

Course Name: Fundamentals of SS7

Course Overview: All signaling information between switches and central offices have migrated to SS7 or Signaling System #7. Initially this appears to be a complex technology, but it is actually quite simple. TESSCO has designed this one day course to provide an overview of SS7 technology and standards. All SS7 equipment, links, protocols, and service parameters are discussed as well as basic maintenance and troubleshooting methods utilized to detect potential problems.

Course Length: 1 day

Who should Attend:

- Wireless Carriers
- Telephone Companies
- Tower Companies
- Contracting Organizations
- Field Engineers
- Data Engineers
- Installers/Technicians
- Management staff
- Planners

You will Learn:

- Basic signaling concepts
- SS7 Technology Overview
- The different types of SS7 Equipment
- SS7 Protocols
- SS7 Maintenance Techniques
- SS7 Messages/Terms and how these messages are used
- Where SS7 will be positioned in the Future

Prerequisites: None.

Course Fees:

- 1 day course at TESSCO Location \$475 per person
- 1 day course at your location \$3,000 for up to 10 attendees

Customizable Course: Yes

Course Content:

Signaling Overview

- Purpose of Signaling
- In-Band Signaling
- Out-of-Band Signaling
- Common Channel Signaling (CCS)
- Background of SS7
- Comparison to other technologies
- Industry Trends
- Standards

SS7 Overview

- The Intelligent Network (IN)
- Technology overview
- Features
- Benefits

SS7 Equipment

- SSP
- STP
- SCP
- Links

SS7 Protocols

- MTP (1, 2, 3)
- ISUP
- SNM
- SCCP/TCAP

SS7 Maintenance

- Test Equipment
- Link Monitoring
- Message Analysis
- Call Tracing SS7 Messages/Terms
- FISU, MSU, LSSU
- FCS/CRC
- ACM, IAM, ANM, RLC, REL
- DPC/OPC
- Cause Codes

SS7 in the Future

- Next Steps for Intelligent Signaling Networks
- Interaction w/ VoIP