

Training Proposal for IBS and Small Cell Product Technical Training Project



HUAWEI
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2015

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1 Training Solution

1.1 Background Introduction

1.2 Overview

1.3 IBS and Small Cell Product Technical Training Path

O&M Engineer	RNP/RNO Engineer								
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LTE eRAN3.0/6.0/7.0 Micro BTS Operation and Maintenance Training									
ILT	3D								
WCDMA Micro BTS Network Planning & Optimization Training									
ILT	1D								
<table border="1"> <tr> <td>WCDMA RAN14.0/15.0/16.0 Micro BTS Operation and Maintenance</td> <td></td> </tr> <tr> <td>ILT</td> <td>3D</td> </tr> </table>	WCDMA RAN14.0/15.0/16.0 Micro BTS Operation and Maintenance		ILT	3D	<table border="1"> <tr> <td>LTE Micro BTS Network Planning & Optimization Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>1D</td> </tr> </table>	LTE Micro BTS Network Planning & Optimization Training		ILT	1D
WCDMA RAN14.0/15.0/16.0 Micro BTS Operation and Maintenance									
ILT	3D								
LTE Micro BTS Network Planning & Optimization Training									
ILT	1D								
<table border="1"> <tr> <td>LTE eRAN6.0/7.0 Lampsite Operation and Maintenance Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>3D</td> </tr> </table>	LTE eRAN6.0/7.0 Lampsite Operation and Maintenance Training		ILT	3D	<table border="1"> <tr> <td>Lampsite Planning and Design Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>1D</td> </tr> </table>	Lampsite Planning and Design Training		ILT	1D
LTE eRAN6.0/7.0 Lampsite Operation and Maintenance Training									
ILT	3D								
Lampsite Planning and Design Training									
ILT	1D								
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WCDMA RAN15.0/16.0 Lampsite Operation and Maintenance Training									
ILT	3D								
SingleDAS Planning & Design Training									
ILT	1D								
<table border="1"> <tr> <td>WCDMA/LTE SRAN8.0/9.0 Lampsite Operation and Maintenance Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>3D</td> </tr> </table>	WCDMA/LTE SRAN8.0/9.0 Lampsite Operation and Maintenance Training		ILT	3D	<table border="1"> <tr> <td>Wireless Network Indoor Coverage Planning and optimization Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>5D</td> </tr> </table>	Wireless Network Indoor Coverage Planning and optimization Training		ILT	5D
WCDMA/LTE SRAN8.0/9.0 Lampsite Operation and Maintenance Training									
ILT	3D								
Wireless Network Indoor Coverage Planning and optimization Training									
ILT	5D								
<table border="1"> <tr> <td>DBS3900 IBS Operation and Maintenance Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>3D</td> </tr> </table>	DBS3900 IBS Operation and Maintenance Training		ILT	3D	<table border="1"> <tr> <td>WCDMA Indoor Coverage Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>2D</td> </tr> </table>	WCDMA Indoor Coverage Training		ILT	2D
DBS3900 IBS Operation and Maintenance Training									
ILT	3D								
WCDMA Indoor Coverage Training									
ILT	2D								
	<table border="1"> <tr> <td>LTE Indoor Coverage Training</td> <td></td> </tr> <tr> <td>ILT</td> <td>2D</td> </tr> </table>	LTE Indoor Coverage Training		ILT	2D				
LTE Indoor Coverage Training									
ILT	2D								

1.4 Required Training Programs

IBS and Small Cell Product Technical Training For this project, the whole training solution is designed into the following programs. List of Training Program(s) for Small Cell Product Technical Training Project:

Training Program	Program Level	Duration (workdays)	Training Location	Class Size
IBS				
Wireless Network Indoor Coverage Planning and optimization Training	III	5		6 ~ 16
WCDMA Indoor Coverage Training	III	2		6 ~ 16
LTE Indoor Coverage Training	III	2		6 ~ 16
Micro BTS				
WCDMA RAN16.0 Micro BTS Operation and Maintenance Training	II	3		6 ~ 16
WCDMA RAN16.0 Micro BTS Network Planning and Optimization Training	III	1		6 ~ 16
LTE eRAN7.0 Micro BTS Product Technical Training	II	3		6 ~ 16
LTE eRAN7.0 Micro BTS Network Planning and Optimization Training	III	1		6 ~ 16
WCDMA RAN15.0 Micro BTS Operation and Maintenance Training	II	3		6 ~ 16
WCDMA RAN15.0 Micro BTS Network Planning and Optimization Training	III	1		6 ~ 16
LTE eRAN6.0 Micro BTS Product Technical Training	II	3		6 ~ 16
LTE eRAN6.0 Micro BTS Network Planning and Optimization Training	III	1		6 ~ 16
LTE eRAN3.0 Micro Product Technical Training	II	3		6 ~ 12
WCDMA RAN14.0 Micro BTS Operation and Maintenance Training	II	3		6 ~ 12
Lampsite				
UMTS/LTE SRAN9.0 Lampsite Operation and Maintenance Training	II	3		6 ~ 16
WCDMA RAN16.0 Lampsite Operation and Maintenance	II	3		6 ~ 16

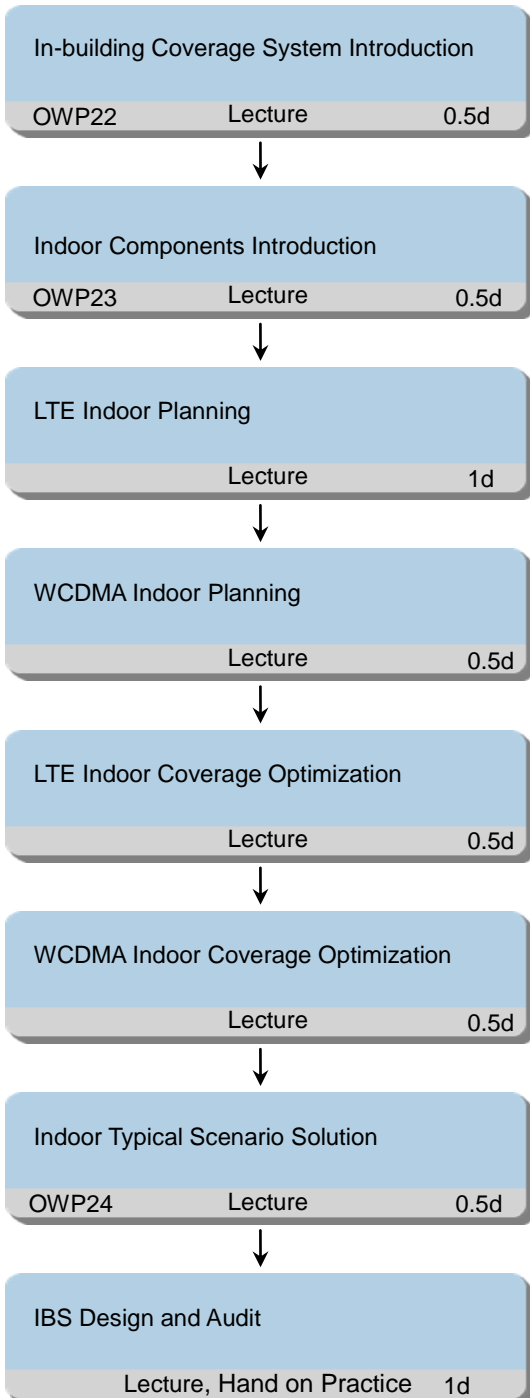
Training				
LTE eRAN7.0 Lampsite Operation and Maintenance Training	II	3		6 ~ 16
UMTS/LTE SRAN8.0 Lampsite Operation and Maintenance Training	II	3		6 ~ 16
WCDMA RAN15.0 Lampsite Operation and Maintenance Training	II	3		6 ~ 16
LTE eRAN6.0 Lampsite Operation and Maintenance Training	II	3		6 ~ 16
Lampsite Planning and Design Training	III	1		6 ~ 16
DBS3900 IBS				
DBS3900 IBS Operation and Maintenance Training	II	3		6 ~ 12
DBS3900 IBS Planning & Design Training	III	1		6 ~ 12

Level Description: I : Basic Course II : Intermediate Course III: Advanced Course IV: Expert Course

1.5 IBS

1.5.1 Wireless Network Indoor Coverage Planning and optimization Training

Training Path



Target Audience

Planning Engineers
System Technicians

System Engineers

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Describe the structure of indoor coverage
- Describe the functions of common components for indoor coverage
- Describe the functions of repeaters
- Describe the method of LTE indoor capacity planning
- Describe the method of WCDMA indoor capacity planning
- Describe the method of LTE indoor coverage planning
- Describe the method of WCDMA indoor coverage planning
- Describe the method of LTE indoor transmission planning
- Describe the method of WCDMA indoor transmission planning
- Describe the method of LTE indoor coverage optimization
- Describe the method of WCDMA indoor coverage optimization
- Describe the method of indoor and outdoor inter-operation
- Describe the stadium coverage solution
- Describe the metro coverage solution
- Describe the airport coverage solution
- Describe the resident location coverage solution
- Describe the commercial building coverage solution
- Describe the campus coverage solution
- Describe the indoor system design process and key points

Training Content

In-building Coverage System Introduction

- In-building Coverage System Introduction
 - In-building Coverage System Trend and Challenge
 - In-building Coverage System Solution
 - In-building Coverage Key Points
- Common Components for Indoor Coverage
- Repeater Introduction
 - Working Principles
 - The KPIs of Repeater
 - The Classification of Repeater
 - The Application of Repeater
 - Installation and Commissioning

