

---

## Basics of Cybersecurity in the factory automation (ST-SECFAB)

---

### Short Description

---

The training provides an overview of protection concepts against current cyber threats in industry and how industrial plants and machines can be effectively protected using a comprehensive approach. The participants should learn how and which security measures can be implemented using concrete examples using the security portfolio of Siemens Digital Industries (DI).

### Objectives

---

In the course, participants acquire knowledge of which countermeasures and portfolio elements can be used to protect industrial plants and machines against cyber threats.

### Target Group

---

Machine builders, system integrators, plant operators  
Cybersecurity Officers, those responsible for cybersecurity  
Project manager, project staff  
Technologists  
Project planners, programmers  
Commissioning engineer

### Content

---

Awareness and understanding of cyber security threats & risks for industrial production facilities  
Demonstration of security concepts, standards and best practices adapted and optimized for the industry based on use cases and by using the automation portfolio of Siemens Digital Industries.  
How the integrated security functions in the DI Security Portfolio can be configured and used in combination with a holistic security concept.  
What does the Defense in Depth security concept include?  
Getting started with user administration with TIA Portal  
Controller security – System integrity for SIMATIC Controllers  
An introduction to authentication and encryption mechanisms  
Secure communication mechanisms of the SIMATIC CPU S7-1500  
Network security – the cell protection concept and the implementation of remote maintenance access  
Plant security – physical and organizational security measures

### Prerequisites

---

Basic knowledge about industrial automation  
Basic knowledge about industrial communication

### Type

---

Face-to-face training

### Duration

---

2 days

### Language

---

mu