



The Most Trusted Source for Information Security Training,  
Certification, and Research

# TAMPA – CLEARWATER 2017

Clearwater, FL | September 5-10

## Protect Your Business and Advance Your Career

Five hands-on, immersion-style information  
security courses taught by real-world practitioners

CYBER DEFENSE  
ETHICAL HACKING

DIGITAL FORENSICS  
MANAGEMENT



“This training is extremely valuable. To be able to  
not only keep up with the latest topics and dive  
deep into technologies, but also to network with  
others in the same field, is invaluable.”

-ALLISON MILLER, VIDANT HEALTH

A wide-angle photograph of a sandy beach with waves in the foreground. In the background, several tall, modern high-rise apartment buildings are visible under a clear blue sky. People are scattered across the beach, some sitting on towels or blankets.

**SAVE \$400**

Register and pay by July 12th –  
Use code **EarlyBird17**

[www.sans.org/tampa-clearwater](http://www.sans.org/tampa-clearwater)

## SANS Instructors

SANS instructors are real-world practitioners who specialize in the subjects they teach. All instructors undergo rigorous training and testing in order to teach SANS courses. This guarantees that what you learn in class will be up to date and relevant to your job. The SANS Tampa – Clearwater 2017 lineup of instructors includes:



**Carlos Cajigas**  
*Certified Instructor*  
@Carlos\_Cajigas



**Tim Garcia**  
*Certified Instructor*  
@tb911



**Jonathan Ham**  
*Certified Instructor*  
@jhamcorp



**Ronald Hamann**  
*Instructor*  
@airforceteacher



**G. Mark Hardy**  
*Principal Instructor*  
@g\_mark

## Evening Bonus Sessions

Take advantage of these extra evening presentations and add more value to your training. Learn more on page 7.

**KEYNOTE: *The End of Banking as We Know It: How Crypto Currencies and Blockchain are Breaking Up a Centuries-Old Monopoly***

G. Mark Hardy

***Virtualizing Forensic Images Using Free Tools in Linux***

Carlos Cajigas

***Developers: Five Things I Want You to Keep Doing... So I Can Buy a New Boat!***

Ronald Hamann

**Save \$400 when you register and pay by July 12th using code *EarlyBird17***

## Courses at a Glance

	TUE 9-5	WED 9-6	THU 9-7	FRI 9-8	SAT 9-9	SUN 9-10
SEC401 <b>Security Essentials Bootcamp Style</b>	Page 2					
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**Register today for SANS Tampa-Clearwater 2017!**  
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**#SANS Tampa**

# Securing Approval and Budget for Training

## Packaging matters

### Write a formal request

- All organizations are different, but because training requires a significant investment of both time and money, most successful training requests are made via a written document (short memo and/or a few Powerpoint slides) that justifies the need and benefit. Most managers will respect and value the effort.
- Provide all the necessary information in one place. In addition to your request, provide all the right context by including the summary pages on Why SANS?, the Training Roadmap, the instructor bio, and additional benefits available at our live events or online.

## Clearly state the benefits

### Be specific

- How does the course relate to the job you need to be doing? Are you establishing baseline skills? Transitioning to a more focused role? Decision-makers need to understand the plan and context for the decision.
- Highlight specifics of what you will be able to do afterwards. Each SANS course description includes a section titled “You Will Be Able To.” Be sure to include this in your request so that you make the benefits clear. The clearer the match between the training and what you need to do at work, the better.

## Set the context

### Establish longer-term expectations

- Information security is a specialized career path within IT with practices that evolve as attacks change. Because of this, organizations should expect to spend 6%-10% of salaries to keep professionals current and improve their skills. Training for such a dynamic field is an annual, per-person expense—not a once-and-done item.
- Take a GIAC Certification exam to prove the training worked. Employers value the validation of skills and knowledge that a GIAC Certification provides. Exams are psychometrically designed to establish competency for related job tasks.
- Consider offering trade-offs for the investment. Many professionals build annual training expenses into their employment agreements even before joining a company. Some offer to stay for a year after they complete the training.

## Security Essentials Bootcamp Style

### Six-Day Program

Tue, Sep 5 - Sun, Sep 10

9:00am - 7:00pm (Days 1-5)

9:00am - 5:00pm (Day 6)

46 CPEs

Laptop Required

Instructor: Tim Garcia

### Who Should Attend

- > Security professionals who want to fill the gaps in their understanding of technical information security
- > Managers who want to understand information security beyond simple terminology and concepts
- > Operations personnel who do not have security as their primary job function but need an understanding of security to be effective
- > IT engineers and supervisors who need to know how to build a defensible network against attacks
- > Administrators responsible for building and maintaining systems that are being targeted by attackers
- > Forensic specialists, penetration testers, and auditors who need a solid foundation of security principles to be as effective as possible at their jobs
- > Anyone new to information security with some background in information systems and networking

**"This course has opened my eyes to just how important security is, and has given me a deeper understanding on how to protect our systems."**

-TRAVIS SORENSON,  
XPRESS SOLUTIONS

This course will teach you the most effective steps to prevent attacks and detect adversaries with actionable techniques you can directly apply when you get back to work. You'll learn tips and tricks from the experts so you can win the battle against the wide range of cyber adversaries that want to harm your environment.