Indoor Coverage Planning and Design

- Indoor Coverage Survey and Design

-
- Indoor Coverage Survey and Design Process
 - Indoor Coverage Survey
 - Indoor Coverage Design Basis
 - Indoor Coverage System Design
 - LTE Indoor Planning
 - LTE Indoor Planning Procedure
 - LTE Indoor Radio Link Budget
 - LTE Indoor Capacity Dimensioning
 - LTE Indoor Transmission Dimensioning
 - LTE Indoor Cell Parameter Planning
 - WCDMA Indoor Planning
 - WCDMA Indoor Planning Procedure
 - WCDMA Indoor Radio Link Budget
 - WCDMA Indoor Capacity Dimensioning
 - WCDMA Indoor CE Dimensioning
 - WCDMA Indoor Iub Dimensioning

Indoor Coverage Optimization

- UMTS In-building Coverage Optimization
 - Indoor Coverage Network Optimization Conception
 - Solution Evaluation
 - RF Optimization
 - Service Performance Optimization
- UMTS IBS Indoor and Outdoor Inter-Optimization Solution
 - Overview
 - KPI Evaluation of the Indoor Distribution System
 - Indoor and Outdoor RF Inter-Optimization
 - Service Performance Optimization
- LTE In-building Coverage Optimization
 - Indoor Coverage Network Optimization Conception
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Indoor Coverage Solution

- Stadium Coverage Solution
 - Requirement of Stadium Coverage Solutions
 - Huawei Stadium Coverage Solution
 - Key Points in Coverage Solution Design

-
- Successful Cases
 - Metro Coverage Solution
 - The Key Demands Of Metro Coverage
 - Huawei Metro tunnel Coverage Solution
 - Successful Cases
 - Airport Coverage Solution
 - The Key Demands of Airport Coverage
 - Huawei Airport Coverage Solution
 - Successful Cases
 - Resident Location Coverage Solution
 - Requirement of Resident Location Coverage Solutions
 - Huawei Resident Location Coverage Solutions
 - Key Points in Coverage Solution Design
 - Successful Cases
 - Commercial Building Coverage Solution
 - Brief Introduction
 - Huawei Commercial Coverage Solution
 - Key Points in Coverage Solution Design
 - Successful Cases
 - Campus Coverage Solution
 - Campus Scenarios Analyze
 - Huawei Campus Coverage Solution
 - Successful Cases

IBS Design and Audit

- Indoor System Design Process
- Indoor System Design Key Points
- IBS Solution Audit

Duration

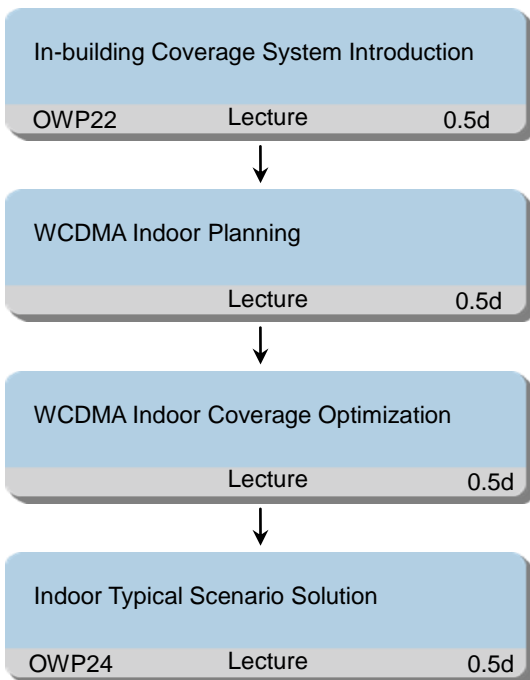
5 working days

Class Size

Min 6, Max 12

1.5.2 WCDMA Indoor Coverage Training

Training Path



Target Audience

Planning Engineers
System Technicians
System Engineers

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Describe the structure of indoor coverage
- Describe the method of WCDMA indoor capacity planning
- Describe the method of WCDMA indoor coverage planning
- Describe the method of WCDMA indoor transmission planning
- Describe the method of WCDMA indoor coverage optimization
- Describe the method of indoor and outdoor inter-operation
- Describe the stadium coverage solution
- Describe the metro coverage solution
- Describe the airport coverage solution
- Describe the resident location coverage solution
- Describe the commercial building coverage solution

-
- Describe the campus coverage solution

Training Content

In-building Coverage System Introduction

- In-building Coverage System Introduction
 - In-building Coverage System Trend and Challenge
 - In-building Coverage System Solution
 - In-building Coverage Key Points

Indoor Coverage Planning and Design

- Indoor Coverage Survey and Design
 - Indoor Coverage Survey and Design Process
 - Indoor Coverage Survey
 - Indoor Coverage Design Basis
 - Indoor Coverage System Design
- WCDMA Indoor Planning
 - WCDMA Indoor Planning Procedure
 - WCDMA Indoor Radio Link Budget
 - WCDMA Indoor Capacity Dimensioning
 - WCDMA Indoor CE Dimensioning
 - WCDMA Indoor Iub Dimensioning

Indoor Coverage Optimization

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 - Solution Evaluation
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 - Service Performance Optimization
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 - Indoor and Outdoor RF Inter-Optimization
 - Service Performance Optimization

Indoor Coverage Solution

- Stadium Coverage Solution
 - Requirement of Stadium Coverage Solutions
 - Huawei Stadium Coverage Solution
 - Key Points in Coverage Solution Design
 - Successful Cases
- Metro Coverage Solution
 - The Key Demands Of Metro Coverage
 - Huawei Metro tunnel Coverage Solution
 - Successful Cases
- Airport Coverage Solution

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- The Key Demands of Airport Coverage
 - Huawei Airport Coverage Solution
 - Successful Cases
 - Resident Location Coverage Solution
 - Requirement of Resident Location Coverage Solutions
 - Huawei Resident Location Coverage Solutions
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 - Commercial Building Coverage Solution
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 - Huawei Commercial Coverage Solution
 - Key Points in Coverage Solution Design
 - Successful Cases
 - Campus Coverage Solution
 - Campus Scenarios Analyze
 - Huawei Campus Coverage Solution
 - Successful Cases

Duration

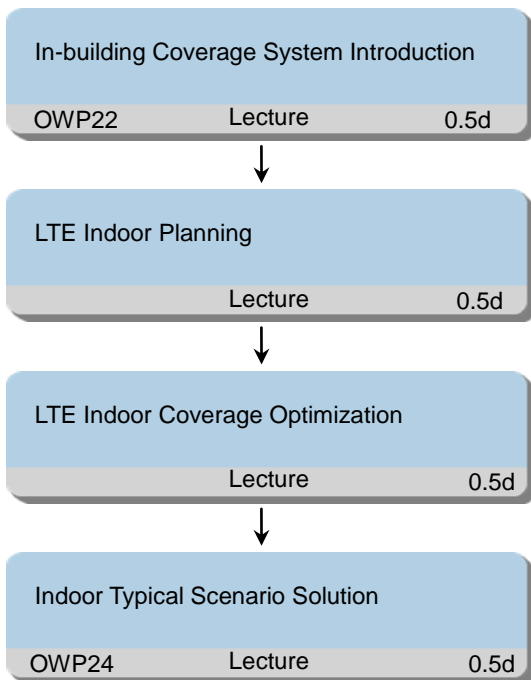
2 working days

Class Size

Min 6, Max 12

1.5.3 LTE Indoor Coverage Training

Training Path



Target Audience

Planning Engineers
System Technicians
System Engineers

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Describe the structure of indoor coverage
- Describe the method of LTE indoor capacity planning
- Describe the method of LTE indoor coverage planning
- Describe the method of LTE indoor transmission planning
- Describe the method of LTE indoor coverage optimization
- Describe the method of indoor and outdoor inter-operation
- Describe the stadium coverage solution
- Describe the metro coverage solution
- Describe the airport coverage solution
- Describe the resident location coverage solution
- Describe the commercial building coverage solution

-
- Describe the campus coverage solution

Training Content

In-building Coverage System Introduction

- In-building Coverage System Introduction
 - In-building Coverage System Trend and Challenge
 - In-building Coverage System Solution
 - In-building Coverage Key Points

Indoor Coverage Planning and Design

- Indoor Coverage Survey and Design
 - Indoor Coverage Survey and Design Process
 - Indoor Coverage Survey
 - Indoor Coverage Design Basis
 - Indoor Coverage System Design
- LTE Indoor Planning
 - LTE Indoor Planning Procedure
 - LTE Indoor Radio Link Budget
 - LTE Indoor Capacity Dimensioning
 - LTE Indoor Transmission Dimensioning
 - LTE Indoor Cell Parameter Planning

Indoor Coverage Optimization

- LTE In-building Coverage Optimization
 - Indoor Coverage Network Optimization Conception
 - Solution Evaluation
 - RF Optimization
 - Service Performance Optimization
- LTE IBS Indoor and Outdoor Inter-Optimization Solution
 - Overview
 - KPI Evaluation of the Indoor Distribution System
 - Indoor and Outdoor RF Inter-Optimization
 - Service Performance Optimization

Indoor Coverage Solution

- Stadium Coverage Solution
 - Requirement of Stadium Coverage Solutions
 - Huawei Stadium Coverage Solution
 - Key Points in Coverage Solution Design
 - Successful Cases
- Metro Coverage Solution
 - The Key Demands Of Metro Coverage
 - Huawei Metro tunnel Coverage Solution
 - Successful Cases
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- The Key Demands of Airport Coverage
 - Huawei Airport Coverage Solution
 - Successful Cases
 - Resident Location Coverage Solution
 - Requirement of Resident Location Coverage Solutions
 - Huawei Resident Location Coverage Solutions
 - Key Points in Coverage Solution Design
 - Successful Cases
 - Commercial Building Coverage Solution
 - Brief Introduction
 - Huawei Commercial Coverage Solution
 - Key Points in Coverage Solution Design
 - Successful Cases
 - Campus Coverage Solution
 - Campus Scenarios Analyze
 - Huawei Campus Coverage Solution
 - Successful Cases

