



## PECB Certified Lead SCADA Security Manager

**Become a professional on SCADA Security**

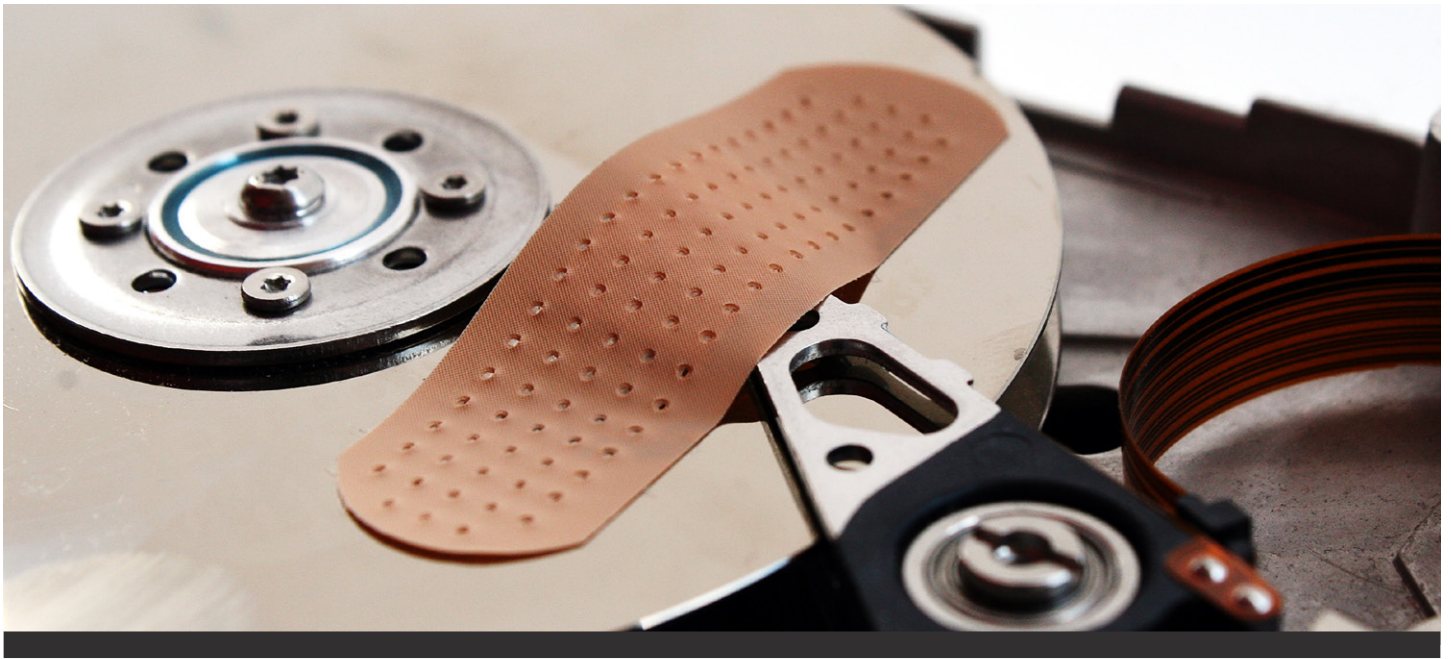
### **Why should you attend?**

Lead SCADA Security Manager training enables you to develop the necessary expertise to plan, design, and implement an effective program to protect SCADA systems. In addition, you will be able to understand common Industrial Control System (ICS) threats, vulnerabilities, risks related to the Industrial Control Systems (ICS) and techniques used to manage these risks. This training focuses on several aspects of security management and skills related to SCADA/ICS security.

Lead SCADA Security Manager training course is designed by industry experts with in-depth experience in SCADA and Industrial Control Systems Security. Unlike other trainings, this training course concentrates specifically on the knowledge and skills needed by a professional seeking to advice on, or manage risks related to SCADA environments and systems. Given the high profile nature and the significant impacts associated with such environments, a holistic professional approach to security is needed and that is exactly what this course is designed to provide.

In addition, to acquire the theoretical knowledge needed by a SCADA Security Manager, a comprehensive methodology for the implementation of a SCADA Security program is presented. Thus, at the end of this course, you will gain knowledge on how to effectively implement a security program for SCADA/ICS systems.