STOP and ask yourself the following questions:

- > Do you fully understand why some organizations get compromised and others do not?
- > If there were compromised systems on your network, are you confident you would be able to find them?
- > Do you know the effectiveness of each security device and are you certain they are all configured correctly?
- > Are proper security metrics set up and communicated to your executives to drive security decisions?

If you do not know the answers to these questions, SEC401 will provide the information security training you need in a bootcamp-style format that is reinforced with hands-on labs.

**SEC401: Security Essentials Bootcamp Style** is focused on teaching you the essential information security skills and techniques you need to protect and secure your organization's critical information assets and business systems. Our course will show you how to prevent your organization's security problems from being headline news in the *Wall Street Journal*!

### Prevention Is Ideal but Detection Is a Must

With the rise in advanced persistent threats, it is almost inevitable that organizations will be targeted. Whether the attacker is successful in penetrating an organization's network depends on the effectiveness of the organization's defense. Defending against attacks is an ongoing challenge, with new threats emerging all of the time, including the next generation of threats. Organizations need to understand what really works in cybersecurity. What has worked, and will always work, is taking a risk-based approach to cyber defense. Before your organization spends a dollar of its IT budget or allocates any resources or time to anything in the name of cybersecurity, three questions must be answered:

- > What is the risk? > Is it the highest priority risk? > What is the most cost-effective way to reduce the risk?

Security is all about making sure you focus on the right areas of defense. In SEC401 you will learn the language and underlying theory of computer and information security. You will gain the essential and effective security knowledge you will need if you are given the responsibility for securing systems and/or organizations. This course meets both of the key promises SANS makes to our students: (1) You will learn up-to-the-minute skills you can put into practice immediately upon returning to work; and (2) You will be taught by the best security instructors in the industry.



### Tim Garcia SANS Certified Instructor

Timothy Garcia is a seasoned security professional who loves the challenging and continuously changing landscape of defense. Tim currently works as an information security engineer for a Fortune 100 financial company, where he helps project teams ensure the security of IT operations and compliance with policies and regulations. He also leads the team that is tasked with firewall review, SIEM management and privileged access monitoring and policy compliance. Tim has worked as a systems engineer and database administrator and has expertise in systems engineering, project management and information security principles and procedures/compliance. Tim previously worked for Intel and served in the U.S. Navy. At SANS, Tim also works with the OnDemand team as a subject-matter expert, serves as a mentor for the Vet Success program, and provides consulting and content review for the Securing The Human project. Tim is a contributor to the Arizona Cyber Warfare Range and works with the local security community giving monthly talks on information security tools and techniques. Tim holds the CISSP, GSEC, GSLC, GISF, GMON, GAWN, GCCC, and GCED as well as the NSA-IAM certifications. He has extensive knowledge of security procedures and legislation such as Sarbanes-Oxley, GLBA, CobiT, COSO, and ISO 1779. **@tb911**

## Hacker Tools, Techniques, Exploits, and Incident Handling

### Six-Day Program

Tue, Sep 5 - Sun, Sep 10

9:00am - 7:15pm (Day 1)

9:00am - 5:00pm (Days 2-6)

37 CPEs

Laptop Required

*(If your laptop supports only wireless, please bring a USB Ethernet adapter.)*

Instructor: Ronald Hamann

### Who Should Attend

- > Incident handlers
- > Leaders of incident handling teams
- > System administrators who are on the front lines defending their systems and responding to attacks
- > Other security personnel who are first responders when systems come under attack

**“As someone who works in information security but has never had to do a full incident report, SEC504 is teaching me all the proper processes and steps.”**

**-TODD CHORYAN,  
MOTOROLA SOLUTIONS**

The Internet is full of powerful hacking tools and bad guys using them extensively. If your organization has an Internet connection and one or two disgruntled employees (and whose does not!), your computer systems will get attacked. From the five, ten, or even one hundred daily probes against your Internet infrastructure to the malicious insider slowly creeping through your most vital information assets, attackers are targeting your systems with increasing viciousness and stealth. **As defenders, it is essential we understand these hacking tools and techniques.**

