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# Understanding OT Cybersecurity & IEC 62443- Bengaluru- Training Workshop



Join the 7<sup>th</sup> Batch. Register Now.

Venue: Bengaluru

(Hotel Southern Star, Lavelle Road)

Date: 23<sup>rd</sup> and 24<sup>th</sup> January 2025

**Register Now** 



## What is this training event all about?

OT is short for Operational Technology. These are computer based systems that control physical objects and parameters in the real world. Although these systems do process data, their main function is to monitor and control physical objects and parameters. Some examples of OT systems include:

- \* Industrial Automation and Control Systems (including DCS/PLC/SCADA/SIS)
- \* Building Automation Systems
- \* Heating, Ventilation & Airconditioning (HVAC) Control Systems
- \* Ship Steering & Control Systems, Marine Port cranes
- \* Electrical Grid Management/Electrical Distribution SCADA systems
- \* Automated Warehouse Stacking Systems

There are more such systems and they are in many different industrial sectors.

#### Real Life Exercises

This training event is not all talk.

Participate in real life exercises in the workshop including the following:

- a) Evaluate an OT architecture for cyber resilience-spot weaknesses and vulnerabilities & modify it to become more resilient
- b) Develop a new OT CSMS (Cyber Security Management System)
- c) Red Team/Blue Team Tabletop exercise to attack/defend an OT system
- d) Evaluate an electronic Device for OT Cyber Security

# Some Participants in earlier workshops & feedback





Earlier batches were conducted in Mumbai (multiple times), Baroda and Dahej. Participants from marquee organizations such as GACL, Toyo Engg, Thyssenkrupp, HCL Technologies, Schneider, Worley and others have participated in earlier workshops.



Abhisam's OT Cybersecurity workshops and self-paced e-learning courses have seen participation from several hundreds of professionals from all over the world including from several marquee organizations. Here's a sampling of the excellent feedback from a section of the participants.

Thanks to this workshop, I will now be able to define cybersecurity requirements & specifications very well for my client for the next project as well conduct risk assessments effectively Participant from Worley



Great knowledge gained about OT Security. It will help protect our DCS from cyber attacks

Participant from Gujarat Alkalies and Chemicals I was able to very well understand the different parts of IEC 62443 and how to apply the clauses of different parts-Participant from Thyssenkrupp

Exciting real life examples and Case Studies-Participant from Toyo Engineering

# Why is OT Cybersecurity different from IT cybersecurity?

Both OT systems and IT systems are computer-based systems that may be vulnerable to cyberattacks. A cyber-attack on an IT system may result in loss of data, information and perhaps money; however, an attack on an OT system may result in not only loss or theft of data but may also lead to physical consequences such as fires, explosions, loss of containment, equipment damage, harm to people and harm to the environment.

Many OT systems that exist today are insecure from the design stage itself, since it was never envisaged that they would be the target of cyberattacks. Additionally, the priorities of defending OT systems and IT systems are different, so the strategies and techniques are also different. For IT systems



confidentiality of data is a priority whereas for OT systems, availability & safety are priorities. Furthermore, OT systems may be a few generations older than IT systems and the cyber security tools commonly used to protect IT systems may not be suitable for protecting OT systems.

Additionally, the standards that govern OT systems (such as IEC 62443) are different from IT cybersecurity standards.

#### Who Should attend?

Any technical professional who has some work experience in working with any IT system or OT system can attend. Participants should have a basic understanding of computers, networking and preferably be familiar with typical industrial operations. Some typical attendee profiles are:

- \* Instrumentation & Automation Professionals
- \* IT Heads (CIOs) from manufacturing or Critical Infrastructure or Marine operations or Transportation or similar organizations having cyber-physical systems
- \* IT Cybersecurity Professionals including CISOs who wish to understand OT security in more detail
- \* IT Cybersecurity Auditors
- \* Smart OT Device Developers & Evaluators
- \* Process Safety Professionals
- \* Industrial Plant or Process Engineers, Plant Managers
- \* Electrical Engineers involved in Electrical SCADA/ Electrical Grid/ Distribution/Load Dispatch/ Sub stations
- \* Cybersecurity Management consultants

#### What will be covered?

The following topics will be covered.

- 1. Introduction to Operational Technology (OT) systems.
- 2. Differences between OT security and IT security.



- 3. Basic Concepts of OT security- Threats, Vulnerabilities & Attacks
- 4. Case Study of an OT attack
- 5. Evaluating OT System architectures for vulnerabilities and weaknesses
- 6. Introduction to CSMS
- 7. Overview of different standards related to OT cybersecurity
- 8. Introduction to IEC 62443 & Changed Structure in 2024
- 9. Overview of following (published) parts of IEC 62443
  - IEC 62443-1-1
  - IEC 62443-2-1
  - IEC 62443-2-3
  - IEC 62443-2-4
  - IEC 62443-3-1
  - IEC 62443-3-2
  - IEC 62443-3-3
  - IEC 62443-4-1
  - IEC 62443-4-2
- 10. Carrying out an OT Security Risk Assessment
- 11. Tabletop Exercises- Red /Blue Team game, Role Play for Product evaluation according to IEC 62443-4-1

#### About Abhisam

Abhisam is a global provider of e-learning courses & certifications for technical professionals in the Manufacturing, Oil & Gas, Chemicals, Power, Electronics, EPC, Logistics, IT, Industrial Automation sectors, with many marquee organizations as customers. Since 2003, Abhisam has pioneered the use of technology in skill upgradation and competency management. Abhisam's CICP® (Certified Industrial Cybersecurity Professional) program is used by leading companies such as IBM, FLSmidth, SASOL, Black & Veatch, CEMEX and many others to build competency of their employees in OT cybersecurity worldwide.

## How to Register?

The investment is Rs. 18,000/- per participant plus GST @18%.

Group Discount: 15% for 3 or more participants in a group.

For Individuals, please visit the link below. (Limited Seats, book early to get in



before doors close).

https://in.explara.com/e/understanding-ot-security-iec62443-bengaluru/

For organizations wishing to nominate, please contact us for Invoicing.

#### More Information?

Contact us at <a href="mailto:sales@abhisam.com">sales@abhisam.com</a> or Call us on +91 9664404771

### Will I get a Certificate?

A Certificate of Participation will be provided that will state what has been covered in the two day training event. If you would like to have a Certificate of Competency and a title, then you can consider joining the CICP® program.

# What is the CICP® program?

The CICP® program is our flagship Professional Certification program. The Certified Industrial Cybersecurity Professional (CICP®) is a self-paced fully online course that is popular all over the world. It has been taken by hundreds of professionals from all over the world, including those from different areas such as Asset Owners, EPC companies, IT consultants, Automation vendors, independent cybersecurity companies and more.

On completion of all modules of this course, you will earn the title of CICP® that you can affix to your name such as for example John Q. Public, CICP® . You also earn a Certificate of Competency, the CICP® certificate and electronic badge that you can display on LinkedIn.

Where can I get more information about OT Cybersecurity? Please visit the Abhisam website at <a href="https://www.abhisam.com/cybersecurity-information/">https://www.abhisam.com/cybersecurity-information/</a> for more information about OT Cybersecurity and IEC 62443