Name of the course: Cybersecurity for Industrial Control Systems

Teacher: Giovanni Gaggero giovanni.gaggero@unige.it

Duration of the course: 16 hours

Credits: 4

Language: English

Aims of the course: After the course, the student will be able to recognize the main cybersecurity issues in industrial control system, and to evaluate the cyber risk related to the technologies they are working on. Furthermore, the student will be able to recognize potential research gaps related to industrial cybersecurity in their own field of research.

Teaching programme:

1. Fundamentals of Industrial Control System Cybersecurity
2. Defense-in-Depth paradigm
3. Risk Assessment methodologies
4. Standards and Best Practices: the IEC 62443
5. Use case: the evolution of power systems
6. Intrusion Detection Systems and Anomaly Detection

Exam modality:
Presentation of a research project

Bibliography:
Notes provided by the teacher (in English)
NIST SP 800-82 Guide to Industrial Control Systems (ICS) Security