Duration

2 working days

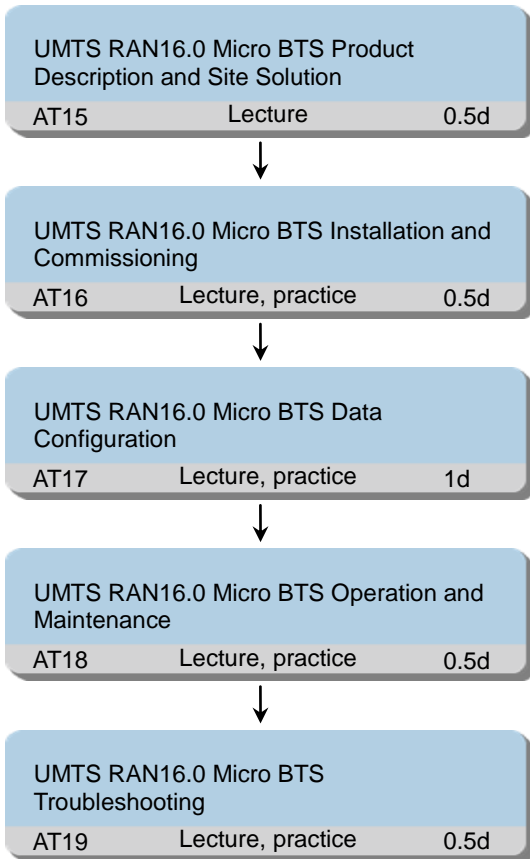
Class Size

Min 6, Max 12

1.6 Micro BTS

1.6.1 WCDMA RAN16.0 Micro BTS Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide UMTS RAN16.0 Micro BTS BTS3902E and BTS3803E Product description, installation
- Commissioning, data configuration, operation and maintenance and troubleshooting training.

Training Content

AT15 UMTS RAN16.0 Micro BTS Product Description and Site Solution

-
- UMTS RAN16.0 Micro BTS3803E Product Description and Site Solution
 - Describe the UMTS RAN16.0 Micro BTS Product Description and Site Solution
 - UMTS RAN16.0 Micro BTS3902E Product Description and Site Solution
 - Describe the UMTS RAN16.0 Micro BTS Product Description and Site Solution

AT16 UMTS RAN16.0 Micro BTS Installation and Commissioning

- UMTS RAN16.0 Micro BTS Installation and Commissioning
 - Describe the UMTS RAN16.0 Micro BTS Installation and Commissioning

AT17 UMTS RAN16.0 Micro BTS Data Configuration

- UMTS RAN16.0 Micro BTS Data Configuration
 - Describe the UMTS RAN16.0 Micro BTS Data Configuration
- UMTS RAN16.0 Micro BTS Data Configuration Practice Guide
 - Describe the UMTS RAN16.0 Micro BTS Data Configuration Practice in the lab

AT18 UMTS RAN16.0 Micro BTS Operation and Maintenance

- UMTS RAN16.0 Micro BTS Operation and Maintenance
 - Describe the UMTS RAN16.0 Micro BTS Operation and Maintenance
- UMTS RAN16.0 Micro BTS Operation and Maintenance Practice Guide
 - Describe the UMTS RAN16.0 Micro BTS Operation and Maintenance practice in the lab

AT19 UMTS RAN16.0 Micro BTS Troubleshooting

- UMTS RAN16.0 Micro BTS Troubleshooting
 - Describe the UMTS RAN16.0 Micro BTS Troubleshooting

Duration

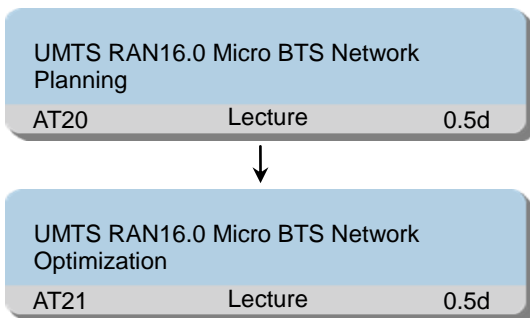
3 working days

Class Size

Min 6, Max 16

1.6.2 WCDMA RAN16.0 Micro BTS Network Planning and Optimization Training

Training Path



Target Audience

UMTS Network Design Engineer
Network Planning Engineer
Network Optimization Engineer

Prerequisites

- Successful completion of the following courses:
- WCDMA System Overview

Objectives

On completion of this program, the participants will be able to:

- Provide UMTS RAN16.0 Micro BTS Micro BTS network planning and optimization training.

Training Content

AT20 UMTS RAN16.0 Micro BTS Network Planning

- UMTS RAN16.0 Micro BTS Network Planning
 - Describe the UMTS RAN16.0 Micro BTS Network Planning

AT21 UMTS RAN16.0 Micro BTS Network Optimization

- UMTS RAN16.0 Micro BTS Network Optimization
 - Describe the UMTS RAN16.0 Micro BTS Network Optimization

Duration

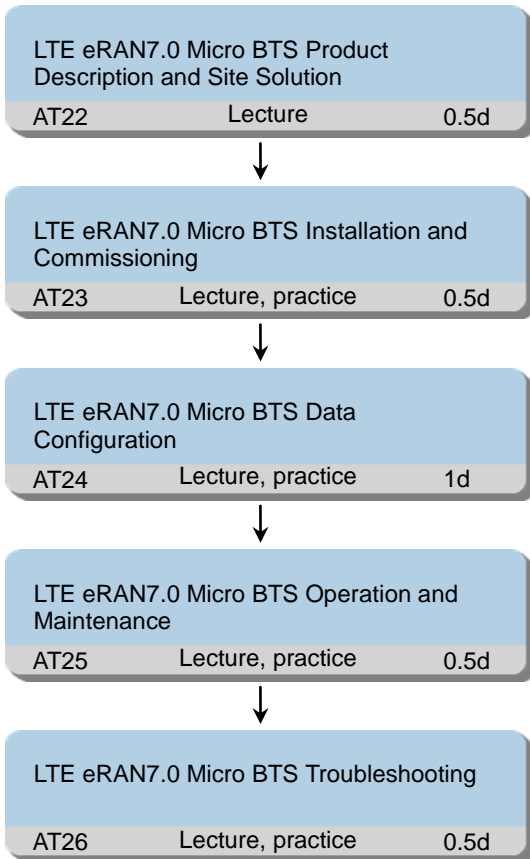
1 working day

Class Size

Min 6, Max 16

1.6.3 LTE eRAN7.0 Micro BTS Product Technical Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
eRAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide LTE eRAN7.0 Micro BTS MicroBTS3202E and BTS3203E Product description, installation
- Commissioning, data configuration, operation and maintenance and troubleshooting training.

Training Content

AT22 LTE eRAN7.0 Micro BTS Product Description and Site Solution

- LTE eRAN7.0 Micro BTS3202E Product Description and Site Solution

-
- Describe the LTE eRAN7.0 Micro BTS Product Description and Site Solution
 - LTE eRAN7.0 Micro BTS3203E Product Description and Site Solution
 - Describe the LTE eRAN7.0 Micro BTS Product Description and Site Solution

AT23 LTE eRAN7.0 Micro BTS Installation and Commissioning

- LTE eRAN7.0 Micro BTS Installation and Commissioning
 - Describe the LTE eRAN7.0 Micro BTS Installation and Commissioning

AT24 LTE eRAN7.0 Micro BTS Data Configuration

- LTE eRAN7.0 Micro BTS Data Configuration
 - Describe the LTE eRAN7.0 Micro BTS Data Configuration
- LTE eRAN7.0 Micro BTS Data Configuration Practice Guide
 - Describe the LTE ERAN7.0 Micro BTS Data Configuration Practice in the lab

AT25 LTE eRAN7.0 Micro BTS Operation and Maintenance

- LTE eRAN7.0 Micro BTS Operation and Maintenance
 - Describe the LTE eRAN7.0 Micro BTS Operation and Maintenance
- LTE eRAN7.0 Micro BTS Operation and Maintenance Practice Guide
 - Describe the LTE ERAN7.0 Micro BTS Operation and Maintenance practice in the lab

AT26 LTE eRAN7.0 Micro BTS Troubleshooting

- LTE eRAN7.0 Micro BTS Troubleshooting
 - Describe the LTE eRAN7.0 Micro BTS Troubleshooting

Duration

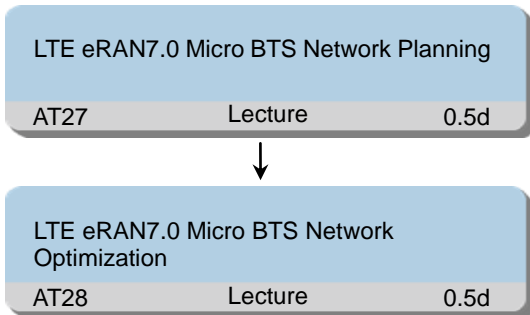
3 working days

Class Size

Min 6, Max 16

1.6.4 LTE eRAN7.0 Micro BTS Network Planning and Optimization Training

Training Path



Target Audience

LTE Network Design Engineer
Network Planning Engineer
Network Optimization Engineer

Prerequisites

- Successful completion of the following courses:
- LTE System Overview

Objectives

On completion of this program, the participants will be able to:

- Provide LTE eRAN7.0 Micro BTS Micro BTS network planning and optimization training.

