

## Course Description

Learn the essential skills and procedures you need to monitor and troubleshoot E7 GPON optical networks. In this class, you will learn how to monitor and detect issues in E7-2 nodes and ONTs using Calix Management System (CMS) and the CLI. This course applies to both the E7-20 and E7-2.

### Objectives

- Understand GPON Optical Distribution Network (ODN) fundamentals
- Configure Optical Monitoring
- Troubleshoot and rectify common GPON issues

### Who should attend?

- Anyone who manages, maintains, troubleshoots, and installs the E7 GPON networks
- Network Operations
  - Customer Support
  - Field Technicians
  - Engineering/Planner

### Prerequisite Training and Skills

- Completion of Introduction to E7, Configuring E7 Transport, and Configuring E7 Services eLearning courses, or equivalent knowledge and experience
- Understanding of telecommunications and engineering standards
- Knowledge of Ethernet and Optical networks

### Training Resources in My Calix

- [Learning Solutions](#)
- [Certifications](#)

## Delivery Mode

### FOR ILT USE

This instructor-led course consists of learning content delivered by an experienced Calix instructor in a virtual classroom or at a physical location. Learners are provided with access to a live lab environment for hands-on lab exercises that reinforce the course content.

Lessons	Topics
<b>01</b> E7 GPON Introduction	Gigabit Passive Optical Network E7 GPON Equipment Overview E7-2 and E7-20 GPON Cards GPON OIMs and OIM Reach Characteristics Classroom Topology
<b>02</b> E7 Optical Monitoring	What is E7 optical monitoring Optical parameters on the OLT and ONTs Deploying Optical Monitoring Getting Status from the OLT Configuring optical monitoring Understanding optical alarms and events
<b>03</b> Troubleshooting GPON Networks	Detecting component optical issues OLT, ONT and fiber issues Using alarms and logs to detect issues Isolating service related issues Using Performance Monitoring to isolate issues
<b>04</b> Using Calix Resources	Calix Resource Center The Calix Community Contacting TAC