

## **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.

Course Duration: 4 hours





Lessons		Topics
01	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
02	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
03	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
04	Using Calix Resources	Calix Resource Center
		The Calix Community
		Contacting TAC