**“Fills the gap of ‘here’s what adversaries do and the evidence it leaves.’”**

**-KEVIN HEITHAUS, JPMORGAN CHASE**

This course enables you to turn the tables on computer attackers by helping you understand their tactics and strategies in detail, giving you hands-on experience in finding vulnerabilities and discovering intrusions, and equipping you with a comprehensive incident handling plan. It addresses the latest cutting-edge, insidious attack vectors, the “oldie-but-goodie” attacks that are still prevalent, and everything in between. Instead of merely teaching a few hack attack tricks, this course provides a time-tested, step-by-step process for responding to computer incidents and a detailed description of how attackers undermine systems so you can prepare for, detect, and respond to those attacks. In addition, the course explores the legal issues associated with responding to computer attacks, including employee monitoring, working with law enforcement, and handling evidence. Finally, students will participate in a hands-on workshop that focuses on scanning, exploiting, and defending systems. **This course will enable you to discover the holes in your system before the bad guys do!**

The course is particularly well-suited to individuals who lead or are a part of an incident handling team. General security practitioners, system administrators, and security architects will benefit by understanding how to design, build, and operate their systems to prevent, detect, and respond to attacks.



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### Ronald Hamann SANS Instructor

Ron is a retired U.S. Air Force officer and enlisted person with over 20 years of experience in information technology and information assurance, from software development and system administration to security analysis and security operations. Ron is currently a senior security analyst for Rackspace Managed Security in San Antonio, working in its Security Operations Center (SOC) hunting for attacker activity and responding to attacks daily. Ron has been a security instructor since 2010, sharing his experiences at multiple SOCs, both military and commercial, and various consulting clients including NASA and oil, gas, and construction companies. Ron teaches the three core classes for the GSE and the STI Masters program: SEC401, SEC503 and SEC504. When not thinking about attackers and defenses, Ron spends his time looking for yet another craft cider he hasn't tried and apologizing to his dance partners. [@airforceteacher](#)

# FOR500 (Formerly FOR408)

**GCFE** Certification  
Forensic Examiner



[www.giac.org/gcfe](http://www.giac.org/gcfe)

## Windows Forensic Analysis

Six-Day Program

Tue, Sep 5 - Sun, Sep 10

9:00am - 5:00pm

36 CPEs

Laptop Required

Instructor: Carlos Cajigas

### Who Should Attend

- > Information security professionals
- > Incident response team members
- > Law enforcement officers, federal agents, and detectives
- > Media exploitation analysts
- > Anyone interested in a deep understanding of Windows forensics

**“This course has depth and breadth because of the knowledge shared by the instructor, and the contents of the labs make this necessary training.**

**Very impressive!”**

**-DEBRA EMMANUEL,  
TWD & ASSOCIATES**



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All organizations must prepare for cyber crime occurring on their computer systems and within their networks. Demand has never been greater for analysts who can investigate crimes like fraud, insider threats, industrial espionage, employee misuse, and computer intrusions. Government agencies increasingly require trained media exploitation specialists to recover key intelligence from Windows systems. To help solve these cases, SANS is training a new cadre of the world's best digital forensic professionals, incident responders, and media exploitation masters capable of piecing together what happened on computer systems second by second.

**FOR500: Windows Forensic Analysis (formerly FOR408)** focuses on building in-depth digital forensics knowledge of the Microsoft Windows operating systems. You can't protect what you don't understand, and understanding forensic capabilities and artifacts is a core component of information security. You'll learn to recover, analyze, and authenticate forensic data on Windows systems. You'll understand how to track detailed user activity on your network and how to organize findings for use in incident response, internal investigations, and civil/criminal litigation. You'll be able to use your new skills to validate security tools, enhance vulnerability assessments, identify insider threats, track hackers, and improve security policies. Whether you know it or not, Windows is silently recording an unimaginable amount of data about you and your users. FOR500 teaches you how to mine this mountain of data.

Proper analysis requires real data for students to examine. The completely updated FOR500 course trains digital forensic analysts through a series of new hands-on laboratory exercises that incorporate evidence found on the latest Microsoft technologies (Windows 7/8/10, Office and Office365, cloud storage, SharePoint, Exchange, Outlook). Students leave the course armed with the latest tools and techniques and prepared to investigate even the most complicated systems they might encounter. Nothing is left out – attendees learn to analyze everything from legacy Windows XP systems to just-discovered Windows 10 artifacts.

FOR500 is continually updated. This course utilizes a brand-new intellectual property theft and corporate espionage case that took over six months to create. You work in the real world and your training should include real practice data. Our development team used incidents from their own experiences and investigations and created an incredibly rich and detailed scenario designed to immerse students in a true investigation. The case demonstrates the latest artifacts and technologies an investigator might encounter while analyzing Windows systems. The incredibly detailed step-by-step workbook details the tools and techniques that each investigator should follow to solve a forensic case.

