# Course Outline FE-1081

### Introduction to Legacy SONET Testing

This one-day course covers the basics of legacy SONET technology and its test applications using EXFO's FTB/IQS-8115/8120/8130 SONET/SDH Analyzers. This training session discusses both theoretical and practical aspects.

#### Content

#### Part 1: Legacy SONET - An Overview

- > DSn networks and their limitations
- > Benefits of synchronization
- > SONET networks
  - > Definition
  - > Rates and format
  - > Network elements
  - > Configurations and protection schemes

#### Part 2: Legacy SONET Testing Applications using EXFO's FTB/IQS-8115/8120/8130

- Continuity test
- > BER test
- > Error sectionalization
- > Signal auto-detection
- > Alarm and error processing
- > Round-trip delay
- Synchronization
- > Protection switching
- > Remote management
- Scripting

#### **Pre-Requisites**

- > Basic comprehension of physics and mathematics
- Basic knowledge of telecommunications

#### Methodology

The first part of this course consists of lectures using PowerPoint presentations and demonstrations, while the second part consists of specific hands-on testing exercises using EXFO's FTB/IQS-8115/8120/8130 SONET/SDH Analyzers.



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Typical Schedule (can be modified to accommodate attendees' working schedule)

INTRODUCTION TO LEGACY SONET TESTING			
8:00 a.m. to 12:00 p.m.	Part 1: Theory Overview of legacy SONET		
12:00 p.m. to 1:00 p.m.	Lunch		
1:00 p.m. to 5:00 p.m.	Part 2: Hands-On Session <ul> <li>Legacy SONET testing applications using EXFO's FTB/IQS-8115/8120/8130</li> </ul>		

#### Documentation

Attendees will receive a binder containing copies of presentations and other printed handouts, if applicable. When available, a CD containing the electronic version (PDF format) of the presentation, as well as related application notes, will also be provided.

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