Major Contents covered during Training in Advanced Telecom with Specialization in Mobile Communications

1. Overview of Telecommunication networks
   a) Telecom Network Architecture
   b) Local and Trunk network
   c) Call Routing
   d) Telecom Industry in India - Institutional Mechanism & Role

2. Digital Switching Principles
   a) PCM principles & Multiplexing of Telecom signals
   b) Introduction to latest switches in telecom industry

3. Fibre Optic Communication Principles
   a) Characteristics of Optical Fibre
   b) OF transmission systems and their features
   c) Concept of SDH and DWDM

4. Mobile Communication Principles
   a) Cellular Principles
   b) GSM - Principles, Network Architecture, Call Processing, Handover, GPRS, EDGE
   c) CDMA - Principles, Network Architecture, Call Processing, Handover, Power Control, EVDO
   d) 3G technologies and emerging trends
   e) Overview of Mobile Services – Postpaid, Prepaid, SMS, VAS, Data

5. Broadband, DSL technologies
   a) Principles, Network Architecture
   b) Broadband Services

6. Intelligent Network
   a) Network Architecture
   b) IN Services

7. Next Generation Network
   Overview and Architecture

Topics Covered under Specialization in Mobile Communications:
   a) GPRS – Network Architecture and PDP Call flow
   b) EDGE - Migration towards 3G
   c) EVDO & Other CDMA technologies
   d) 3G technologies – WCDMA principles, 3G Architecture, Radio & Core network, Call setup
   e) Emerging trends - Wi MAX
   f) LTE & 4G technologies, Migration paths

Highlights:
The classroom theory sessions are supplemented through practical exposure on live full complement of latest equipments available in the training centre:

- Latest switches – OCB, CDOT
- Mobile equipments - 2G GSM, CDMA, 3G Mobile
- OF Systems - SDH, DWDM
- Broadband