**MASTER WINDOWS FORENSICS –  
YOU CAN'T PROTECT WHAT YOU DON'T KNOW ABOUT**

### **Carlos Cajigas** *SANS Certified Instructor*



A native of San Juan, Puerto Rico, Carlos began his career with the West Palm Beach Police Department in Florida, first as a police officer and eventually as a digital forensics detective, examiner, and instructor specializing in computer crime investigations. During his law enforcement tenure, Carlos conducted examinations on hundreds of digital devices, from computers and mobile phones to GPS devices, and served as both a fact and expert witness. Today, Carlos is a senior incident response analyst at IBM, where he is responsible for responding to computer and network security threats for clients located in North and South America. In addition, he holds various certifications in the digital forensics field including EnCase Certified Examiner (ENCE), Certified Forensic Computer Examiner (CFCE) from IACIS, and the GIAC Certifications GCFE and GCFA. **@Carlos\_Cajigas**



## SANS Training Program for CISSP® Certification

### Six-Day Program

Tue, Sep 5 - Sun, Sep 10

9:00am - 7:00pm (Day 1)

8:00am - 7:00pm (Days 2-5)

8:00am - 5:00pm (Day 6)

46 CPEs

Laptop NOT Needed

Instructor: Jonathan Ham

### Who Should Attend

- > Security professionals who are interested in understanding the concepts covered on the CISSP® exam as determined by (ISC)²
- > Managers who want to understand the critical areas of information security
- > System, security, and network administrators who want to understand the pragmatic applications of the CISSP® eight domains
- > Security professionals and managers looking for practical ways the eight domains of knowledge can be applied to their current job



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### SANS MGT414: SANS Training Program for CISSP® Certification

is an accelerated review course that is specifically designed to prepare students to successfully pass the CISSP® exam.

MGT414 focuses solely on the eight domains of knowledge as determined by (ISC)² that form a critical part of the CISSP® exam. Each domain of knowledge is dissected into its critical components, and those components are then discussed in terms of their relationship with one another and with other areas of information security.

### Obtaining Your CISSP® Certification Consists of:

- > Fulfilling minimum requirements for professional work experience
- > Completing the Candidate Agreement
- > Review of your résumé
- > Passing the CISSP® 250 multiple-choice question exam with a scaled score of 700 points or greater
- > Submitting a properly completed and executed Endorsement Form
- > Periodic audit of CPEs to maintain the credential

**“I have taken several CISSP® prep courses in the last several years and this by far is the best. Finally I feel that I have the confidence to take the test.”**

-JERRY CARSE, SARUM, LLC

**“This course has been fantastic in terms of boiling down years of IT security trends and best practices into a week of learning.”**

-ERIC PAVLOV, INNO MARK COMMUNICATIONS

**“I think the course material and the instructor are very relevant for the task of getting a CISSP®. The overall academic exercise is solid.”**

-AARON LEWTER, AVAILITY



### Jonathan Ham *SANS Certified Instructor*

Jonathan is an independent consultant who specializes in large-scale enterprise security issues, from policy and procedure, through staffing and training, to scalable prevention, detection, and response technology and techniques. With a keen understanding of ROI and TCO (and an emphasis on process over products), he has helped his clients achieve greater success for over 20 years, advising in both the public and private sectors, from small start-ups to the Fortune 500. He's been commissioned to teach NCIS investigators how to use Snort, performed packet analysis from a facility more than 2000 feet underground, and chartered and trained the Cyber Incident Response Team for one of the largest U.S. civilian federal agencies. He has held the CISSP, GSEC, GCIA, and GCIH certifications, and is a member of the GIAC Advisory Board. A former combat medic, Jonathan still spends some of his time practicing a different kind of emergency response, volunteering and teaching for both the National Ski Patrol and the American Red Cross. [@jhamcorp](http://@jhamcorp)

## SANS Security Leadership Essentials for Managers with Knowledge Compression™

### Five-Day Program

Tue, Sep 5 - Sat, Sep 9

9:00am - 6:00pm (Days 1-4)

9:00am - 4:00pm (Day 5)

33 CPEs

Laptop Recommended

Instructor: G. Mark Hardy

### Who Should Attend

- > All newly appointed information security officers
- > Technically skilled administrators who have recently been given leadership responsibilities
- > Seasoned managers who want to understand what their technical people are telling them

**“MGT512 is one of the most valuable courses I’ve taken with SANS.**

**It really did help bridge the gap from security practitioner to security orchestrator.**

**Truly a gift!”**

**-JOHN MADICK,  
EPIQ SYSTEMS, INC.**

This completely updated course is designed to empower advancing managers who want to get up to speed quickly on information security issues and terminology. You won't just learn about security, you will learn how to manage security. Lecture sections are intense; the most common student comment is that it's like drinking from a fire hose. The diligent manager will gain the vital, up-to-date knowledge and skills required to supervise the security component of any information technology project. Additionally, the course has been engineered to incorporate the NIST Special Publication 800 (series) guidance so that it can be particularly useful to U.S. government managers and supporting contractors.

