



## ANSI-41 MAP

**Course Length:** 2 days

**Description:** The ANSI-41 MAP is a mobile application standard that provides a means to perform intersystem handoff, delivery of short messages and roaming. This course examines the call flow scenarios and the TCAP structure defined in the standard. Also shown, is how the various network entities communicate with each other.

### **Course Outline:**

- **Overview and Intersystem Handoff**
  - ✓ Interconnection between the wireline and wireless networks
  - ✓ A brief background of the ANSI-41 standard
  - ✓ How mobiles are identified
  - ✓ The network reference model
  - ✓ Intersystem handoff call flows
  
- **Signaling Protocols**
  - ✓ Signaling concepts
  - ✓ SS7 protocol and ANSI-41 MAP
  - ✓ The lower layers – MTP and SCCP
  - ✓ General TCAP structures
  - ✓ TCAP message construction
  - ✓ ANSI-41 operations and parameters
  
- **Automatic Roaming**
  - ✓ Concept of location
  - ✓ Roaming and ANSI-41 MAP
  - ✓ Roaming operations
  - ✓ Roaming Scenarios:
    - Mobile authentication and registration
    - Voice features
    - Short Message Service
  - ✓ OA&M
  - ✓ ANSI-41 Enhancements
    - WIN
    - WNP
    - E911
    - Over-the-Air Activation
    - Next release of ANSI-41



Exercises are provided throughout the course, reinforcing a practical understanding of the material. This gives the student practice in analyzing the protocol and understanding how the data being sent and received is used.

**What You Will Learn:** The student will gain valuable knowledge of how mobile services are accomplished in today's ANSI-41 networks. This includes how to analyze and decipher critical parameters within the SS7 protocol structure and the Mobile Application Part (MAP) application. You will also learn important call flow scenarios of how network entities communicate vital information in a mobile network.

**Who Will Benefit From This Course:** ANSI-41 MAP is designed for individuals responsible for or involved with network planning, switch maintenance, central office engineering, interconnection, technical support or network operations. Though this course is designed for wireless providers, those involved in the wireline interconnect area should also find it beneficial.

**Course Prerequisites:** A basic knowledge of mobile telephony and signaling would be helpful, but not essential.

**Instructors:** All of our instructors have years of experience developing and teaching technical courses at Telcordia Technologies (Bellcore) Learning Services in Lisle, IL.. They are all SS7 certified and CompTIA CTT+ Certified Professionals.

*\* This course is provided through special agreement with Telecom Training Associates, Inc.*