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CETTM is one of the most renowned corporate training centers in India. CETTM conducts the below mentioned training programmes for the Ministry of External Affairs, Govt of India. These programmes are suited for the participants from various foreign countries under the MEA's ITEC SCAAP programme. These programmes cover the latest in the field of Telecom, Information Technology and Management. CETTM has conducted similar trainings in the past and has evolved a unique methodology of training which includes case studies, field visits, study tours, technology lab sessions, personal consultations with the faculty apart from daily lectures. The participants are housed in the very beautiful CETTM hostel during the entire programme. The courses are as follows:

**Course Title: Switching Technologies and Signaling Systems**

**Course at a glance :** PCM fundamentals, Signaling in Telecom, V5.2 Interface, CCS 7 signaling, Digital Switching Techniques, ISDN, IN Detailed overview of OCB 283 switching system, Overview of EWSD switching system Overview of Telecom services, Value added services, Network Management system NGN concepts.  
*Date of Commencement: 04-10-2010 to 12-11-2010 (6 Weeks)*

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**Course Title: Telecom Management**

**Course at a glance:** *Telecom Revenue and Billing:* Landline Billing, CDMA Billing, GSM Billing, LC Billing IUC Billing, Overview of convergent Billing, Financial Accounting, Internal control mechanism, Financial statement analysis, Capital budgeting, working capital Management, Margin Cost analysis, Breakeven analysis, Budgetary control, collection of Telecom Revenues;  
*Services Marketing:* Overview of Marketing, Market research issues and applications, Consumer behavior, sales and distribution management, Product Management, Marketing of services, CRM, Corporate public relations, Advertising Management and Marketing Communications, Group Discussion and case study;  
*Telecom Operations Management:* Telecom Business Environment and Regulations, Telecom Business Models, Telecom costing and Pricing, Telecom Revenue Analysis, Telecom Product Management, and Call center management  
*Telecom Network Planning:* Junction Planning, Engineering, Traffic and Exchange Planning, Access N/W planning and Frequency planning;  
*Telecom Technology and Trends:* Telecom network technology, Switching technology, Internet, Broadband, IPTV, CDMA, GSM, 3G, VOIP, MPLS and NGN Technology  
*Date of Commencement: 14/06/2010 to 23/07/2010 (6 Weeks)*

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**Course Title: Data Communication & IP Technologies**

**Course at a glance:** ISO/OSI Reference Model, Transmission standards, Encoding & Modulation Techniques, Digital transmission interfaces and modems, Error detection & correction, Networking concepts, Ethernet Technology, TCP/IP, IP Sub netting and VLMS, Introduction to CISCO IOS, Switching, Routing, VLAN, OSPF, RIP/IGRP, EIGR, BGP, WAN, Broadband concept.  
*Date of Commencement: 21/06/2010 to 13/08/2010 (8 Weeks)*

**Course Title: Next Generation Networks & Future Trends**

**Course at a glance:** Fundamentals of IP networks SS7 signaling Broadband networks Next generation networks MPLS Core 3G wireless networks  
*Date of Commencement: 19-07-2010 to 20-08-2010 (5 Weeks)*

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**Course Title: Broadband Technology and Future Trends**

**Course at a glance:** IP Networking, xDSL, ADSL technology, ADSL router, DSLAM, BRAS, Broadband subscriber management, Broadband DLC, Wireless Data networks, IPTV & VOIP & Hands on activity on ADSL router configuration, installation and troubleshooting. DSLAM and BRAS configuration.  
*Date of Commencement: 23-08-2010 to 01-10-2010 (6 weeks).*

**Course Title: Telecom Network Planning & Engineering**

**Course at a glance:** The course covers basic concepts of traffic engineering in telecom networks. Calculation of telecom traffic and related network resource planning are all covered in the course. Major topics include telecom network planning concepts, fundamentals of traffic, Traffic Measurement in Telephone Exchanges, Traffic management in transport and data networks, OFC Planning, Switched Network Planning and Transmission Systems Planning.  
*Date of Commencement: 13/09/2010 to 15/10/2010 (5 Weeks)*