Essential security topics covered in this management track include network fundamentals and applications, power, cooling and safety, architectural approaches to defense in depth, cyber attacks, vulnerability assessment and management, security policies, contingency and continuity planning, awareness management, risk management analysis, incident handling, web application security, and offensive and defensive information warfare, culminating with our management practicum. The material uses Knowledge Compression,™ special charts, and other proprietary SANS techniques to help convey the key points of critical slides and keep the information flow rate at a pace senior executives demand every teaching hour of the course. The course has been evaluated and approved by CompTIA's CAQC program for Security+ 2008 to ensure that managers and their direct reports have a common baseline for security terminology and concepts. You will be able to put what you learn into practice the day you get back into the office.

### Knowledge Compression™

#### Maximize your learning potential!

Knowledge Compression™ is an optional add-on feature to a SANS class that aims to maximize the absorption and long-term retention of large amounts of data over a relatively short period of time. Through the use of specialized training materials, in-class reviews, examinations and test-taking instruction, Knowledge Compression™ ensures students have a solid understanding of the information presented to them. By attending classes that feature this advanced training product, you will experience some of the most intense and rewarding training programs SANS has to offer, in ways that you never thought possible!



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### G. Mark Hardy SANS Principal Instructor

G. Mark Hardy is founder and President of National Security Corporation. He has been providing cybersecurity expertise to government, military, and commercial clients for over 35 years, and is an internationally recognized expert and keynote speaker who has presented at over 250 events world-wide. He provides consulting services as a virtual CISO, expert witness testimony, and domain expertise in blockchain and cryptocurrency. He serves on the Advisory Board of CyberWATCH, an Information Assurance/ Information Security Advanced Technology Education Center of the National Science Foundation. Mark is a retired U.S. Navy captain and was entrusted with nine command assignments, including responsibility for leadership training for 70,000 sailors. A graduate of Northwestern University, he has a B.S. in computer science, a B.A. in mathematics, a master's degree in business administration, and a master's degree in strategic studies, and holds the GSLC, CISSP, CISM and CISA certifications. @g\_mark

# Bonus Sessions

Enrich your SANS training experience! Evening talks by our instructors and selected subject-matter experts help you broaden your knowledge, hear from the voices that matter in computer security, and get the most for your training dollar.

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## KEYNOTE: **The End of Banking as We Know It: How Crypto Currencies and Blockchain are Breaking Up a Centuries-Old Monopoly**

**G. Mark Hardy**

Are we finally ready to go mainstream with blockchain and alt-currency? Bitcoin got off to a slow start, but over \$1 billion was invested in blockchain startups this past year alone. Less unconventional technologies such as Apple Pay, Samsung Pay, and Android Pay (nee Google Wallet) compete against thousands of alternative crypto currencies that are struggling for attention, value, and survival. We'll look at this brave new world of electronic money to understand what it is, how it works, what it can (and cannot) do, and probabilities of success or failure. We'll examine spin-off technologies that use blockchain, and look into the mechanics behind emerging cryptographic payment systems. We'll even show you how to buy and sell Bitcoin – live on stage. In the face of this disruptive technology, will banks go the way of 35mm film, CRTs, and analog TV, or will we see a transformation of the global financial system in the next few years as cryptography and cybersecurity replace national currencies and bank vaults? Attend this SANS keynote and get the latest info on this essential topic.

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## **Virtualizing Forensic Images Using Free Tools in Linux**

**Carlos Cajigas**

Have you ever needed to boot a forensic image to preview the system in a live manner? Would you like to do it without changing a single bit? It is possible! In this session we will discuss the tools and steps required for converting the Donald Blake forensic image into a Virtual Machine (VM). This process is useful because it gives you the ability to boot an image of an OS drive into a VM, all while preserving the integrity of the image. All changes made by the OS are saved and stored to a cache file. Come see how you accomplish this using free tools under Linux Ubuntu. The presentation will include a live demo.

