



ADVANCED LEVEL TELECOM TRAINING CENTRE



MOBILE FACULTY

Mobile Faculty is responsible for conduction of Training programs in mobile communication area namely –GSM, 2G/3G-UMTS, LTE, LTE-A, LTE-Pro, 5G(NR), Wi-MAX, Wifi as well as satellite communication. Mobile Faculty of ALTTC has Nokia GSM & ERICSSON System and Satellite Communication System. Through its erudite strength technically competent faculty, it is imparting training programs like- workshops, Seminars and Inservice course on latest mobile communication & satellite communication techniques and emerging trends in mobile communication i.e. LTE, 4G and path to 5G for BSNL officers as well as for other private and government organizations and PSU's like PGCIL, ONGC, HCL, TCIL etc. Mobile Faculty also provides training for international organizations like ITU, ASEAN, APT & CTO.

In the past faculty has conducted numerous customarily training programs for corporate as well as fresh college graduates.

The Faculty comprises of Telecom Engineers having 10 to 30 years of experience of Installation, Operation and Maintenance of Mobile Networks in BSNL.

Image 1

Image 2



Laboratories:

Laboratory	Equipments	Make
3G and 2G combo lab	BTS, BSC, Node-B, RNC, OSS Server, Media-Gateway, MSC server, SGSN, GGSN	Ericsson
2G Nokia lab	BTS, BSC, MSC,	Nokia
CDMA and EVDO lab	BTS, BSC	ZTE
Satellite lab	IDR, DCME, DSPT and Ku & Ka band VSAT terminals, Satellite E/S ALTTC is DR site for IPSTAR Sikandrabad Hub	IP STAR, Gilat
Wi-MAX	BTS	Huawei

Testing & Measuring Instruments

S.N.	Name of Testing & Measuring Instruments	Make
1	Protocol Analyzer	Techtronix

2	Drive Test Tool	TEMS Model no 8.1.2
3	Spectrum Analyzer	Anritsu MS 2661C
4	Site Master	Anritsu S113C

Courses Offered by Mobile Faculty:

GSM and 3 G Fundamentals	5 days
UMTS, B3G and LTE	5 days
Path to 5G	5 days
RF Planning and Optimization Issues in GSM Network	3 days
Wireless Broadband Access: Wi-Fi, Wi- Max and Hot Spot	3 days
Satellite Communication	5 days
Beyond 4G	3 days
BSNL 4G plus – WiFi Hot Spots	3 days
Global Satellite Phone Service (GSPS)	2 days
Advance Satellite Communication	10 days

Lodging & Boarding facilities are available in AL TTC Campus. Please visit our website for more details

Faculty Contacts: DGM (Mobile): Ph 0120- 2755146, Email: dikshithk@rediffmail.com
AGM (Mobile): Ph 0120- 2755147, Email: abhaybpl@gmail.com
AD (Sat): Ph 0120- 2755900 Email: manoj.abhitej@gmail.com
AD (Mobile): Ph 0120- 2755150, Email: rajeshbsnl@gmail.com
AD (Mobile): Ph 0120-2755252. Email: sandeepbiet@gmail.com

ADVANCED LEVEL TELECOM TRAINING CENTRE
An ISO 9000 : 2008 certified , apex training center of
BSNL
Govt. Of India Enclave, Raj Nagar ,Ghaziabad , (UP) - 201 002
www.alttc.bsnl.co.in

Advanced Level Telecom Training Centre

**Bharat Sanchar Nigam limited
Ghaziabad - 201 002 UTTAR PRADESH**

Course Structure

1. **Course Title: BSNL Certified Course 5G Mobile Communication Engineer.**
2. **Course Objectives:**

After having undergone this training, the participants would be able to

 - Understand mobile broadband technologies: LTE/LTE-A/LTE-A Pro, including mobile QoS.
 - Understand mobile ultra-broadband with 5G New Radio (5G NR), including network slicing, 5G Next Generation Core (NG Core), Mobile Edge Computing (MEC), QoS in 5G.
3. **Course Contents:**
 1. ITU's role in mobile broadband Internet
 2. 4G LTE , LTE-A , LTE-A Pro, Mobile QoS.
 3. ITU specification for 5G: IMT-2020
 4. 5G network architectures
 5. Network slicing in 5G
 6. 5G New Radio (NR), Massive MIMO, Beamforming, Beam Management and Physical Channels.
 7. 5G Next Generation Core (NG Core)
4. **Course Duration: 5 days**
5. **Target Population: All those having passion to learn.**
6. **Training Methodology: Training will be provided using PPT presentations, A/V aids and Lab.**
7. **Eligibility Criteria: Should have basic knowledge of communication system.**
8. **Trainee Evaluation:**

Success of the training will be tested by a written test at the end of the training.

