

## Network Architectures («NETZAR»)

This module teaches concepts and network architecture for IT systems. It trains theoretical knowledge and skills for defining requirements, evaluating solutions and designing and implementing networks.

**Duration:** 1 day

**Price:** 950.–

**Course documents:** Powerpoint slides as PDF

### Content

- Requirements for IT networks:
  - Operational aspects
  - Technical aspects (focus)
  - Legal aspects
- Concepts and architectures of IT networks:
  - Layer models
  - Topologies
  - Protocols (focus on Internet, TCP/IP)
- Design of IT networks:
  - Conversion of requirements into solution variants
  - Evaluation of solutions
- Implementation of IT networks:
  - available hardware / software
  - physical and virtual implementations on site and in the cloud
  - Security aspects
- Management of IT networks:
  - Problems, objectives and approaches to solutions.
  - SNMP
  - Software Defined Networking (SDN) (Control Plane / Data Plane)

For the exercises and the comprehension of examples, each participant has his own virtual exercise environment with several VMs in our computer center.

### Key Learnings

- Defining requirements for IT networks
- Understanding the concepts, architectures and protocols of IT networks
- Understanding the design of IT networks
- Understanding and evaluating IT network implementations

### Methodology & didactics

This course is structured as an interactive seminar in which knowledge and skills are acquired primarily in joint group work with the supervision and support of the trainer.

### Target audience

This course is aimed at IT decision makers as well as IT managers of all industries.

## Requirements

Basic knowledge of business IT.

- Basics of data communication («DAC»)
- TCP/IP Basics («TCN»)

## Further courses

- TCP/IP Advanced («TCA»)

## 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-software-engineering/it-architecture/system-infrastructure-architecture/course-network-architectures](https://www.digicomp.ch/courses-software-engineering/it-architecture/system-infrastructure-architecture/course-network-architectures)