UMTS RRM Procedure	47 Min.

LEARNING OBJECTIVE:

Upon completing the course, the participant will be able to:

➢ Understand the RRM Flow
➢ Understand the Concept of bearer, power control
➢ Dig deep into the handover Process
➢ Examine the Admission Control Process

COURSE OBJECTIVE:

This course provides a learning path to understand the multiple Radio Resource Management (RRM) procedures in UMTS. Our main focus will be to understand the admission control, handover control, power control and its types, resource management and look at how admission control (AC), packet scheduler (PS) and load control (LC) algorithm will interact for a User equipment (UE). We will also see in depth the scheduling procedure and how it is implemented in case of Non real time (NRT) and Real time (RT) traffic.

WHO SHOULD ATTEND:

This course is designed to provide a general overview for strategic or technical managers, consultants, communications professionals, network professionals and others who plan to work in UMTS wireless network.

TARGET AUDIENCE:

RF Engineers, UMTS Engineers, Drive Test Engineers.

INSTRUCTIONAL METHODS:

Lectures in Classroom, Virtual Classroom trainings, discussion, Questions & Answers. All participants will also receive comprehensive course materials.

COURSE OUTLINE:

1. Overview

1.1 Overview and objectives
1.2 UTRA Radio Interface Protocol Layers
1.3 Radio Bearer

1.4 RRM Procedure
1.5 RRM Aims and Functionality
1.6 RRM Methods
1.7 Power Control and its Classification
1.8 Open Loop Power Control

UMTS RRM Procedure

47 Min.

2. Basics

2.1 Uplink Open Loop Power Control

2.2 Downlink Open Loop Power Control

2.3 Power Control on Downlink Common Channel

2.4 Closed Loop Power Control (Inner Loop)

2.5 Closed Loop Power control (Outer Loop)

2.6 Handover (HO)

2.7 Handover Reasons

2.8 Handover Process

3. Intermediate

3.1 Handover Algorithm

3.2 Network types

3.3 Comparison Between Soft and Hard Handover

3.4 Admission Control (AC)

3.5 Throughput Based CAC (TCAC)

3.6 Throughput Based Admission Control

3.7 Wideband Power based Admission Control

3.8 Logical Dependencies

4. Advanced

4.1 Load control

4.2 Packet Scheduling

4.3 RT and NRT Traffic

4.4 Time Division Scheduling

4.5 PS – Code Division Scheduling

4.6 PS – Transmission Power based scheduling

4.7 PS – Packet Scheduling with QoS Differentiation

Evaluation and feedback of the participants

Maximum number of participants:	15
Duration:	47 Min.