Training Content

AT27 LTE eRAN7.0 Micro BTS Network Planning

- LTE eRAN7.0 Micro BTS Network Planning
 - Describe the LTE eRAN7.0 Micro BTS Network Planning

AT28 LTE eRAN7.0 Micro BTS Network Optimization

- LTE eRAN7.0 Micro BTS Network Optimization
 - Describe the LTE eRAN7.0 Micro BTS Network Optimization

Duration

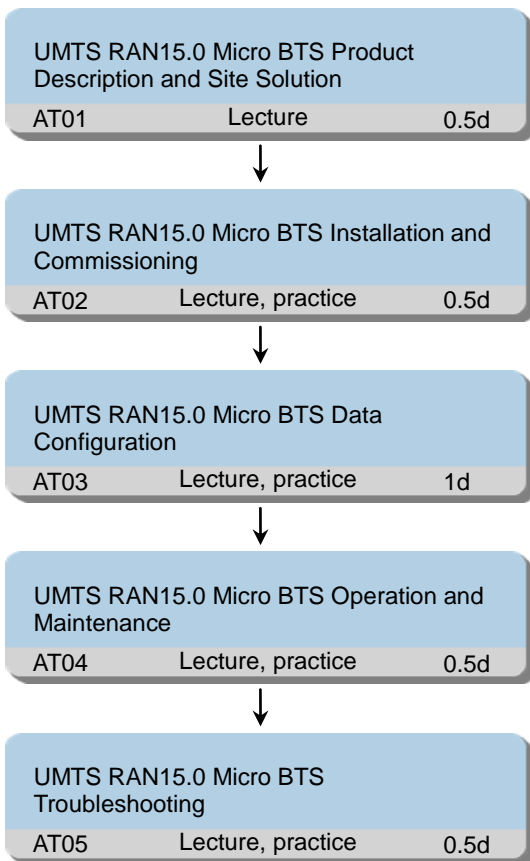
1 working day

Class Size

Min 6, Max 16

1.6.5 WCDMA RAN15.0 Micro BTS Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide UMTS RAN15.0 Micro BTS Micro BTS3902E and BTS3803E Product description, installation
- Commissioning, data configuration, operation and maintenance and troubleshooting training.

Training Content

AT01 UMTS RAN15.0 Micro BTS Product Description and Site Solution

- UMTS RAN15.0 Micro BTS3803E Product Description and Site Solution
 - Describe the UMTS RAN15.0 Micro BTS Product Description and Site Solution

-
- UMTS RAN15.0 Micro BTS3902E Product Description and Site Solution
 - Describe the UMTS RAN15.0 Micro BTS Product Description and Site Solution

AT02 UMTS RAN15.0 Micro BTS Installation and Commissioning

- UMTS RAN15.0 Micro BTS Installation and Commissioning
 - Describe the UMTS RAN15.0 Micro BTS Installation and Commissioning

AT03 UMTS RAN15.0 Micro BTS Data Configuration

- UMTS RAN15.0 Micro BTS Data Configuration
 - Describe the UMTS RAN15.0 Micro BTS Data Configuration
- UMTS RAN15.0 Micro BTS Data Configuration Practice Guide
 - Describe the UMTS RAN15.0 Micro BTS Data Configuration Practice in the lab

AT04 UMTS RAN15.0 Micro BTS Operation and Maintenance

- UMTS RAN15.0 Micro BTS Operation and Maintenance
 - Describe the UMTS RAN15.0 Micro BTS Operation and Maintenance
- UMTS RAN15.0 Micro BTS Operation and Maintenance Practice Guide
 - Describe the UMTS RAN15.0 Micro BTS Operation and Maintenance practice in the lab

AT05 UMTS RAN15.0 Micro BTS Troubleshooting

- UMTS RAN15.0 Micro BTS Troubleshooting
 - Describe the UMTS RAN15.0 Micro BTS Troubleshooting

Duration

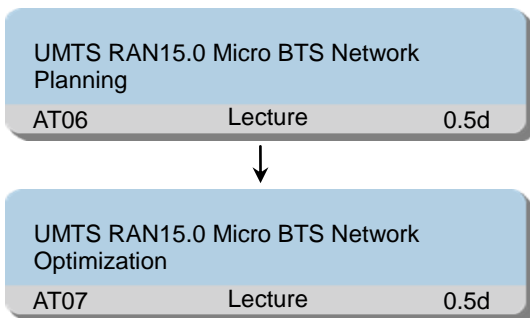
3 working days

Class Size

Min 6, Max 16

1.6.6 WCDMA RAN15.0 Micro BTS Network Planning and Optimization Training

Training Path



Target Audience

UMTS Network Design Engineer
Network Planning Engineer
Network Optimization Engineer

Prerequisites

- Successful completion of the following courses:
- WCDMA System Overview

Objectives

On completion of this program, the participants will be able to:

- Provide UMTS RAN15.0 Micro BTS Micro BTS network planning and optimization training.

Training Content

AT06 UMTS RAN15.0 Micro BTS Network Planning

- UMTS RAN15.0 Micro BTS Network Planning
 - Describe the UMTS RAN15.0 Micro BTS Network Planning

AT07 UMTS RAN15.0 Micro BTS Network Optimization

- UMTS RAN15.0 Micro BTS Network Optimization
 - Describe the UMTS RAN15.0 Micro BTS Network Optimization

Duration

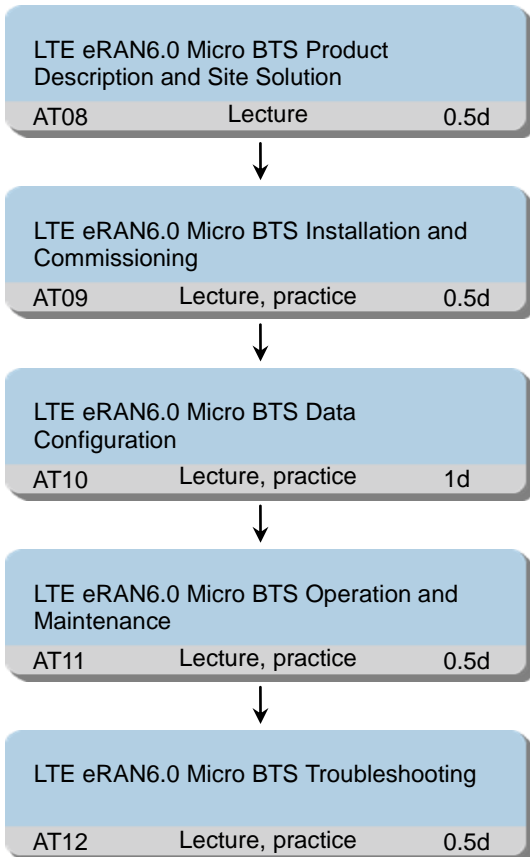
1 working day

Class Size

Min 6, Max 16

1.6.7 LTE eRAN6.0 Micro BTS Product Technical Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
eRAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide LTE eRAN6.0 Micro BTS MicroBTS3202E and BTS3203E Product description, installation
- Commissioning, data configuration, operation and maintenance and troubleshooting training.

Training Content

AT08 LTE eRAN6.0 Micro BTS Product Description and Site Solution

- LTE eRAN6.0 Micro BTS3202E Product Description and Site Solution

-
- Describe the LTE eRAN6.0 Micro BTS Product Description and Site Solution
 - LTE eRAN6.0 Micro BTS3203E Product Description and Site Solution
 - Describe the LTE eRAN6.0 Micro BTS Product Description and Site Solution
- AT09 LTE eRAN6.0 Micro BTS Installation and Commissioning
- LTE eRAN6.0 Micro BTS Installation and Commissioning
 - Describe the LTE eRAN6.0 Micro BTS Installation and Commissioning
- AT10 LTE eRAN6.0 Micro BTS Data Configuration
- LTE eRAN6.0 Micro BTS Data Configuration
 - Describe the LTE eRAN6.0 Micro BTS Data Configuration
 - LTE eRAN6.0 Micro BTS Data Configuration Practice Guide
 - Describe the LTE Eran6.0 Micro BTS Data Configuration Practice in the lab
- AT11 LTE eRAN6.0 Micro BTS Operation and Maintenance
- LTE eRAN6.0 Micro BTS Operation and Maintenance
 - Describe the LTE eRAN6.0 Micro BTS Operation and Maintenance
 - LTE eRAN6.0 Micro BTS Operation and Maintenance Practice Guide
 - Describe the LTE Eran6.0 Micro BTS Operation and Maintenance practice in the lab
- AT12 LTE eRAN6.0 Micro BTS Troubleshooting
- LTE eRAN6.0 Micro BTS Troubleshooting
 - Describe the LTE eRAN6.0 Micro BTS Troubleshooting

Duration

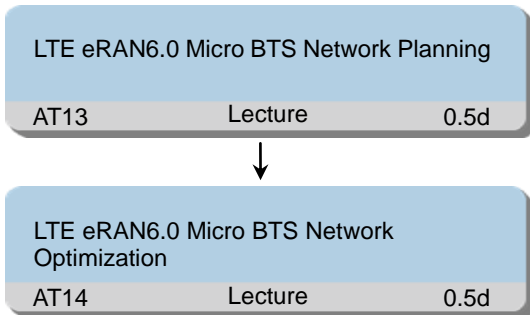
3 working days

Class Size

Min 6, Max 16

1.6.8 LTE eRAN6.0 Micro BTS Network Planning and Optimization Training

Training Path



Target Audience

LTE Network Design Engineer
Network Planning Engineer
Network Optimization Engineer

Prerequisites

- Successful completion of the following courses:
- LTE System Overview

Objectives

On completion of this program, the participants will be able to:

- Provide LTE eRAN6.0 Micro BTS Micro BTS network planning and optimization training.