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## **Developers: Five Things I Want You to Keep Doing... So I Can Buy a New Boat!**

**Ronald Hamann**

I want a boat. If you guys will keep making these mistakes adding these “features,” I’ll keep getting billable hours and I can buy an even bigger boat! Join me for an overview of the most common development errors in web and desktop applications that cause major security flaws and loss of customer data. The goal is not a dry repeat of every threat lecture you’ve ever gotten but hopefully a non-dry discussion of what’s hitting your colleague’s apps right now, and the best defenses.

# Enhance Your Training Experience

Add an  
**OnDemand Bundle & GIAC Certification Attempt\***  
to your course within seven days  
of this event for just \$689 each.

SPECIAL  
PRICING



## Extend Your Training Experience with an **OnDemand Bundle**

- Four months of supplemental online review
- 24/7 online access to your course lectures, materials, quizzes, and labs
- Subject-matter-expert support to help you increase your retention of course material

***"The course content and OnDemand delivery method  
have both exceeded my expectations."***

**-ROBERT JONES, TEAM JONES, INC.**



## Get Certified with **GIAC Certifications**

- Distinguish yourself as an information security leader
- 30+ GIAC cybersecurity certifications available
- Two practice exams included
- Four months of access to complete the attempt

***"GIAC is the only certification that proves you have  
hands-on technical skills."***

**-CHRISTINA FORD, DEPARTMENT OF COMMERCE**

## MORE INFORMATION

[www.sans.org/ondemand/bundles](http://www.sans.org/ondemand/bundles)

[www.giac.org](http://www.giac.org)

## Protect Your Employees

Keep your organization safe with flexible computer-based training.

- |                      |   |
|----------------------|---|
| <b>End User</b>      | • Train employees on their own schedule                           |
| <b>CIP</b>           | • Modify modules to address specific audiences                    |
| <b>ICS Engineers</b> | • Increase comprehension – courses translated into many languages |
| <b>Developers</b>    | • Test learner comprehension through module quizzes               |
| <b>Healthcare</b>    | • Track training completion for compliance reporting purposes     |

Learn more about SANS Security Awareness at:  
**[securingthehuman.sans.org](http://securingthehuman.sans.org)**



**Change Human Behavior | Manage Risk | Maintain Compliance | Protect Your Brand**

**SANS**  
Technology  
Institute

## The best. Made better.

The SANS Technology Institute transforms the world's best cybersecurity training and certifications into a comprehensive and rigorous graduate education experience.

*"Joining the SANS Master's Program was probably one of the best decisions I've ever made."*

– John Hally, MSISE,  
EBSCO Information Services

### MASTER OF SCIENCE DEGREES

- Information Security Engineering: MSISE
- Information Security Management: MSISM

### GRADUATE CERTIFICATE PROGRAMS

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

### Tuition Reimbursement



Regional accreditation enables students to use most corporate tuition reimbursement plans.

The SANS Technology Institute is also approved to accept and/or certify Veterans for education benefits.

**[WWW.SANS.EDU](http://WWW.SANS.EDU) | [INFO@SANS.EDU](mailto:INFO@SANS.EDU)**

The SANS Technology Institute is accredited by The Middle States Commission on Higher Education (3624 Market Street, Philadelphia, PA 19104 – 267-284-5000), an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.  
GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at [www.benefits.va.gov/gibill](http://www.benefits.va.gov/gibill).

**GIAC**  
CERTIFICATIONS

Students earn industry-recognized GIAC certifications during most technical courses.

# SANS Training Formats

Whether you choose to attend a training class live or online, the entire SANS team is dedicated to ensuring your training experience exceeds expectations.

## Live Classroom Instruction

### Premier Training Events

Our most recommended format, live SANS training events feature SANS' top instructors teaching multiple courses at a single time and location. This allows for:

- Focused, immersive learning without the distractions of your office environment
- Direct access to SANS Certified Instructors
- Interacting with and learning from other professionals
- Attending SANS@Night events, NetWars tournaments, vendor presentations, industry receptions, and many other activities

Our premier live training events in North America, serving thousands of students, are held in Orlando, Washington DC, Las Vegas, New Orleans, and San Diego. Regional events with hundreds of students are held in most major metropolitan areas during the year. See page 12 for upcoming training events in North America.

### Summits

SANS Summits focus one or two days on a single topic of particular interest to the community. Speakers and talks are curated to ensure the greatest applicability to participants.

### Community SANS Courses

Same SANS courses, courseware, and labs taught by up-and-coming instructors in a regional area. Smaller classes allow for more extensive instructor interaction. No need to travel; commute each day to a nearby location.

### Private Classes

Bring a SANS Certified Instructor to your location to train a group of your employees in your own environment.

Save on travel and address sensitive issues or security concerns in your own environment.

## Online Training

SANS Online successfully delivers the same measured learning outcomes to students at a distance that we deliver live in classrooms. More than 30 courses are available for you to take whenever or wherever you want. Thousands of students take our courses online and achieve certifications each year.