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# CETTMTM

## Course Title: Optical Fibre Cables & System

**Course at a glance:** Optical Fiber Cable has been adopted by Telecom Service Providers worldwide as the core Transport for all types of telecom traffic. This course is designed to provide insight into various activities related to Optical Fiber Cable installation in the Telecom Network like planning, laying and testing of the O.F Cables and also the transmission systems which work on this media. Major topics include Transmission Media, Transmission of light through optical medium, Characteristics of OF medium, Optical Fiber Construction & Types, Couplers & Connectors, Sources, Splicing Methods & Precautions, OFC, Testing & Measuring Instruments, OTDR, OF cable Laying, Link Budgeting, PCM Principles. Line Codes, Multiplexing Technique, Digital Hierarchy, 2 Mbit/s frame structure, Transmission Systems, Alarm & trouble Shooting, New Trends.  
*Date of Commencement:* 18-11-2010 to 17-12-2010 (6 Weeks)

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## Course Title: Mobile Technology & Services

**Course at a glance:** This course provides basic knowledge on Cellular Mobile technologies like GSM and CDMA. Basic concepts related to the working of these wireless based technologies, fundamentals of microwave communication are all covered to start with. The course covers GSM / CDMA network architecture, mobile identities, GSM / CDMA channels, frame structure, call processing in GSM /CDMA GPRS, 3G and wireless data networks.  
*Date of Commencement:* 17-01-2011 to 25-02-2011 (6 Weeks)

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## Course Title: Data Communication & IP Technologies

**Course at a glance:** ISO/OSI Reference Model, Transmission standards, Encoding & Modulation Techniques, Digital transmission interfaces and modems, Error detection & correction, Networking concepts, Ethernet Technology, TCP/IP, IP Subnetting and VLSMs, Introduction to CISCO IOS, Switching, Routing, VLAN, OSPF, RIP/IGRP, EIGRP, ISIS, BGP, WAN, Broadband concepts.  
*Date of Commencement:* 07/03/2011 to 22/04/2011 (8 Weeks)

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## Course Title: Telecom Billing and Finance Management

**Course at a glance:** This course aims to familiarize the participants about –Telecom Billing and Revenue Collection Management : Land Line Billing, CDMA billing, GSM billing, Convergent billing, Circuit billing, Interconnect billing and Regulatory environment, Collection Mechanism and Management, Revenue Assurance and Debtors Management. Finance Management and Control Strategy: Budgetary Control, Capital Budgeting, Working Capital Management, Cost Management and Tariff Fixation & Costing.  
Telecom Technology: Familiarisation of Telecom Services relating to Technological aspects.  
*Date of Commencement:* 14-02-2011 to 18-03-2011 (5 Weeks)

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## Course Title: MPLS Technology

**Course at a glance:** The course covers the latest packet based networks and transport technologies like NGSDH and MPLS. This course provides an understanding of these technologies, including concepts and configuration network design and operations. The main topics are packet communication fundamentals, role of IP networks telecom transport technologies, packet transport technologies, Multi Protocol Label Switching, OSS and BSS systems.  
*Date of Commencement:* 07-03-2011 to 15-04-2011 (6 Weeks)

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## Course Title: IP Networks and Advanced Routing Technologies

**Course at a glance:** This course aims to enhance the level of expertise of the participants about planning, designing, configuring troubleshooting and administering IP Network The objective of this course is to create IP Network Professionals This course covers the following modules OSI-ISO reference model, Networking concepts, Ethernet Technology, TCP/IP, IP Subnetting and VLSMs, Introduction to CISCO IOS, Switching, Routing, VLAN, OSPF, RIP/IGRP, EIGRP, ISIS, BGP, WAN Route redistribution, Multicasting, IPv6, MPLS etc.  
*Date of Commencement:* 18-10-2010 to 26-11-2010 (6 Weeks)

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