TELECOMMUNICATIONS & 5G · TRANSMISSION

Optical Transport Networks: SDH, OTN & DWDM

شبكات النقل الضوئي: SDH وOTN وDWDM

3 days | Advanced | In person · Live online | Arabic & English

Understand the optical backbone that carries traffic between cities and data centres. You will learn SDH and OTN framing and multiplexing, DWDM wavelengths and amplifiers, protection and restoration, and how packet and optical layers work together in modern transport networks.

WHO IT'S FOR

Transmission and backbone engineers, network operations staff and network planners.

BEFORE YOU START

No formal prerequisites: bring curiosity and a willingness to practise.

WHAT YOU'LL LEARN

- Describe SDH and OTN framing and multiplexing.
- Explain DWDM channels, amplifiers and optical budgets.
- Compare protection and restoration schemes.
- Describe how packet and optical layers interwork.
- Read alarms and performance data on transport networks.

Training a team?
We run this course privately for organizations, on your dates, at your site or ours, and adapt the examples to your network and equipment.

COURSE OUTLINE

5 modules, 3 days

MODULE 01

Transport basics

- The role of transport networks
- PDH and SDH

MODULE 02

OTN

- OTN frame structure
- Multiplexing and mapping
- Monitoring and alarms

MODULE 03

DWDM

- Wavelengths and channels
- Amplifiers and dispersion
- ROADMs

MODULE 04

Protection and restoration

- Linear and ring protection
- Mesh restoration

MODULE 05

Packet and optical together

- IP over DWDM
- Operations and monitoring

ALSO IN TRANSMISSION

GNSS & GPS Fundamentals, **Microwave Link Planning with Pathloss**, **Microwave Transmission Links**, **Satellite Communications**, **Submarine Cable Systems**

Enrol or ask a question

In person in Damascus · Live online · Private training for teams. Tell us your goals and we will send the dates, the fees and the right level for you.

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