### Top reasons to take SANS courses online:

- Learn at your own pace, over four months
- Spend extra time on complex topics
- Repeat labs to ensure proficiency with skills
- Save on travel costs
- Study at home or in your office

Our SANS OnDemand, vLive, Simulcast, and SelfStudy formats are backed by nearly 100 professionals who ensure we deliver the same quality instruction online (including support) as we do at live training events.

**“I am thoroughly pleased with the OnDemand modality. From a learning standpoint, I lose nothing. In fact, the advantage of setting my own pace with respect to balancing work, family, and training is significant, not to mention the ability to review anything that I might have missed the first time.”**

-Kevin E., U.S. Army

**“The decision to take five days away from the office is never easy, but so rarely have I come to the end of a course and had no regret whatsoever. This was one of the most useful weeks of my professional life.”**

-Dan Trueman, Novae PLC

# Employers need good talent. Veterans need good jobs. SANS VetSuccess Immersion Academy delivers both.

Introducing the SANS VetSuccess Immersion Academy, an intensive, accelerated program that provides the real-world training and certifications needed to fill critical jobs in cybersecurity.

**For employers**, the academy is a faster, more reliable, and less expensive way to find, train, certify, and employ highly qualified cybersecurity talent.

**For transitioning veterans**, the academy provides free accelerated training and certifications to quickly and effectively launch careers in cybersecurity.

Find out how your organization can benefit from hiring graduates or sponsoring an academy to meet your specific talent needs.

**Read the Pilot Program Results Report**  
**Visit [sans.org/vetsuccess](https://sans.org/vetsuccess)**

SANS

CyberTalent

IMMERSION ACADEMY



*Read the Pilot Program  
Results Report*  
**Visit [sans.org/vetsuccess](https://sans.org/vetsuccess)**



VetSuccess



## Future Training Events

**Columbia** . . . . . Columbia, MD . . . . . June 26 - July 1  
**Los Angeles – Long Beach** . . . . . Long Beach, CA . . . . . July 10-15



### SANSFIRE

Washington, DC July 22-29

**San Antonio** . . . . . San Antonio, TX . . . . . Aug 6-11  
**Boston** . . . . . Boston, MA . . . . . Aug 7-12  
**New York City** . . . . . New York, NY . . . . . Aug 14-19  
**Salt Lake City** . . . . . Salt Lake City, UT . . . . . Aug 14-19  
**Chicago** . . . . . Chicago, IL . . . . . Aug 21-26  
**Virginia Beach** . . . . . Virginia Beach, VA . . . Aug 21- Sep 1  
**Tampa – Clearwater** . . . . . Clearwater, FL . . . . . Sep 5-10  
**San Francisco Fall** . . . . . San Francisco, CA . . . . . Sep 5-10



### Network Security

Las Vegas, NV Sep 10-17

**Baltimore Fall** . . . . . Baltimore, MD . . . . . Sep 25-30  
**Rocky Mountain Fall** . . . . . Denver, CO . . . . . Sep 25-30  
**Phoenix-Mesa** . . . . . Mesa, AZ . . . . . Oct 9-14  
**Tysons Corner Fall** . . . . . McLean, VA . . . . . Oct 16-21  
**San Diego Fall** . . . . . San Diego, CA . . . . . Oct 30 - Nov 4  
**Seattle** . . . . . Seattle, WA . . . . . Oct 30 - Nov 4  
**Miami** . . . . . Miami, FL . . . . . Nov 6-11  
**San Francisco Winter** . . . . . San Francisco, CA . . . Nov 27 - Dec 2  
**Austin Winter** . . . . . Austin, TX . . . . . Dec 4-9



### Cyber Defense Initiative

Washington, DC Dec 12-19



## Future Summit Events

**Digital Forensics and IR** . . . . . Austin, TX . . . . . June 22-29  
**ICS & Energy** . . . . . Houston, TX . . . . . July 10-15  
**Security Awareness** . . . . . Nashville, TN . . . . . July 31 - Aug 9  
**Data Breach** . . . . . Chicago, IL . . . . . Sep 25 - Oct 2  
**Secure DevOps** . . . . . Denver, CO . . . . . Oct 10-17  
**SIEM & Tactical Analytics** . . . . . Scottsdale, AZ . . . . . Nov 28 - Dec 5



## Future Community SANS Events

Local, single-course events are also offered throughout the year via SANS Community. Visit [www.sans.org/community](http://www.sans.org/community) for up-to-date Community course information.

