

# Cyber Security – Implement Network and System Security («P3S»)

This course gives you an up-to-date and well-founded overview of technical IT security in networks and distributed systems.

**Duration:** 2 days

**Price:** 1'900.–

**Course documents:** Digicomp Courseware

## Content

- Practical use of the course materials
  - Presentation of the practice-oriented implementation concept
  - Integration of the BSI IT-Grundschutz into the security considerations
- Latest Cyber Threats
  - From non-targeted attack to APT
  - Threat overview and useful sources of information
  - Malware and its defense today
  - Overview of useful measures against Ransomware (Kryptotrojaner)
- Fundamentals of Cryptography
  - Overview symmetric and asymmetric cryptography
  - Basics of Public Key Infrastructures
- System security measures
  - System Hardening Overview
  - Malware defense through application whitelisting and exploit protection
  - Defense against targeted physical attacks (HID,BAD-USB,..)
- Network security measures
  - Basics of VPN technologies (IPSec, L2TP and SSL/TLS)
  - Email Encryption Basics
  - Basics of WLAN security (attacks on WLANs)
  - Basics of perimeter security (firewalling)
- Access control
  - Basics of Identification, Authentication and Authorization
  - Use of secure passwords (attacks on passwords)
  - Use of two factor solutions
  - Basics of Access Control Models (DAC, MAC and RBAC)
- Control and monitoring
  - Security and vulnerability scanning
  - Interpret vulnerabilities (CVE databases)
  - Basics of using IDS/IDP solutions (detecting attacks)

## Key Learnings

- Knowledge of the current scenarios of attacks on networks and systems
- Knowledge of current attacks from LAB simulations
- Keeping your knowledge up-to-date with well-founded sources
- Suggesting current cyber security measures to protect the network and systems
- Knowledge of practical tools for implementation

## Target audience

This practice-oriented course is intended to enable information security managers, information system architects, administrators, system engineers, developers, project managers and IT managers to implement network and system security.

## Requirements

Experience in projects and in the daily use of information technologies, IT systems and networks. Basic knowledge of information security, analogous to the following course, is also required:

- [Information Security Fundamentals \(«P1S»\)](#)

## Additional information

The protection of the network and the systems connected to it is one of the current challenges of every security professional. This course provides you with the necessary tools for this essential task. This is the last of three courses («P1S», «P2S», «P3S») in preparation for the international certification as a «CompTIA Security+ Professional». This course can also be attended without taking a certification.

## Further courses

- [Cyber Security Tester – Hands-on Foundation \(«HAK»\)](#)
- [Next Generation Firewall – Hands-on Basic \(«FIRE1»\)](#)

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-security/cyber-security-offense/course-cyber-security-implement-network-and-system-security](http://www.digicomp.ch/courses-security/cyber-security-offense/course-cyber-security-implement-network-and-system-security)