Background

Indian telecom scenario had demonstrated a meteoric rise over the last 15 years to become the 2nd largest wireless network in the world. What people of India have witnessed over the last decade and a half is nothing short of a "Telecom revolution" in the voice domain. Now the country is preparing itself for the next wave of "Broadband Data". Roll out of data networks based on 4G LTE technology is happening simultaneously in India as well as other countries globally. Presently all the markets globally have a huge latent demand both in terms of number of users as well as access speeds of broadband data. Due to this high growth rate in this sector, there is huge requirement of skilled professionals. The current education curriculum, though fundamentally strong, lacks the practical on field aspects as well as fails to cover certain upcoming newer technologies which are currently under deployment. This results in a gap between the skill level of a fresh graduate and industry expectations.

In an effort to bridge this gap and make the fresh graduate engineers, industry ready, MTNL, in joint partnership with Syncroute Infranet Pvt Ltd, is launching a certification course called Certified Telecom Professional (CTP) – Wireless, which aims at uncovering the potential of our engineering cadre and presenting this talent to meet the challenges before the telecom sector.

This joint partnership has nationwide footprint and addresses students all over the country to be trained at various training centers nationally.

Enabling the Sync through our CTP-Wireless course

Course objective

Certified Telecom Professional - Wireless course aims at uncovering the potential of our engineering cadre and presenting this talent to meet the challenges before the telecom sector. It aims at creating efficient and knowledgeable RF engineers and managers, who will be engaged in making India a world-class player in the area of Telecom Management. The cardinal objective of the course is to impart theoretical and practical inputs to students in order to mould them into sound Wireless Telecom professionals.

This short course covers all the major aspects of the Wireless Telecom Sector, like Cellular Communication & GSM System, CDMA and WCDMA (3G), TD-LTE (4G), Digital Communication, Transmission Techniques, Optical Communication.
This will be followed up with in-field hands-on practical training on Telecom industry requirements, such as Site Surveys, Drive Test and soon.

Course outline

- Intensive 150 hrs of power packed training

- Includes theory, application and practical (hands on) modules

- Familiarization with emerging business trends

- Covers all major aspects of Wireless Telecom Sector, like Cellular communication GSM System, CDMA and WCDMA (3G), TD-LTE (4G), Digital communication, Transmission Techniques, Optical Communication and Mobile

- In field hands on training in line with requirements of telecom industry which includes various aspects such as Site Surveys, Drive Test, installation and commissions and so on.

- Actual on field use of high end and high cost test and measurement tools

CERTIFIED TELECOM PROFESSIONAL WIRELESS

KNOWLEDGE PARTNER

SYNCROUTE
www.syncroute.com

Course content

CTP course content has 6 modules covering advance technologies followed by the traditional telecommunication systems.

Module 1:
Telecom & Wireless Basics
1. Introduction to emerging wireless business environment
2. Telecom Basics
3. Radio Wave Propagation
4. Antenna Theory
5. Mobile Number Portability

Module 2: GSM
1. Introduction to GSM
2. Features of GSM
3. Network Components
4. Terrestrial Interfaces
5. Channel Concept
6. Burst formats, Coding and Interleaving
7. Power Control, DTX and DRX
8. Idle Mode
9. Dedicated Mode

Module 3: CDMA
1. Introduction to CDMA
2. The Cellular System
3. CDMA Channels
4. Features of CDMA
5. Traffic Cases

Module 4: WCDMA
1. WCDMA Introduction
2. Network Elements
3. Radio Resource Management
4. Channel Concept
5. Protocols
6. Traffic Cases
7. HSDPA concept

Module 5: TD-LTE
1. Introduction to LTE and its Unique Technologies
2. LTE Radio Interface Architecture
3. LTE Access Procedure

Module 6:
Practical Job Applications
1. Introduction to RF Planning
2. Transmission Planning
3. Brief Introduction of RF Survey
4. BTS Installation and Commissioning
5. Microwave Installation and Commissioning
6. EMF Measurements
7. RF Drive Test and Optimization

Excel with the MTNL-Syncroute edge

1. Trusted brand of domain specialists: MTNL and Syncroute are one of those few companies which have significant experience of carrying out various vital activities in roll out and optimization of 2G, 3G and 4G network in India.
2. Relevant Industry Experience: Driven by the finest professionals in the telecom sector with a collective experience of more than 200 + man years in deployment of GSM, WCDMA and LTE/4G.
3. Real-time instructor led courses: Courses are "Instructor led" and are conducted in a class room by relevant faculty.
4. Relevant Hands on Faculty: Faculty has been carefully chosen as the one which has a rich hands on knowledge of deployment of telecom technologies like GSM, WCDMA and LTE.
5. Hands-on practical training: Classroom lectures are followed by hands-on training using aRF Engineering tools and T&M instruments to demonstrate the functioning of wireless networks.
6. Certification: Successful completion of course will result in the certification of the individual in the form of Certificate being awarded by MTNL and Syncroute.
7. Placement assistance: Certified candidates will be imparted placement assistance for quality assignments across India on projects from leading telecom firms.

Eligibility

Candidates who are either in the final year or passed out from BE(Electronics/ECE/EEE/IT/E&TC) are eligible for the program.

Fee Structure

i) **Course Fee:** The Course Fee for this One-month program is Rs.32,000/, which includes the cost of tuition.

ii) **Course Material:** Courseware in the form printed books will be supplied at a charge of Rs. 3600/-. These course books can serve as a useful tool as Technical Reference Guide in future.

All above mentioned fees will be subject to Service tax at the currently applicable rates payable extra.

About MTNL (CETTM)

Centre for Excellence in Telecom Technology and Management (CETTM), an ISO 9001:2008 certified institute, has been established by MTNL with state of the art facilities to impart training in Telecom Technology and Management Studies. CETTM had acquired ISO 9001:2000 certification in 2005. CETTM enables professionals to acquire knowledge and skills to perform effectively in the rapidly advancing telecom and information technology sector. CETTM has been constantly raising its benchmarks and has broadened its boundaries by imparting training to thousands of candidates across the globe. (www.cettm.mtnl.in)

About Syncroute

SyncRoute is an emerging Education services provider seeking to synergize its experience in System Integration and Telecom to deliver best-in-class education for churning out industry ready professionals across the key areas of its expertise. The Company also provides System Integration Solutions & Engineering Services to Enterprises as well as Telecom Operators in both, Wireless and Wire line domains. Syncroute has been set up by a group of industry professionals, who form the core management team with over 120+ man years of hard core industry experience in telecom and SI fields. Headquartered in Mumbai, Syncroute also has a presence in Western, Northern & Southern India. (www.syncroute.com)

Web: www.cettm.mtnl.in / www.syncroute.com