Training Content

AT13 LTE eRAN6.0 Micro BTS Network Planning

- LTE eRAN6.0 Micro BTS Network Planning
 - Describe the LTE eRAN6.0 Micro BTS Network Planning

AT14 LTE eRAN6.0 Micro BTS Network Optimization

- LTE eRAN6.0 Micro BTS Network Optimization
 - Describe the LTE eRAN6.0 Micro BTS Network Optimization

Duration

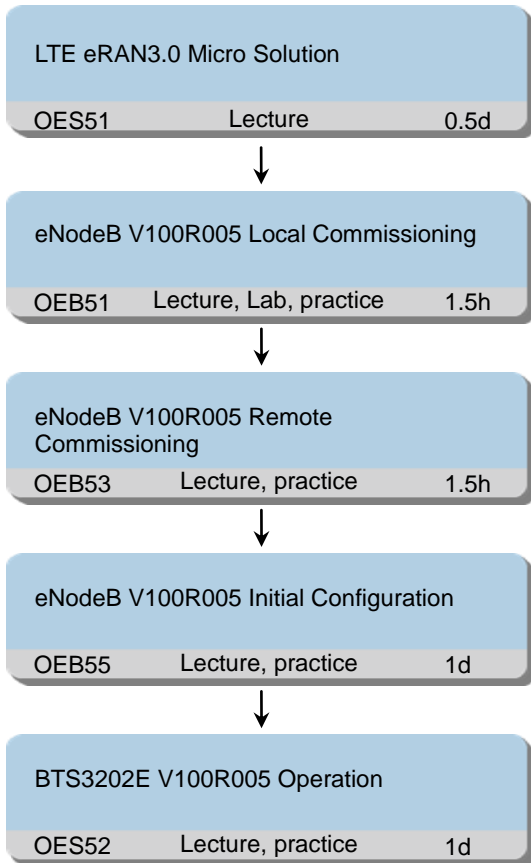
1 working day

Class Size

Min 6, Max 16

1.6.9 LTE eRAN3.0 Micro BTS Product Technical Training

Training Path



Target Audience

System Engineer
Service Engineer
Service Planning Engineer
Service Design Engineer

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in wireless network operation and maintenance

Objectives

On completion of this program, the participants will be able to:

- Explain Huawei Micro BTS solution
- Describe Micro BTS LTE base station hardware structure
- Explain the architecture and components of eNodeB operation and maintenance system
- Use LMT login Micro BTS LTE base station
- Use M2000 client Login M2000 server and Micro BTS LTE base station

-
- Execute MML in single mode
 - Execute MML in batch mode
 - Manage alarms of Micro BTS LTE base station
 - Manage software, such as querying current software version and backup configuration file
 - Manage transport data, such as querying IP address of Ethernet port and querying IP route
 - Manage radio data, such as querying cell states and querying neighbor cell
 - Manage tracing message, for example: creating a tracing task, checking tracing result, saving results
 - Outline the procedure of Micro BTS LTE base station data configuration
 - Use LTE Configuration System to create project
 - Use LTE Configuration System to import external template
 - Use LTE Configuration System to query data configuration and modify data
 - Use LTE Configuration System to check up data
 - Use LTE Configuration System to export data
 - Describe the procedure of BTS3202E commissioning
 - Querying the current version of Micro BTS LTE base station
 - Commission the Micro BTS LTE base station through M2000
 - Verify commissioning result
 - Use LMT login BTS3202E
 - Use M2000 client Login M2000 server and BTS3202E
 - Execute MML in single mode
 - Execute MML in batch mode
 - Manage alarms of BTS3202E
 - Manage software, such as querying current software version and backup configuration file
 - Manage transport data, such as querying IP address of Ethernet port and querying IP route
 - Manage radio data, such as querying cell states and querying neighbor cell
 - Manage tracing message, for example: creating a tracing task, checking tracing result, saving results
 - Outline the procedure of BTS3202E data configuration
 - Use LTE Configuration System to create project
 - Use LTE Configuration System to import external template
 - Use LTE Configuration System to query data configuration and modify data
 - Use LTE Configuration System to check up data
 - Use LTE Configuration System to export data
 - Describe the procedure of BTS3202E commissioning
 - Querying the current version of BTS3202E
 - Commission the BTS3202E through M2000
 - Verify commissioning result
 - Outline the procedure of eNodeB data configuration
 - Describe the main table of "eNodeB Summary Data"
 - Use LTE Configuration System to create project
 - Use LTE Configuration System to import external template

-
- Use LTE Configuration System to query data configuration and modify data
 - Use LTE Configuration System to check up data
 - Use LTE Configuration System to export data
 - Describe the procedure of eNodeB commissioning
 - Describe the related concept of eNodeB software and configuration file
 - Querying the current version of eNodeB
 - Use USB disk to commission the eNodeB
 - Commission the eNodeB through LMT
 - Verify commissioning result
 - Describe the procedure of eNodeB commissioning
 - Describe the related concept of eNodeB software and configuration file
 - Querying the current version of eNodeB
 - Commission the eNodeB through M2000
 - Verify commissioning result

Training Content

OEB51 eNodeB V100R005 Local Commissioning

- eNodeB LTE V100R005 Local Commissioning
 - eNodeB Commissioning Overview
 - eNodeB Local Commissioning through the USB Disk
 - Procedure for the Local Commissioning through the USB Disk
 - Download
 - Activate the Software and Data Configuration File
 - eNodeB Local Commissioning on the LMT
 - Prepare for the Local eNodeB Commissioning on the LMT
 - Upgrade the eNodeB Software and Data Configuration File on the LMT
 - Download the License on the LMT
 - Query the Running Status
 - Establish an OM Link Between the M2000 and the eNodeB

OEB53 eNodeB V100R005 Remote Commissioning

- eNodeB LTE V100R005 Remote Commissioning
 - eNodeB Commissioning Overview
 - eNodeB Remote Commissioning on the M2000

OEB55 eNodeB V100R005 Initial Configuration

- eNodeB LTE V100R005 Initial Configuration
 - eNodeB Data Configuration Introduction
 - Preparing eNodeB Data
 - Creating eNodeB Data
 - Adjusting eNodeB Data
 - Checking eNodeB Data
 - Exporting eNodeB Data
- eNodeB LTE V100R005 Initial Configuration Practice Guide

-
- Practice on eNodeB data configuration file preparation by CME
 - eNodeB LTE V100R005 SUMMARY Description
 - SUMMARY introduction
 - Creating bulk eNodeBs with Summary
 - Checking data

OES51 LTE eRAN3.0 Micro Solution

- LTE eRAN3.0 Micro Solution
 - Micro Solution Overview
 - Micro eNodeB Introduction
 - Micro eNodeB Hardware Introduction
 - Micro eNodeB Auxiliary Devices
 - Micro eNodeB Site Deployment
 - Micro eNodeB Specification
 - Micro eNodeB Deployment
 - Differences between Micro eNodeBs and Macro eNodeBs
 - Data Preparation before Micro eNodeB Deployment
 - Micro eNodeB Deployment Procedure
 - Self-planning of Micro eNodeB
 - Micro Transmission Solutions
 - Micro Transmission Overview
 - Last-Mile Backhaul Solution
 - E2E Transmission Solution

OES52 BTS3202E V100R005 Operation

- eNodeB LTE V100R005 TOPN Alarm Handling
 - The TOPN alarms are picked from the engineering projects. By presenting the description, system impact, possible causes, and handling procedure of the TOP N alarms, give an overview of how to recognize and analyze alarms. Finally, cases about alarms handling are given for trainees to have a reference in practical maintenance work about alarms.
- Micro eNodeB BTS3202E LTE V100R005 Operation
 - Structure of operation and maintenance system
 - Login BTS3202E OM system
 - BTS3202E equipment management
 - BTS3202E transport management
 - BTS3202E radio management
 - Backup BTS3202E configuration file, query BTS3202E version
 - Tracing and real time monitoring

Duration

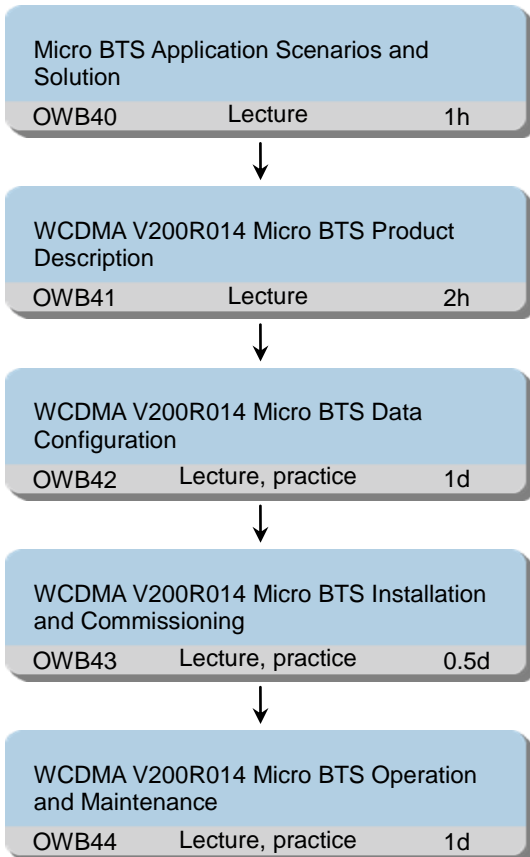
3 working days

Class Size

Min 6, Max 12

1.6.10 WCDMA RAN14.0 Micro BTS Operation and Maintenance Training

Training Path



Target Audience

Field engineer
System engineer
Site maintainer

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in WCDMA wireless network operation and maintenance