After mastering all the necessary concepts of SCADA Security, you can sit for the exam and apply for a "PECB Certified Lead SCADA Security Manager" credential. By holding a PECB Lead SCADA Security Manager Certificate, you will be able to demonstrate that you have the practical knowledge and professional capabilities to support and lead a team in managing SCADA Security.



## Who should attend?

- Security professionals interested in acquiring SCADA security professional skills
- IT professionals looking to enhance their technical skills and knowledge
- IT and Risk Managers seeking a more detailed understanding of ICS and SCADA systems
- SCADA system developers
- SCADA engineers and operators
- SCADA IT professionals

## Course agenda

Duration: 5 days

### Day 1 | Introduction to SCADA and ICS

- Course objectives and structure
- Fundamental principles and concepts of SCADA and SCADA Security
- Industrial Control Systems (ICS) characteristics, threats and vulnerabilities

### Day 2 | Designing a Security Program and Network Security Architecture

- SCADA Security program
- Risk assessment
- Network security architecture for SCADA systems

### Day 3 | Implementing ICS Security Controls, Incident Management and Business Continuity

- Implementation of security controls for SCADA systems
- Incident management
- Linkage to business continuity
- Monitoring, measurement analysis and evaluation

### Day 4 | Security testing of SCADA systems

- Testing principles
- Legal and ethical issues
- Penetration testing approaches
- Security testing of ICS
- Management of a penetration test
- Documentation of the test, quality review and report
- Maintaining a testing program
- Competence and evaluation of SCADA Security Managers
- Closing the training

### Day 5 | Certification Exam





## Learning objectives

- Understand and explain the purpose and risks to SCADA systems, Distributed Control Systems and Programmable Logic Controllers
- Understand the risks faced by these environments and the appropriate approaches to manage such risks
- Develop the expertise to support a pro-active SCADA Security program, including policies and vulnerability management
- Define and design network architecture incorporating defense in advanced security controls for SCADA
- Explain the relationship between management, operational and technical controls in a SCADA Security program
- Improve the ability to design resilient and high availability SCADA systems
- Learn how to manage a program of effective security testing activities

## Examination

Duration: 3 hours

The “PECB Certified Lead SCADA Security Manager” exam fully meets the requirements of the PECB Examination and Certification Programme (ECP). The exam covers the following competency domains:

- Domain 1** | Fundamental principles and concepts of SCADA and SCADA Security
- Domain 2** | Industrial Control Systems (ICS) characteristics, threats and vulnerabilities
- Domain 3** | Designing and developing an ICS Security Program based on NIST SP 800-82
- Domain 4** | Network security architecture for SCADA systems
- Domain 5** | Implementation of security controls for SCADA systems
- Domain 6** | Developing resilient and robust systems
- Domain 7** | Security testing of SCADA systems

For more information about exam details, please visit [Examination Rules and Policies](#).



## Certification

After successfully completing the exam, you can apply for the credentials shown on the table below  
You will receive a certificate once you comply with all the requirements related to the selected credential

For more information about SCADA certifications and the PECB certification process, please refer to the [Certification Rules and Policies](#).

Credential	Exam	Professional experience	SCADA Project Experience	Other requirements
<b>PECB Certified Provisional SCADA Security Manager</b>	PECB Certified Lead SCADA Security Manager exam or equivalent	None	None	Signing the PECB Code of Ethics
<b>PECB Certified SCADA Security Manager</b>	PECB Certified Lead SCADA Security exam or equivalent	<b>Two years:</b> One year of SCADA work experience	SCADA Security activities: a total of 200 hours	Signing the PECB Code of Ethics
<b>PECB Certified Lead SCADA Security Manager</b>	PECB Certified Lead SCADA Security exam or equivalent	<b>Five years:</b> Two years of SCADA work experience	SCADA Security activities: a total of 300 hours	Signing the PECB Code of Ethics

## General information

- Certification fees are included on the exam price
- Training material containing over 450 pages of information and practical examples will be distributed
- A participation certificate of 31 CPD (Continuing Professional Development) credits will be issued
- In case of exam failure , you can retake the exam within 12 months for free