Course Networking and Cyber Security

Includes:

- Labsoft course "Network technology"
- 2 x Experiment cards "Networking (Server/Client)"
- Network switch
- USB-to-Ethernet adapter
- 3 x CAT 5 connection cables

Course Contents:

- Network architecture and topology
  - Computer network
  - Star topology
  - Tree topology
  - CSMA/CD
  - ISO/OSI layer model
  - MAC address
  - Peer-to-peer network
  - Server-client network
- Introduction to network standards
  - Categories
  - Network cables
  - Connectors
- Introduction to Internet Protocol
  - TCP IP
  - Addressing
  - Masking
  - Packaging & routing
- Important protocols for layer 3-4
  - ICMP
  - TCP
  - UDP & SSDP
- Network services and protocols for layer 5-7
  - DHCP
  - FTP
  - HTTP (WEB-Server)
  - Streaming
- Cyber security
  - Open ports
  - Data transfer via FTP
  - Encryption by SSH
  - DDoS attack

- Course duration: approximately 8 hours