



Training Program:
SDH (Synchronous digital Hierarchy) & DWDM Networks

INTRODUCTION

Synchronous Digital Hierarchy (SDH) and Synchronous Optical Network (SONET) refer to a group of fiber-optic transmission rates that can transport digital signals with different capacities.

This course discusses synchronous transmission standards in world public telecommunications networks. It will cover their origins, features, applications, and advantages, as well as their impact on network design and synchronous signal structure. This course provides detailed knowledge on the SONET/SDH and DWDM networking elements, and their technologies, required to build evolving transport networks. It provides you with a comprehensive business and technical foundation in optical networks, services and applications development. Further, this course provides advanced SONET/SDH and DWDM topics.

The course participants shall be comfortable with the basic concepts of a public telecommunications network, with its separate functions of transmission and switching, and shall be aware of the context for the growth of broadband traffic. No specific prior knowledge is assumed about hardware or software technologies.

WHO SHOULD ATTEND

This course is designed to provide a detailed knowledge on SONET/SDH/DWDM for telecommunications engineers, technical managers, consultants, communications professionals, software engineers, system engineers, network professionals, and IT professionals

CERTIFICATE

BTS attendance certificate will be issued to all attendees completing minimum of 80% of the total course duration.

COURSE OBJECTIVES

Upon the successful completion of this course, participants will be able to:

- Apply an up-to-date knowledge and skills of latest technology in synchronous digital hierarchy (SDH) & dense wavelength division multiplexing (DWDM)
- Implement fiber optics technologies and explore SONET/SDH architectures & services
- Identify SONET frame format structure, payload, synchronization & timing and analyze SONET/SDH network element, architecture, topologies and configurations
- Practice span engineering and manage SONET/SDH networks & services and IP, ATM, WDM and DWDM integration
- List DWDM components and architecture and practice digital voice and plesiochronous digital hierarchy (PDH)
- Apply SONET/SDH protocols & concepts, path overhead and payload mappings
- Analyze SONET/SDH network elements & application, synchronization and multiplexing