Objectives

On completion of this program, the participants will be able to:

- Describe Micro BTS application scenarios
- Outline Micro BTS solutions and benefit
- Describe the hardware structure of BTS3902E/BTS3803E
- Detail the functions of the components of BTS3902E/BTS3803E
- Make a comparison between BTS3902E and BTS3803E
- Provide a detail procedure on how to configure the data base on CME
- Provide a way to configure sites in batch base on CME

-
- Guide the procedure on how to install the BTS3803E correctly
 - Perform NodeB commissioning based on M2000 (PnP)
 - Perform NodeB commissioning based on TF card+M2000
 - Perform NodeB commissioning based on LMT+M2000
 - Node B Automatic deployment
 - Grasp alarm operation by M2000
 - Perform BTS Device maintenance
 - Grasp the operation of Transport connectivity and performance Test
 - Grasp check of Transport Link
 - Perform operation of Carrier Resource CELL
 - Grasp the operation of BTS Tracing Management
 - Grasp the operation of BTS Monitoring Management
 - Perform Right, log and License Management

Training Content

OWB40 Micro BTS Application Scenarios and Solution

- Micro BTS Application Scenarios and Solution
 - Micro BTS application scenarios
 - Urban Outdoor Hot Spot Coverage
 - Urban Indoor Hot Spot Coverage
 - Rural Isolated Spot Coverage
 - Micro BTS solutions
 - Power Backup Solution
 - No Power Backup Solution
 - Outdoor Solution
 - Indoor Solution
 - Micro BTS application cases

OWB41 WCDMA V200R014 Micro BTS Product Description

- WCDMA V200R014 Micro BTS Product Description
 - BTS3902E/BTS3803E Overview
 - BTS3902E/BTS3803E product introduce
 - BTS3902E/BTS3803E Structure and Specification
 - BTS3902E/BTS3803E hardware description
 - The functions of different subsystems
 - BTS3902E/BTS3803E external ports and LED description
 - BTS3902E/BTS3803E cables and connection description
 - BTS3902E/BTS3803E Technical Description
 - BTS3902E/BTS3803E logical structure
 - BTS3902E/BTS3803E RF configuration
 - BTS3902E/BTS3803E Transmission scheme
 - BTS3902E/BTS3803E technical specification

OWB42 WCDMA V200R014 Micro BTS Data Configuration

-
- WCDMA V200R014 Micro BTS Data Configuration
 - Overview of CME
 - Procedure of adding NodeB data
 - Configuring NodeBs in batch by using a summary data file
 - Check data consistency and export configuration data
 - WCDMA V200R014 Micro BTS Data Configuration Practice Guide
- OWB43 WCDMA V200R014 Micro BTS Installation and Commissioning
- WCDMA V200R014 Micro BTS Installation and Commissioning
 - Installing a BTS3803E
 - Installing the BTS3803E and the Dock Separately
 - Installing the BTS3803E and Dock as an Integration
 - Installing Cables
 - Commissioning a Newly Deployed Base Station
 - M2000-based Commissioning
 - TF card+M2000-based Commissioning
 - LMT+M2000-based Commissioning
 - Node B Automatic deployment
 - WCDMA V200R014 Micro BTS Installation and Commissioning Practice Guide
- OWB44 WCDMA V200R014 Micro BTS Operation and Maintenance
- WCDMA V200R014 Micro BTS Operation and Maintenance
 - Operation and Maintenance System Overview
 - UMTS Micro BTS Routine Operation
 - Alarm Management
 - Equipment Management
 - Cell Management
 - Real-time Monitoring
 - UMTS Micro BTS Routine Maintenance
 - Software loading
 - Backup and Restore
 - UMTS Micro BTS replacement
 - WCDMA V200R014 Micro BTS Operation and Maintenance Practice Guide

Duration

3 working days

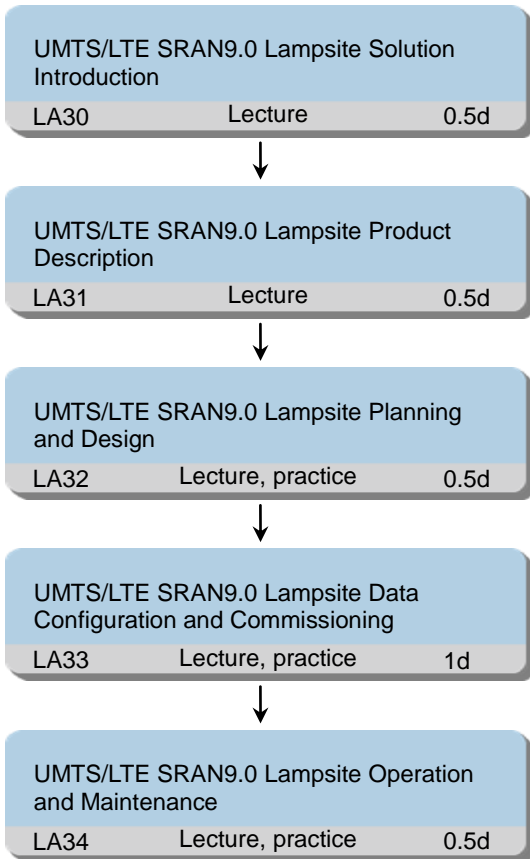
Class Size

Min 6, Max 12

1.7 Lampsite

1.7.1 UMTS/LTE SRAN9.0 Lampsite Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide UMTS
- LTE SRAN9.0 Lampsite Product description, installation
- Commissioning, data configuration, operation and maintenance training.

Training Content

LA30 UMTS/LTE SRAN9.0 Lampsite Solution Introduction

- UMTS/LTE SRAN9.0 Lampsite Solution Introduction
 - Describe the Lampsite Solution

LA31 UMTS/LTE SRAN9.0 Lampsite Product Description

- UMTS/LTE SRAN9.0 Lampsite Product Description
 - Describe the Lampsite Product Description

LA32 UMTS/LTE SRAN9.0 Lampsite Planning and Design

- UMTS/LTE SRAN9.0 Lampsite Planning and Design
 - Describe the Lampsite Network Planning

LA33 UMTS/LTE SRAN9.0 Lampsite Data Configuration and Commissioning

- UMTS/LTE SRAN9.0 Lampsite Data Configuration and Commissioning
 - Describe the Lampsite BTS Data Configuration

LA34 UMTS/LTE SRAN9.0 Lampsite Operation and Maintenance

- UMTS/LTE SRAN9.0 Lampsite Operation and Maintenance
 - Describe the Lampsite BTS Operation and Maintenance

Duration

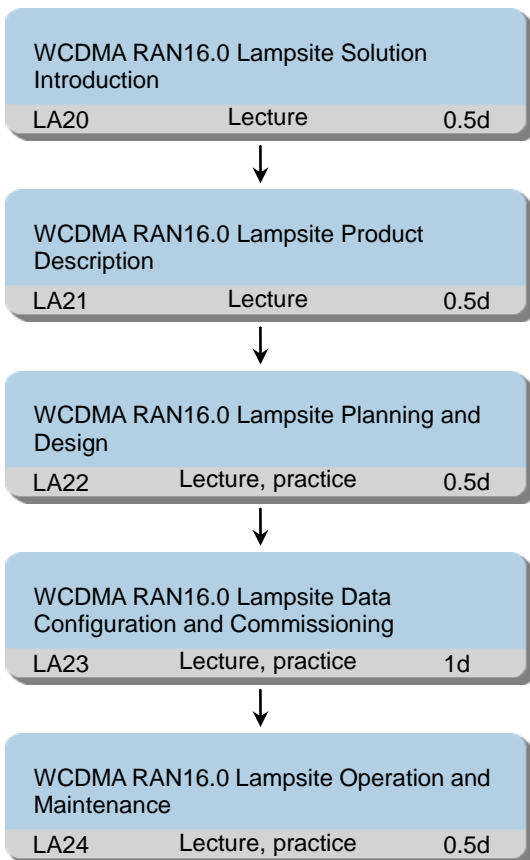
3 working days

Class Size

Min 6, Max 16

1.7.2 WCDMA RAN16.0 Lampsite Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide WCDMA RAN16.0 Lampsite Product description, installation
- Commissioning, data configuration, operation and maintenance training.

