Module Name	Key Knowledge	Training Methods	Duration Working days)
GSM Basic Principles	GSM Overview. GSM Network Structure. Interfaces and Protocols . GSM Radio Channels. Voice Processing and Key Radio Technology.	Lecture	1.0
ZTE BTS Introduction.	ZXSDR BTS Introduction Card functionality. Power Consumption. Signal flow. BTS Configuration.(LMT)	Lecture	0.5
	ZXG10 iBSC Introduction Card functionality.	Lecture	0.5
W-CDMA Basics	W-CDMA Key technologies Handover control Power control Admission Contol Load Control	Lecture	1.0
GSM Radio Network Survey	Site survey summary Preparation of site survey Working flow of site survey Data audit and documents output Site survey tools Site survey instances Use of GPS, Compass and altimeter	Lecture	1.0
GSM Radio Parameter	Radio Parameters Summarized Network Identifying Parameters System Control Parameters Cell Selection Parameters Network Function Parameters GSM Typical Timers	Lecture	1.0
Antenna Systems & radiowave propagation	1.Outline of antennas 2. Technical data 3. Principles of antenna selection.	Lecture	0.5

GSM Radio Network Planning	Network Planning Information Gathering Capacity Planning Coverage Planning Site distribution & Survey Coverage Emulation Frequency Planning	Lecture	0.5
GSM Radio Network Optimization	Overview of Radio Network Optimization Introduction of Network Performance Evaluation Flow of Radio Network Optimization Daily Network Optimization Tasks Common Network Optimization Problem	Lecture	0.5
GSM signaling Procedure	GSM System signaling Model GSM System signaling Application GSM System Basic signaling Procedure	Lecture	0.5
Coverage planling	Coverage Principles Link budget ZTE BTS configuration Propagation model	Lecture	1.0
GSM Traffic Statistics Analysis	ZTE Traffic Statistic Overview Definitions Of Main Traffic Statistic Parameters Position And Analyze Problems Making Use Of Traffic Statistic Traffic Statistic Analysis Cases	Lecture	0.5
Network Planning & Network Optimization cases	1. Voice Problem Analysis 2. Coverage Quality Problem Analysis 3. TCH Call Drop Analysis 4. Interference Analysis 5. TCH Assignment Problem Analysis 6. Congestion Analysis	Lecture	1.0
RF Survey Practical Part-1	Radion Network Design process, Transmission Network Design Process,EMF Survey Process, How to use GPS, Magnetic Compass, Altimeter?	Lecture + Practical	1.0
RF Survey Practical Part-2	Working with RF S/W Tools Quantum Gis, RL Tool, Path Loss, Global Mapper, Google Earth. RF Survey Report Preration	Lecture + Practical	1.0

Drive Test Practical Batch-1	TEMS Software Explanation/ Kit Connectivity/Logfile Recording,Playing, Analysis/Site Visit Batch wise	Lecture + Practical	1.0
Drive Test Practical Batch-2	TEMS Software Explanation/ Kit Connectivity/Logfile Recording,Playing, Analysis/Site Visit Batch Wise	Lecture + Practical	1.0
Post Processing Work	Actix S/W Tool Explanation, Logfile Analysis,DT Report Making,N/W Probs. Identification & Suggesting Solutions	Lecture + Practical	1.0
Radio Network Planning Practical	Fundamentals of N/W Planning, Atoll S/W tool Explanation, Site Planining for Live Network (Green Field N/W & Existing N/W)	Lecture + Practical	1.0
Radio Network Planning Practical	Atoll S/W tool Database Prepration, Frequency /Neighbour Planining for Live Network/ Post Processing Work on Atoll	Lecture + Practical	1.0