- Year 2: 6 courses, 13 credits
- Year 3: 4-5 courses, 8-10 credits
- 8-10 hours per week investment

Who Should Enroll?
IT or Infosec professionals who seek to advance their careers to become technically proficient leaders and managers in their organizations.

Cybersecurity issues have arrived at the board and executive level – with a loud bang. Organizations can no longer manage cyber as a technical support function. Effective decisions on strategic priorities and resource allocation for cybersecurity require new perspectives, new skills, and a new level of executive leadership.

The Master of Science in Information Security Management provides students with the executive skills needed to define and deliver organization-wide strategies, programs, and policies. It teaches many of the technical underpinnings of information security, but focuses information security personnel on auditing information systems, managing the legal implications of an incident, evaluating emerging solutions, and implementing organization-wide standards.

Who Should Enroll?
IT or IS managers in larger organizations that emphasize organizational and policy considerations rather than technical, hands-on skills and knowledge.

MSISM students take required courses in policy development, audit, and legal considerations in place of some of the technical, applied-skills education of the MSISE. This is a difference in emphasis, but MSISM graduates will still understand the underlying technologies.
Cybersecurity professionals operate amidst rapid, constant change. New threats emerge daily. Knowledge currency is essential and an ongoing task. The SANS Technology Institute’s graduate certificate program provides a shorter, technically focused set of courses that sharpen your skills and keep your knowledge current. Certificate program credit is directly applicable to the Master’s Program.

Students can choose from 3 options and will earn 3 to 4 GIAC certifications while earning a graduate level credential.

**Cybersecurity Engineering (Core)**
Spans from an introductory survey of fundamental information security tools and techniques to a more advanced study of the inter-relationships between offensive (attack/penetration testing) and defensive (intrusion detection and incident response) information security best practices.

**Penetration Testing and Ethical Hacking**
Focuses on developing the student’s capability to discover, analyze, and understand the implications of information security vulnerabilities in systems/networks/applications in order to identify solutions before others exploit these flaws.

**Incident Response**
Focuses on developing the student’s capability to manage both a computer and network-based forensics investigation as well as the appropriate incident responses.

“The SANS faculty make this program unique. They’re at the top of their industry and not a single one is too busy to engage with students at all levels.”
– Ron Hamann, MSISE Consultant, Slalom Consulting

“I chose the SANS Technology Institute over other programs primarily because of the ability to tailor the program to my career goals.”
– Sally Vandeven, MSISE Senior Security Analyst, NetWorks Group

“I was challenged by both the coursework and faculty. Earning a graduate degree from SANS had a direct and positive influence on my career.”
– Russ McRee, MSISE Director, Security Response & Investigations, Microsoft

Visit sans.edu for complete information on courses, admissions, and tuition.
The SANS Technology Institute develops leaders to strengthen enterprise and global information security. We educate managers and engineers in information security practices and techniques, attract top scholar-practitioners as faculty, and engage both students and faculty in real-world applied research.

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