Training Content

LA20 WCDMA RAN16.0 Lampsite Solution Introduction

- WCDMA RAN16.0 Lampsite Solution Introduction
 - Describe the Lampsite Solution

LA21 WCDMA RAN16.0 Lampsite Product Description

- WCDMA RAN16.0 Lampsite Product Description
 - Describe the Lampsite Product Description

LA22 WCDMA RAN16.0 Lampsite Planning and Design

- WCDMA RAN16.0 Lampsite Planning and Design
 - Describe the Lampsite Network Planning

LA23 WCDMA RAN16.0 Lampsite Data Configuration and Commissioning

- WCDMA RAN16.0 Lampsite Data Configuration and Commissioning
 - Describe the Lampsite BTS Data Configuration

LA24 WCDMA RAN16.0 Lampsite Operation and Maintenance

- WCDMA RAN16.0 Lampsite Operation and Maintenance
 - Describe the Lampsite BTS Operation and Maintenance

Duration

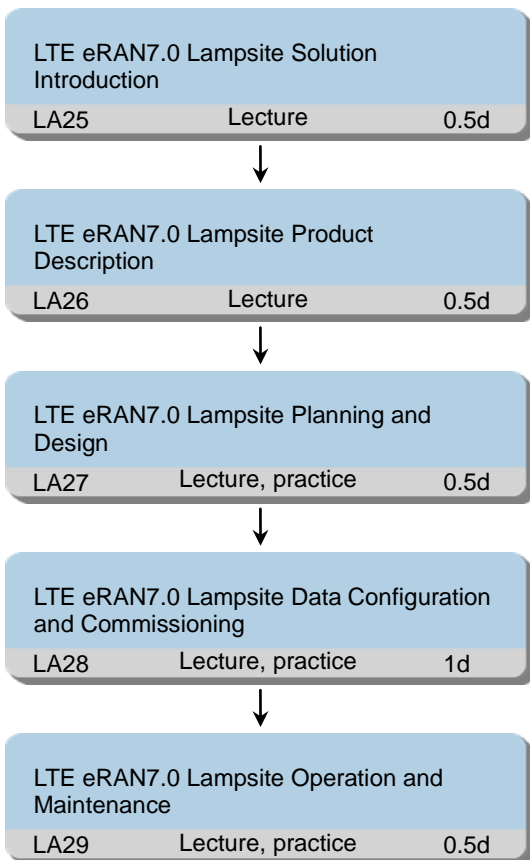
3 working days

Class Size

Min 6, Max 16

1.7.3 LTE eRAN7.0 Lampsite Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN O
M Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide LTE eRAN7.0 Lampsite Product description, installation
- Commissioning, data configuration, operation and maintenance training.

Training Content

LA25 LTE eRAN7.0 Lampsite Solution Introduction

- LTE eRAN7.0 Lampsite Solution Introduction

-
- Describe the Lampsite Solution
- LA26 LTE eRAN7.0 Lampsite Product Description
- LTE eRAN7.0 Lampsite Product Description
 - Describe the Lampsite Product Description
- LA27 LTE eRAN7.0 Lampsite Planning and Design
- LTE eRAN7.0 Lampsite Planning and Design
 - Describe the Lampsite Network Planning
- LA28 LTE eRAN7.0 Lampsite Data Configuration and Commissioning
- LTE eRAN7.0 Lampsite Data Configuration and Commissioning
 - Describe the Lampsite BTS Data Configuration
- LA29 LTE eRAN7.0 Lampsite Operation and Maintenance
- LTE eRAN7.0 Lampsite Operation and Maintenance
 - Describe the Lampsite BTS Operation and Maintenance

Duration

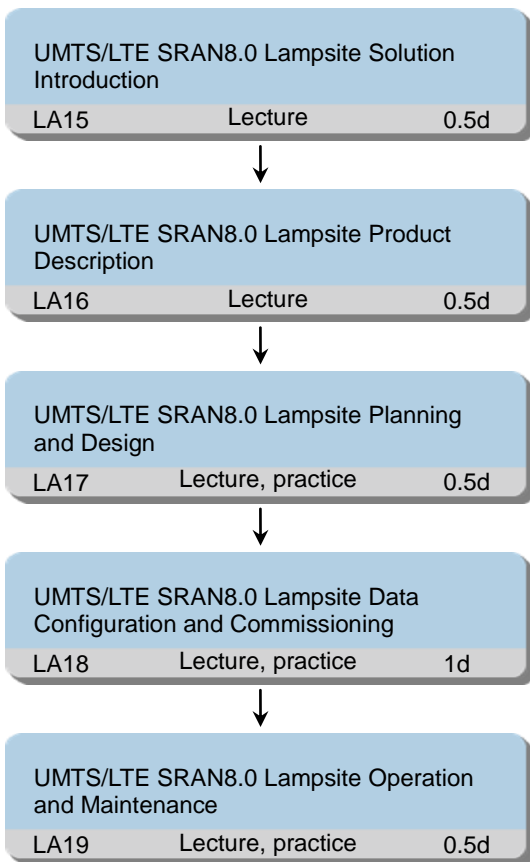
3 working days

Class Size

Min 6, Max 16

1.7.4 UMTS/LTE SRAN8.0 Lampsite Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide UMTS
- LTE SRAN8.0 Lampsite Product description, installation
- Commissioning, data configuration, operation and maintenance training.

Training Content

LA15 UMTS/LTE SRAN8.0 Lampsite Solution Introduction

- UMTS/LTE SRAN8.0 Lampsite Solution Introduction

-
- Describe the Lampsite Solution
- LA16 UMTS/LTE SRAN8.0 Lampsite Product Description
- UMTS/LTE SRAN8.0 Lampsite Product Description
 - Describe the Lampsite Product Description
- LA17 UMTS/LTE SRAN8.0 Lampsite Planning and Design
- UMTS/LTE SRAN8.0 Lampsite Planning and Design
 - Describe the Lampsite Network Planning
- LA18 UMTS/LTE SRAN8.0 Lampsite Data Configuration and Commissioning
- UMTS/LTE SRAN8.0 Lampsite Data Configuration and Commissioning
 - Describe the Lampsite BTS Data Configuration
- LA19 UMTS/LTE SRAN8.0 Lampsite Operation and Maintenance
- UMTS/LTE SRAN8.0 Lampsite Operation and Maintenance
 - Describe the Lampsite BTS Operation and Maintenance

Duration

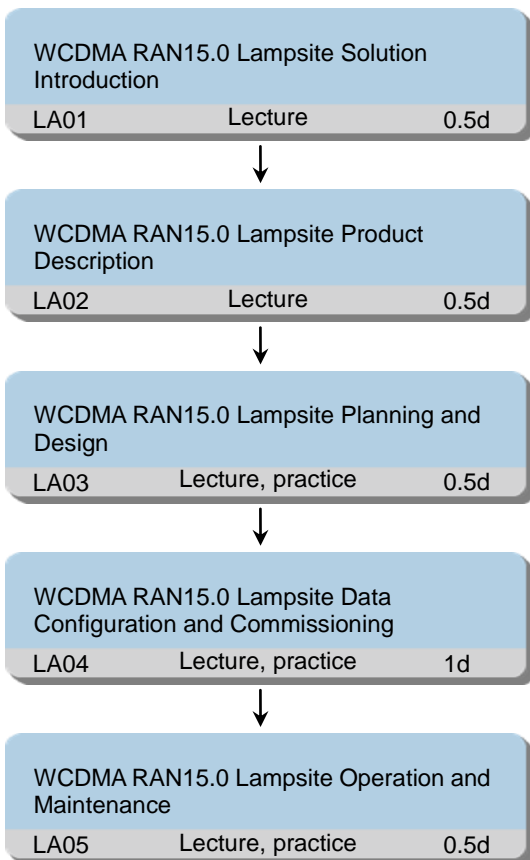
3 working days

Class Size

Min 6, Max 16

1.7.5 WCDMA RAN15.0 Lampsite Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN OM Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide WCDMA RAN15.0 Lampsite Product description, installation
- Commissioning, data configuration, operation and maintenance training.

Training Content

LA01 WCDMA RAN15.0 Lampsite Solution Introduction

- WCDMA RAN15.0 Lampsite Solution Introduction
 - Describe the Lampsite Solution

LA02 WCDMA RAN15.0 Lampsite Product Description

- WCDMA RAN15.0 Lampsite Product Description
 - Describe the Lampsite Product Description

LA03 WCDMA RAN15.0 Lampsite Planning and Design

- WCDMA RAN15.0 Lampsite Planning and Design
 - Describe the Lampsite Network Planning

LA04 WCDMA RAN15.0 Lampsite Data Configuration and Commissioning

- WCDMA RAN15.0 Lampsite Data Configuration and Commissioning
 - Describe the Lampsite BTS Data Configuration

LA05 WCDMA RAN15.0 Lampsite Operation and Maintenance

- WCDMA RAN15.0 Lampsite Operation and Maintenance
 - Describe the Lampsite BTS Operation and Maintenance

Duration

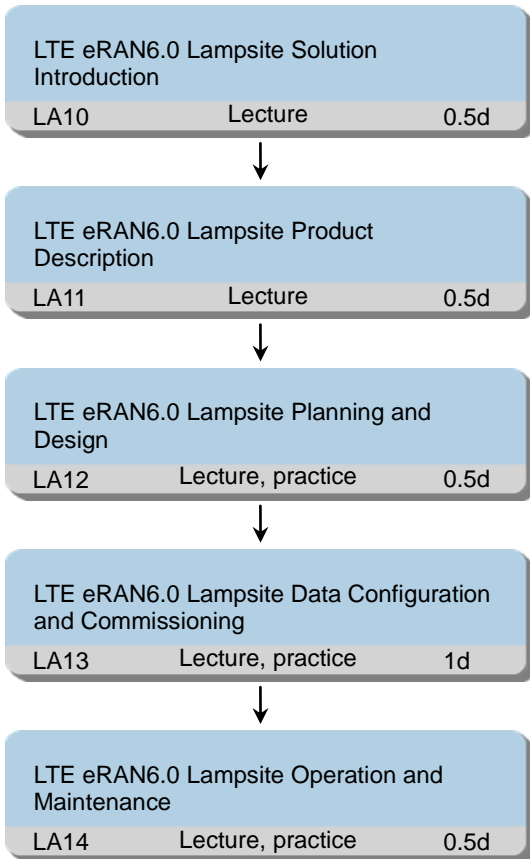
3 working days

Class Size

Min 6, Max 16

1.7.6 LTE eRAN6.0 Lampsite Operation and Maintenance Training

Training Path



Target Audience

Field Technician
Network Deployment Engineer
RAN O
M Engineer

Prerequisites

- Basic knowledge of mobile communications. At least 1 year working experience in wireless network

Objectives

On completion of this program, the participants will be able to:

- Provide LTE eRAN6.0 Lampsite Product description, installation
- Commissioning, data configuration, operation and maintenance training.

