



# Fundamentals of GPRS Technology

## Course Overview

### Course Numbers:

Agilent Training Center: H7216A #205

Onsite Training: H7216B #205

## Learn the fundamentals of GPRS technology.

### Course Overview

GPRS Technical Training is a program designed to teach the fundamentals of GPRS technology. GPRS technology will lead to tomorrow's "Packet Revolution."

### What you will learn

- an introductory overview of GSM cellular technology
- an explanation of the existing GSM Network building blocks and air interface.
- an explanation of how the GSM system evolves into the GPRS technology.

### Specifications

#### Course type:

User/application training

#### Audience

All personnel involved with GSM networks, systems and operations and who are in the process of implementing a GPRS network.

### Prerequisites

Participants should have attended these classes: "GSM Basics"; "Cell Planning and Implementation"; and "GSM Advanced"; or have a thorough understanding of the GSM Network.

### Course Length

Two days

### Course Format

Classroom; 100% lectures

### Delivery Method

*Scheduled* (at Agilent training locations), or

*Dedicated* (at customer's site)

To save you time and travel, many Agilent courses can be delivered at your site. Agilent can provide required equipment; or save money by furnishing your own.



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## Detailed Course Agenda

### GSM Overview

- GSM network architecture
- GSM air interfaces.

### Need for Data

- Data drivers in the "Packet World"

### GSM to GPRS – Transition

- GPRS features and services
- GSM to GPRS comparison

### GPRS Network Architecture

- Individual elements
- SGSN
- GGSN
- GPRS interfaces

### GPRS Protocols

- GTP
- SNDCP
- LLC
- BSSGP
- RLC
- MAC

### GPRS Air Interface

- Frame Structure
- Logical Channels
- Channel Coding

### Session Management

- Mobility Management and Routing
- Attachment–detachment procedures
- PDP context
- Location Management

### Quality of Service

- Simultaneous use of circuit and packet calls

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