SANS Foundations

SANS Foundations: Computers, Technology, & Security

GIAC Foundational Cybersecurity Technologies

Online	38 CPEs

SANS Foundations is the best course available to learn the core knowledge and develop practical skills in computers, technology, and security foundations that are needed to kickstart a career in cybersecurity. The course features a comprehensive variety of innovative, hands-on labs, and practical exercises that go far beyond what is offered in any other foundational course in cybersecurity. These labs are developed by leading subject-matter experts, drawing on the latest technology, techniques, and concepts in cybersecurity.

Course Authors:

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Certified Instructor

What You Will Learn

The course provides students with the practical learning and key skills to empower future cybersecurity learning and professional development.

What is included with SANS Foundations?

- Over 120 hours of curated content
- Hands-on labs experience
- Quizzes to consolidate learning outcomes
- Training by world-renowned experts
- Engaging 4K video content
- Proctored final exam delivered by GIAC

The course provides exactly what you need to go from zero technical and security knowledge to a level of sufficient theoretical understanding and applied practical skills that will enable you to speak the same language as industry professionals. Students will develop fundamental skills and knowledge in key IT subject areas such as:

- Computer Components & Concepts
- Operating Systems, Containers, & Virtualization
- Linux
- Networking Fundamentals
- The Web: Search Engine & Servers
- Practical Programming in Python and C

- Windows Foundations
- Advanced Computer Hardware (e.g. CPU & Memory)
- Encryption
- Introduction to Basic Security Concepts
- Introduction to Forensics
- Introduction to Reconnaissance, Exploitation, and Privilege Escalation
- Introduction to Network & Computer Infiltration (e.g. Lateral Movement)

Ways to Learn

- **Web-based**

Who Should Attend SEC275?

The course provides exactly what students need to go from zero technical and security knowledge to a level of sufficient theoretical understanding and applied practical skills that will enable students to speak the same language as industry professionals. This course is designed for:

- Career changers
- Online self-driven learners seeking new skills
- College & university students
- Business professionals without a deep cybersecurity background
- New hires in IT/cybersecurity
- Participants in reskilling program

Course FAQ

Q: How long does it take to complete the course?

A: The course content can be completed in 50 to 60 hours, but many students take longer to maximize their learning outcomes and skills development. Most students review course content multiple times, repeat labs and quizzes, or do the extra exercises and the average completion time is 120 to 140 hours.

Q: How long do I have access to the course?

A: Students have access to the course for 4 months, providing plenty of time to go over the material in bite size chunks and to review the labs and lecture. During this time, you can go back over all of the course components and complete them as many times as you wish to do so.

Q: How do the labs work?

A: The learning platform for SANS Foundations has an online labs system where you can interact with security tools, get your hands on the Linux command line, and use an Integrated Development Environment (IDE) to write and test code. There are over 90 labs in the course, and all can be completed from a web browser, providing you access to your own personal and isolated lab network.

Q: What do the quizzes test?

A: The quizzes benchmark your knowledge and measure if you understood the key concepts and topics of each module. The quizzes are based on the course content and a fantastic indicator of your familiarity and

retention. You can take them multiple times until you feel confident and are ready to move onto the next module.

Q: How do I access the course?

A: After successfully registering for the course, you will receive an email with instructions to access the course content within two business days of full payment.

Q: What are good training courses or learning pathways to pursue after completing SANS Foundations?

A: The SANS Cyber Security Skills Roadmap shows how you can develop your cyber security skills across multiple career pathways, be it Cyber Defense Analyst, Incident Responder, or Penetration Tester. The SANS Foundations course is designed to prepare you for any of the pathways depending on your career goals and interests.

GIAC Foundational Cybersecurity Technologies

The GIAC Foundational Cybersecurity Technologies (GFACT) certification validates a practitioner's knowledge of essential foundational cybersecurity concepts. GFACT-certified professionals are familiar with practical skills in computers, technology, and security fundamentals that are needed to kickstart a career in cybersecurity.

- Core Computing Components: Hardware and Virtualization, Networking, Operating Systems, Web, Cloud, and Data Storage
- IT Fundamentals and Concepts: Logic and Programming, Windows, and Linux
- Security Foundations and Threat Landscape: Concepts, Exploitation and Mitigation, Forensics and Post Exploitation

More Certification Details

Prerequisites

- There are no prerequisites.
- No prior security knowledge is needed.

Laptop Requirements

Any modern web browser (Chrome, Firefox, Safari) will be suitable, and you can change between devices and pick up where you left off at any time.

No software is required to participate in the course, everything is provided in the online learning platform! Even when learning Python or C and how to build programs, or exploring security tools - everything can be done online!

Author Statement

Cybersecurity is an exciting and fast-growing field, and it must be at a time when the global talent shortage continues to grow, and both the number of threats and malicious actors continues to rise. While job roles in application security, reverse malware engineering, and threat hunting may sound enticing, practitioners in these roles all had to start by learning the basics. There are essential computing and technology skills that all

successful cybersecurity professionals first learn that serve as the baseline for careers and future education in the field. SANS Foundations serves as the launch of an IT education and career or can fill in the gaps by introducing students to these fundamentals.

By providing students with minimal technology proficiency and the ability to recognize key terms and develop competencies with tools and systems in a comfortable atmosphere, they are prepared for future skills development. Whether you are a career seeker, self-driven learner, or in an immersive training program, SANS Foundations will provide you with the core IT and computer knowledge and abilities integral to a future career in cybersecurity.

SANS Foundations teaches students a broad array of fundamental knowledge in areas such as computer hardware, networking, Linux, operating systems, data storage, and much more. The skills gained are applicable to everyone in an IT, computing, or security role. Practical skills are key to success in cybersecurity, and thus there are over 100 labs and hands-on exercises in the course to kickstart your cybersecurity journey. The course will set you up for entering the workforce and be ready to continue learning in more advanced, technical areas across cybersecurity.

- James Lyne, SANS Chief Technology Officer