Training Content

LA10 LTE eRAN6.0 Lampsite Solution Introduction

- LTE eRAN6.0 Lampsite Solution Introduction

-
- Describe the Lampsite Solution
- LA11 LTE eRAN6.0 Lampsite Product Description
- LTE eRAN6.0 Lampsite Product Description
 - Describe the Lampsite Product Description
- LA12 LTE eRAN6.0 Lampsite Planning and Design
- LTE eRAN6.0 Lampsite Planning and Design
 - Describe the Lampsite Network Planning
- LA13 LTE eRAN6.0 Lampsite Data Configuration and Commissioning
- LTE eRAN6.0 Lampsite Data Configuration and Commissioning
 - Describe the Lampsite BTS Data Configuration
- LA14 LTE eRAN6.0 Lampsite Operation and Maintenance
- LTE eRAN6.0 Lampsite Operation and Maintenance
 - Describe the Lampsite BTS Operation and Maintenance

Duration

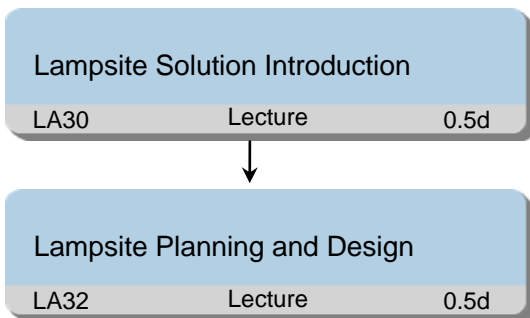
3 working days

Class Size

Min 6, Max 16

1.7.7 Lampsite Planning and Design Training

Training Path



Target Audience

Network Planning Engineers

Prerequisites

- Basic knowledge of mobile communications

Objectives

On completion of this program, the participants will be able to:

- Outline the Lampsite solution
- Detail the advantage of Lampsite solution
- Detail the typical Lampsite application solution
- Describe the Lampsite Capacity Planning
- Describe the Lampsite Sector Planning
- Describe the Lampsite Coverage Design
- Outline the Lampsite Typical Scenario Planning
- Detail the features of Lampsite
- Describe the Case analysis

Training Content

- WCDMA and LTE Lampsite Solution Introduction
 - Challenges of Traditional Indoor Coverage Solutions
 - Advantage of Lampsite solution
 - Lampsite typical application scenario
 - Lampsite Architecture & Specification Introduction
 - Trial Case Introduction
 - LampSite field test result
 - LampSite network KPI and analysis
- WCDMA and LTE Lampsite Planning and Design Training
 - Capacity Planning
 - Sector Planning
 - Coverage Design

-
- ✧ Link Budget
 - ✧ Antenna Model Selection
 - ✧ pRRU Deployment
 - ✧ Signal Leakage Control
 - ✧ Cable Layout
 - Typical Scenario Planning
 - ✧ Airport
 - ✧ Exhibition Center
 - ✧ Stadium
 - ✧ Traffic Hub
 - ✧ Shopping Mall
 - ✧ High-end Business Building
 - ✧ Elevator

Duration

1 working day

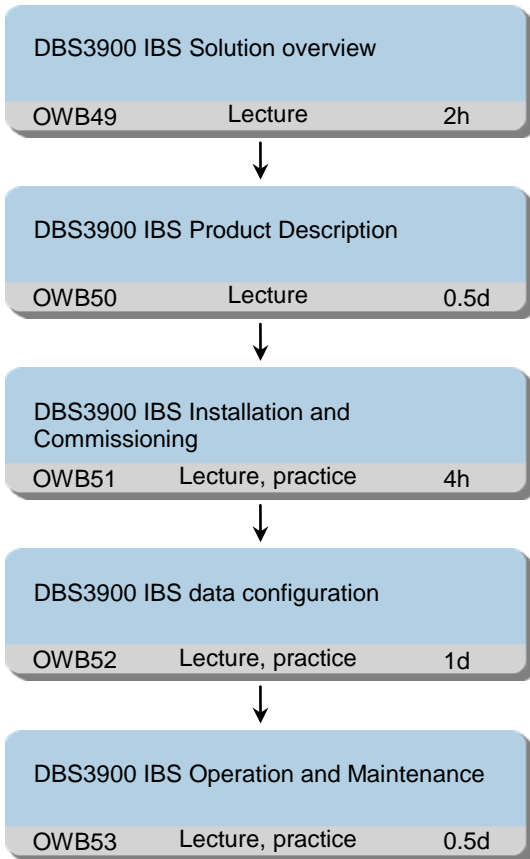
Class Size

Min 6, Max 12

1.8 DBS3900 IBS

1.8.1 DBS3900 IBS Operation and Maintenance Training

Training Path



Target Audience

Field engineer
System engineer
Site maintainer

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in WCDMA wireless network operation and maintenance

Objectives

On completion of this program, the participants will be able to:

- Detail the advantage of SingleDAS solution
- Detail the typical SingleDAS application solution
- Describe the SingleDAS system hardware composition and function
- Describe the SingleDAS technical specification
- Know how to install DCU and DRH in various scenarios

-
- Understand the details of commissioning a DAS
 - Obtain the configuration principle of DCU and DRH
 - Grasp the correctly procedure to configure a SingleDAS
 - Perform routine operation for SingelDAS
 - Perform routine maintenance for SingelDAS
 - Replace DCU module and DRH hardware

Training Content

OWB49 DBS3900 IBS Solution overview

- DBS3900 IBS Solution overview
 - DBS3900 IBS high power solution introduction
 - Advantage of DBS3900 IBS solution
 - Flexible deployment
 - Unified management
 - Easy expansion
 - Smooth evolution
 - DBS3900 IBS typical application scenario

OWB50 DBS3900 IBS Product Description

- DBS3900 IBS V100R001 Product Description
 - DBS3900 IBS Overview
 - DCU hardware description and configuration principle
 - DCU product description
 - DCU cable description
 - DCU configuration principle
 - DRH hardware description and configuration principle
 - DRH product description
 - DRH cable description
 - DRH attached equipment
 - DRH configuration principle
 - DBS3900 IBS Technical Specification
 - DCU technical specification
 - DRH technical specification

OWB51 DBS3900 IBS Installation and Commissioning

- DBS3900 IBS V100R001 Installation and Commissioning
 - Installation Scenario introduction
 - DCU cabinet installation
 - RCH cabinet installation
 - DCU and RCH commissioning
 - Remote commissioning base on M2000
 - Local commissioning base on WebLMT
- DBS3900 IBS V100R001 Installation and Commissioning Practice Guide

OWB52 DBS3900 IBS data configuration

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- DBS3900 IBS V100R001 data configuration
 - Data configuration overview
 - Data configuration procedure
 - Preparation
 - DBS3900 IBS data configuring by WEBLMT
 - DBS3900 IBS V100R001 data configuration Practice Guide
- OWB53 DBS3900 IBS Operation and Maintenance

- DBS3900 IBS V100R001 Operation and Maintenance
 - Operation and Maintenance System Overview
 - DBS3900 IBS Routine Operation
 - Single DAS routine operation introduction
 - Software Version upgrade and rollback
 - Data backup and restore
 - Basic operation through LMT and M2000
 - DBS3900 IBS Routine Maintenance
 - Equipment configuration maintenance
 - System maintenance
 - Wireless parameters maintenance
 - Basic maintenance through LMT and M2000
- DBS3900 IBS V100R001 Operation and Maintenance Practice Guide

Duration

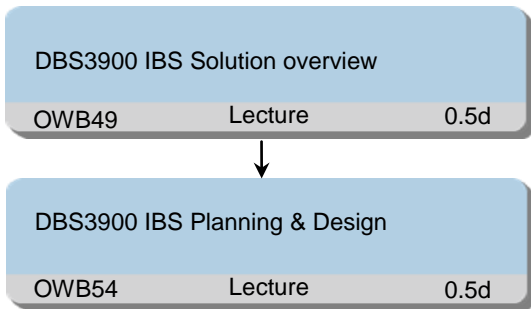
3 working days

Class Size

Min 6, Max 12

1.8.2 DBS3900 IBS Planning & Design Training

Training Path



Target Audience

Planning engineer
Site maintainer
Optimization engineer

Prerequisites

- Basic knowledge of mobile communications
- At least 1 year working experience in WCDMA wireless network operation and maintenance

Objectives

On completion of this program, the participants will be able to:

- Perform System planning and design
- Perform Capacity Planning and design
- Perform Sector Planning and design
- Perform Coverage Planning and design

Training Content

OWB49 DBS3900 IBS Solution overview

- DBS3900 IBS Solution overview
 - DBS3900 IBS high power solution introduction
 - Advantage of DBS3900 IBS solution
 - Flexible deployment
 - Unified management
 - Easy expansion
 - Smooth evolution
 - DBS3900 IBS typical application scenario

OWB54 DBS3900 IBS Planning & Design

- DBS3900 IBS Planning & Design
 - The process of DBS3900 IBS survey and design
 - Preparation of site survey and engineering survey
 - IBS share solutions introduction

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- System planning and design
 - Capacity Planning and design
 - Sector Planning and design
 - Coverage Planning and design

Duration

1 working day

Class Size

Min 6, Max 12