# Hotel Information

## Hyatt Regency Clearwater

301 South Gulfview Blvd

Clearwater, FL 33767

Phone: 727-373-1234

[www.sans.org/event/tampa-clearwater-2017/location](http://www.sans.org/event/tampa-clearwater-2017/location)

Feel the warm breeze, breathe in the fresh, salt air and step into the lobby of one of the most remarkable resorts along the Florida Gulf coast. Just steps away from the powdery-white sands and the turquoise-blue waters of the Gulf of Mexico, this Clearwater Beach resort offers world-class amenities, award-winning service and first-class event venues. Savor a sensual experience that puts you right on the shores of one of the world's best beaches at Hyatt Regency Clearwater Beach Resort and Spa.

### Special Hotel Rates Available

**A special discounted rate of \$179.00 S/D will be honored based on space availability.**

These rates are only available through **August 13, 2017**. A resort fee of \$25.00 is included in the discounted rate above for the nights of September 3-11, 2017. The fee includes use of resort activities and amenities. Additional services and discounts are included. Inquire on arrival for a full list.

If you are a SANS government attendee in need of a government-rated room, we have secured a block of rooms at the Holiday Inn Clearwater Beach, 0.5 miles from the Hyatt Regency. Please call **1-800-770-6461** and mention you are with the SANS Institute to make a reservation by **August 14, 2017**.

### Top 5 reasons to stay at the Hyatt Regency Clearwater

- 1 All SANS attendees receive complimentary high-speed Internet when booking in the SANS block.
- 2 No need to factor in daily cab fees and the time associated with travel to alternate hotels.
- 3 By staying at the Hyatt Regency Clearwater, you gain the opportunity to further network with your industry peers and remain in the center of the activity surrounding the training event.
- 4 SANS schedules morning and evening events at the Hyatt Regency Clearwater that you won't want to miss!
- 5 Everything is in one convenient location!

# Registration Information

Register online at [www.sans.org/tampa-clearwater](http://www.sans.org/tampa-clearwater)

We recommend you register early to ensure you get your first choice of courses.

Select your course and indicate whether you plan to test for GIAC certification. If the course is still open, the secure, online registration server will accept your registration. Sold-out courses will be removed from the online registration. Everyone with Internet access must complete the online registration form. We do not take registrations by phone.

## Pay Early and Save\*

Use code **EarlyBird17** when registering early

	DATE	DISCOUNT	DATE	DISCOUNT
Pay & enter code by	7-12-17	\$400.00	8-2-17	\$200.00

\*Some restrictions apply. Early bird discounts do not apply to Hosted courses.

## SANS Voucher Program

### Expand your training budget!

Extend your fiscal year. The SANS Voucher Program provides flexibility and may earn you bonus funds for training.

[www.sans.org/vouchers](http://www.sans.org/vouchers)

## Cancellation & Access Policy

If an attendee must cancel, a substitute may attend instead. Substitution requests can be made at any time prior to the event start date. Processing fees will apply. All substitution requests must be submitted by email to [registration@sans.org](mailto:registration@sans.org). If an attendee must cancel and no substitute is available, a refund can be issued for any received payments by **August 9, 2017**. A credit memo can be requested up to the event start date. All cancellation requests must be submitted in writing by mail or fax and received by the stated deadlines. Payments will be refunded by the method that they were submitted. Processing fees will apply.

Open a **SANS Account** today  
to enjoy these FREE resources:

## WEBCASTS



**Ask The Expert Webcasts** — SANS experts bring current and timely information on relevant topics in IT Security.



**Analyst Webcasts** — A follow-on to the SANS Analyst Program, Analyst Webcasts provide key information from our whitepapers and surveys.



**WhatWorks Webcasts** — The SANS WhatWorks webcasts bring powerful customer experiences showing how end users resolved specific IT Security issues.



**Tool Talks** — Tool Talks are designed to give you a solid understanding of a problem, and to show how a vendor's commercial tool can be used to solve or mitigate that problem.

## NEWSLETTERS



**NewsBites** — Twice-weekly high-level executive summary of the most important news relevant to cybersecurity professionals



**OUCH!** — The world's leading monthly free security-awareness newsletter designed for the common computer user



**@RISK: The Consensus Security Alert** — A reliable weekly summary of (1) newly discovered attack vectors, (2) vulnerabilities with active new exploits, (3) how recent attacks worked, and (4) other valuable data

## OTHER FREE RESOURCES

■ InfoSec Reading Room

■ Top 25 Software Errors

■ 20 Critical Controls

■ Security Policies

■ Intrusion Detection FAQs

■ Tip of the Day

■ Security Posters

■ Thought Leaders

■ 20 Coolest Careers

■ Security Glossary

■ SCORE (Security Consensus Operational Readiness Evaluation)

**[www.sans.org/account](http://www.sans.org/account)**