Institute for Security and Safety (ISS) at the Brandenburg University of Applied Sciences

ONLINE Training Course on

INDUSTRIAL CYBERSECURITY

TRAINING COURSE OUTLINE

COURSE DESCRIPTION

Title	Industrial Cybersecurity
Objective	To present concepts of ICS and typical attack vectors in ICS environment complementing this knowledge with appropriate response tactics.
Dates	July 13, 2021, 2-5 p.m. CEST
Duration	3 hours
Registration deadline	13 July
Training fees	FREE
Course code	21OI26647MUL-E

DESCRIPTION OF THE TRAINING COURSE

This course will provide audience with unique expertise in the area of critical infrastructure cyber security. The course will cover typical threats and vulnerabilities and industrial control systems.

LEARNING OUTCOMES

As a result of the course, participants will know:

- what is difference between IT and ICS security;
- what are main technologies used in ICS;
- what could be consequences of poor handled Incidents in industrial systems environment.

TARGET POPULATION

The course will be necessary for all employees and managers within organizations with specific OT systems.
Regulator and national authorities should also attend this course to be able to react on Incidents, which are outside of licensee responsibilities, such as APT.
Members of CERTs/CSIRTs will benefit, if need more experience on industrial applications.

ENTRY REQUIREMENTS

Understanding of IT systems and communication principles will be required.

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Dmytro Cherkashyn	d.cherkashyn@uniss.org

TRAINING COURSE CONTENTS

1. Introduction to industrial control systems (ICS) and SCADA:
   - Difference between IT and OT
   - Types
   - Functions
   - Applications
   - Design
   - Communication
   - Protocols
   - Operation
2. ICS cybersecruty:
   - Vulnerabilities
   - Attack vectors
   - Secure design
   - Compensatory controls
3. Incident Response on ICS

TRAINING COURSE SCHEDULE / AGENDA

Time	Topic
July 13, 2021 2 p.m.- 2-30 p.m. CEST	Basics of ICS and SCADA technology
July 13, 2021 2-30 p.m.- 3 p.m. CEST	Comparison of IT and OT(ICS) technology
July 13, 2021 3 p.m.- 3-30 p.m. CEST	Attack taxonomies and case studies
July 13, 2021 3-30 p.m.- 4-30 p.m. CEST	Importance of Incident Response
July 13, 2021 4-30 p.m.- 5 p.m. CEST	Q&A and discussion

METHODOLOGY (Didactic Approach)

The course will include a series of Power Point presentations and discussion on provided topics.

TRAINING COURSE COORDINATION

Course coordinator:	**ITU coordinator:**
Name: Dmytro Cherkashyn Email address: d.cherkashyn@uniss.org	Name: AnaMaria Meshkurti Email address: ana.maria.meshkurti@itu.int

COVID-19 MEASURES

The course is planned to take place fully virtually.

REGISTRATION

ITU Academy portal account

Registration and payment should be made online at the ITU Academy portal.
To be able to register for the course you **MUST** first create an account in the ITU Academy portal at the following address: https://academy.itu.int/user/register

Training course registration

When you have an existing account or created a new account, you can register for the course online at the following link: https://academy.itu.int/training-courses/full-catalogue/industrial-cybersecurity

You can also register by finding your desired course in our training catalogue https://academy.itu.int/training-courses/full-catalogue