Advanced Level Telecom Training Centre

**Bharat Sanchar Nigam limited
Ghaziabad - 201 002 UTTAR PRADESH**

Course Structure

1. Course Title: **BSNL Certified Mobile Radio Network Professional.**

2. **Course Objectives:**

After having undergone this training, the participants would be able to

- Wireless Networks evolution from 2G to 5G.
- RAN Evolution and Radio interface protocol.
- Radio Network Planning and Optimization.
- Ultra-broadband WLAN standards (IEEE 802.11 ac/ad)
- ITU WRC-2019 spectrum Allocation & Spectrum Management.

3. **Course Contents:**

1. Wireless Channel and Air Interface Concept.
2. ITU specification for Wireless Physical Layer.
3. Ultra-broadband WLAN standards (IEEE 802.11 ac/ad).
4. Radio Network Planning and Optimization UMTS and LTE Network.
5. 5G NR and Specification, Massive MIMO, Beamforming.
6. RAN Evolution and Radio interface protocol.
7. Call Flow and initial Access in Wireless Network.

4. **Course Duration:** 5 days

5. **Target Population:** All those having passion to learn.

6. **Training Methodology:** Training will be provided using PPT presentations, A/V aids and Lab.

7. **Eligibility Criteria:** Should have basic knowledge of communication system.

8. **Trainee Evaluation:**

Success of the training will be tested by a written test at the end of the training.

Advanced Level Telecom Training Centre

**Bharat Sanchar Nigam limited
Ghaziabad - 201 002 UTTAR PRADESH**

Course Structure

1. **Course Title: BSNL certified BSS support Engineer.**

2. **Course Objectives:**

After having undergone this training, the participants would be able to

- Nokia BTS & BSC hardware Overview.
- Operation & Maintenance issues NOKIA BTS & BSC.
- Ericsson BSC/RNC Hardware & Ericsson BTS/NODE-B Hardware.
- O&M Issue of Ericsson BSC,RNC,Node-B,BTS.

3. **Course Contents:**

1. Ericsson & Nokia, 2G & 3G Hardware description.
2. BSC & BTS Operation and Maintenance issue.
3. RNC & Node-B Operation and Maintenance issue.
4. BTS & Node-B Creation/Deletion via OMC-R.
5. Exert Tool for configuration related issue (2G Ericsson).
6. Core Network Operation and Maintenance issue.

4. **Course Duration: 5 days**

5. **Target Population: All those having passion to learn.**

6. **Training Methodology: Training will be provided using PPT presentations, A/V aids and Lab.**

7. **Eligibility Criteria: Should have basic knowledge of communication system.**

8. **Trainee Evaluation:**

Success of the training will be tested by a written test at the end of the training.

**ADVANCED LEVEL TELECOM
TRAINING CENTRE (ALTTC)
GHAZIABAD - 201001**

Course Structure

1. **Course Title:** BSNL Certified Course on *Satellite Communication Technologies*
2. **Course Objectives:** After having undergone this training, the participants would be able to
 - understand concepts of Satellite Communication Technologies
 - application areas of Satellite Communication technology in telecom network
 - Identify the different network element like Up Converter, Down converter, HPA, LNA, Satellite Modem, IDR, DCME, VSAT, DSPT etc.
3. **Course Contents:**
 1. Working Principle of Satellite Communication Technologies
 2. Position of Satellite Communication Equipments in Telecom Network
 3. U/C, D/C, HPA, LNA, Modem
 4. IDR, DCME
 5. Link Budget in Satellite Communication
 6. Satellite Communication Applications like DTH, GPS, Satellite Based Mobile Communication (INMARSAT) etc
4. **Course Duration:** 5 days.
5. **Target Population:** All those having passion to learn.
6. **Training Methodology:** Training will be provided using PPT presentations, A/V aids and Lab.
7. **Eligibility Criteria:** Should have basic knowledge of Satellite communication system.
8. **Trainee Evaluation:** Success of the training will be tested by a written test at the end of the training.

**ADVANCED LEVEL TELECOM
TRAINING CENTRE (ALTTC)
GHAZIABAD - 201001**

Course Structure

1. **Course Title:** BSNL Certified Course on VSAT Technology
2. **Course Objectives:**

After having undergone this training, the participants would be able to

 - Understand Technology and deployment aspects of VSAT Technology
 - Basic components of VSAT like BUC, SSPA, LNBC, Modem, Dish, Polarizer, Connecting Cables etc.
 - Link Budget of VSAT.
3. **Course Contents:**
 1. Basic concept and working principle of VSAT.
 2. Introduction to BUC, SSPA, LNBC, Modem, Dish, Polarizer, Connecting Cables.
 3. VSAT Cable end preparation
 4. Applications based on VSAT like DTH
 5. Installation of VSAT in field.
4. **Course Duration:** 5 days
5. **Target Population:** All those having passion to learn.
6. **Training Methodology:** training will be provided using PPT presentations, A/V aids and Lab.
7. **Eligibility Criteria:** Should have basic knowledge of communication system.
8. **Trainee Evaluation:** Success of the training will be tested by a written test at the end of the training.