Modern optical technologies reach the Terabit range and revolutionize the network world. The course takes an inventory and shows development trends. It discusses the major changes in the fields of optical fiber types, access, and backbone, as well as optical networks and network protection and gives a compact overview of the innovative potential of high-performance, optical technologies. Students receive the know-how required for the planning, operation, and troubleshooting in WDM networks. Hands-on exercises on fiber optic analysis and troubleshooting via OTDR measurement serve to consolidate the imparted knowledge. The commissioning of a WDM trunk rounds off the practical part of the course.

Course Contents
- Optical Transmission and Interfaces
- Optical Fibers: MMF, SMF, DSF, NZ-DSF, DCF
- Connectors and their Designs
- Attenuation, Dispersion, and Dispersion Correction
- Application of Optical Repeaters, such as EDFA, RAMAN
- Laser: Protection Classes and Operational Safety
- Optical Technologies: 10G/40G/100G-Ethernet, 8G/16/32G Fibre Channel
- CWDM, DWDM, WWDM, and Application Scenarios
- OADMs, Optical Switches
- Optical Networks: Setup, Operation, Network Protection Mechanisms
- Vendor Overview: Who is responsible for which task?
- OTNs, Optical Transport Networks, for Protected Optical Transmission
- Exercises on network design, acceptance measurement, and troubleshooting

E-Book You will receive the comprehensive documentation package of the ExperTeach Networking series – printed documentation, e-book, and personalized PDF! As online participant, you will receive the e-book and the personalized PDF.

Target Group
The course addresses employees of the carriers, enterprise network operators, and Internet service providers. It also specifically addresses users of networks with high data volumes and traffic by providing an overview of the market situation and of the development trends.

Prerequisites
A profound knowledge of Synchronous Digital Hierarchy will facilitate the understanding of the course contents. Basic know-how of the optical transmission sector will also be helpful.

This Course in the Web
You can find the up-to-date information and options for ordering under the following link: www.experteach-training.com/go/OHSN

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A List of Abbreviations

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