



PECB Certified ISA/IEC 62443 Lead Implementer

Master implementation and management of industrial automation and control systems (IACS) security programs in alignment with the ISA/IEC 62443 standards

Why should you attend?

Cybersecurity threats targeting IACS are increasing in sophistication, scale, and impact. The most effective defense against these risks is the systematic implementation and management of industrial cybersecurity controls and best practices. In today's environment, strong IACS security is also a core expectation of regulators, customers, and other stakeholders.

This training course is designed to prepare participants to implement and manage an IACS security program based on the ISA/IEC 62443 series of standards. It provides a comprehensive understanding of the best practices, processes, and life cycle management principles required to establish, maintain, and continually improve an organization's industrial cybersecurity posture.

After attending the training course, you can take the exam. If you successfully pass it, you can apply for the "PECB Certified ISA/IEC 62443 Lead Implementer" credential, which demonstrates your ability and practical knowledge to implement and manage an IACS security program based on the requirements of the ISA/IEC 62443 standards.



Who should attend?

This training course is intended for:

- Managers, engineers, and consultants seeking to develop or enhance their competence in implementing IACS security programs
- Professionals responsible for or involved in IACS security activities who wish to deepen their understanding of the ISA/IEC 62443 series of standards
- Security practitioners and risk managers looking to strengthen their skills in applying industrial cybersecurity controls, assessing maturity, and managing IACS security
- Individuals pursuing a career in IACS cybersecurity who want to learn a comprehensive methodology for designing, implementing, and maintaining security programs aligned with ISA/IEC 62443

Course agenda

Duration: 5 days

Day 1 | Foundations of ISA/IEC 62443 and IACS security

- Training course objectives and structure
- Terms, definitions, and key technologies
- Purpose and scope
- Key concepts
- IACS networks

Day 2 | Security requirements, maturity models, and threat landscape

- System security requirements
- Maturity models
- Security levels and principles as defined in ISA/IEC 62443
- Threat landscape and actors
- Access control
- Supply chain management
- Audit and certifications
- Patching

Day 3 | Establishing and managing an IACS security program

- Introduction to the IACS security program
- IACS security program establishment
- Risk assessment
- Policy development
- IACS organization

Day 4 | Training, incident response, and sector-specific standards

- Training
- Incident response
- Testing IACS security
- Monitoring
- Other relevant standards
- Closing of the training course

Day 5 | Certification exam



Learning objectives

By the end of this training course, participants will be able to:

- Explain the fundamental concepts and principles of an industrial automation and control systems (IACS) security program based on the ISA/IEC 62443 series of standards
- Interpret the ISA/IEC 62443 requirements, recommendations, and technical reports from the perspective of an implementer
- Manage threats by implementing security controls, assessing maturity, securing assets and supply chains, and plan patching
- Design and maintain an IACS security program aligned with ISA/IEC 62443, assess and manage risks, and define clear security roles and responsibilities

Provide ongoing security awareness and training, monitor IACS environments for threats, conduct regular security testing, and respond swiftly to incidents

Examination

Duration: 3 hours

The "PECB ISA/IEC 62443 Lead Implementer" exam fully meets the PECB Examination and Certification Program (ECP) requirements. It covers the following competency domains:

- Domain 1** | Fundamental principles and concepts of industrial automation and control systems (IACS)
- Domain 2** | Application of ISA/IEC 62443 standards for uptime, resilience, and critical infrastructure protection

For specific information about the exam type, languages available, and other details, please visit the [List of PECB Exams and Exam Rules and Policies](#).



Certification

After passing the exam, you can apply for one of the credentials in the table below. You will receive a certificate once you fulfill all the requirements of the selected credential.

Credential	Exam	Professional experience	Project experience	Other requirements
ISA/IEC 62443 Provisional Implementer	PECB ISA/IEC 62443 Lead Implementer exam	None	None	Signing the PECB Code of Ethics
ISA/IEC 62443 Implementer		2 years (1 in industrial automation and control management)	200 hours	
ISA/IEC 62443 Lead Implementer		5 years (2 in industrial automation and control management)	300 hours	
ISA/IEC 62443 Senior Lead Implementer		10 years (7 in industrial automation and control management)	1.000 hours	

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

General information

- For candidates who complete a training, eLearning, or self-study course delivered by a PECB Partner, the training fee includes the first exam attempt, one free retake, the certification application fee, and the first year of the Annual Maintenance Fee (AMF). This cycle must be completed within 12 months from the course completion date for instructor-led training, or within 12 months from the purchase date for self-study and eLearning formats.
- Candidates will receive more than 450 pages of comprehensive training materials, including practical examples, exercises, and quizzes.
- An attestation of course completion worth 31 CPD (Continuing Professional Development) credits will be awarded to the candidate.
- If the initial exam is not passed, a free retake may be taken within 12 months of the course completion date. For self-study or eLearning courses, the 12-month period is calculated from the date of purchase.