



مكتب المستشار الوطني
NATIONAL CONSULTING BUREAU

**NCB JOB-ORIENTED COURSES
IN
TELECOMMUNICATION TECHNOLOGY**

- I- Transmission (31 Courses)**
- II- Networks (27 Courses)**
- III- Switching (42 courses)**

Practical Hands On Training Courses

In Collaboration with

"Egypt Telecommunication Workshops"

(CAIRO)



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الفرصة
المصرية
للإنجازات
Telecom Egypt
قطاع التدريب

I- Transmission

- 1 Principles of optical fibers
- 2 Principles of optical fibers (intensive)
- 3 Principles of digital telecommunications (Basic)
- 4 Preparation of optical fiber cables for splicing
- 5 Principles of synchronous digital hierarchy (SDH)
- 6 SDH system SMA units operation, maintenance and management
- 7 Measuring and locating faults in optical fiber cables
- 8 Principles of digital telecommunications (Advanced)
- 9 Link systems between exchanges
- 10 Pulse code modulation (PCM)
- 11 Optical fiber technology
- 12 Operation and maintenance of microwave equipment.
- 13 SDH microwave joints
- 14 Synchronous digital hierarchy (SDH) equipments
- 15 Synchronous digital hierarchy (SDH)
- 16 Terminal equipments of optical fibers (M90)
- 17 Microwave equipments
- 18 Digital microwave principles
- 19 Operation and maintenance of alcatel SDH equipment
- 20 Principles of digital telecommunication
- 21 Preparation and splicing of optical fiber cables
- 22 Splices of optical fiber cables
- 23 Basic course for telecommunication engineers
- 24 Test of the printed circuits electronic components
- 25 Basic course for telecommunication engineers
- 26 SDH (SL16-SL64) equipments
- 27 Radio communication principles
- 28 PCM (FMX) equipments
- 29 Fault location of optical fiber cables using mini OTDR equipments
- 30 Splices of optical fiber cables
- 31 VSAT

II- Networks

- 1 **Underground cable fault location using DYNATEL 957 set**
- 2 **Frame connections & maintenance**
- 3 **Cabinet connections**
- 4 **WLL network installations**
- 5 **Acceptance, operation & maintenance tests for WLL network**
- 6 **Cable laying from equipment room to frame**
- 7 **Subscriber telephone installation**
- 8 **Underground cable fault location**
- 9 **Jelly-filled cables splicing**
- 10 **Alcatel telephone set maintenance**
- 11 **Overhead line maintenance**
- 12 **Subscriber line maintenance (Fault centers)**
- 13 **Subscriber line maintenance (Fault centers- intensive)**
- 14 **Installation, operation & maintenance of modern Japanese FX-4100 payphone set**
- 15 **Maintenance of modern telephone sets**
- 16 **Coin box periodic maintenance**
- 17 **Principles of digital line concentrators (MX4)**
- 18 **Subscriber telephone installations (Field course)**
- 19 **Installation, operation & maintenance of PLURIMA 4 Italian payphone set**
- 20 **Cable connections & optical telecommunication techniques**
- 21 **Switching test rooms**
- 22 **ISDN units & terminal equipment connections**
- 23 **Telephone network planning**
- 24 **Cable fault location using DYNATEL 865 set**
- 25 **Underground cable fault location sets**
- 26 **Underground cable fault location using modern sets (intensive)**
- 27 **Digital pair gain system**

III- Switching

- 1 Operation & maintenance of the ONU1000 system (intensive course)**
- 2 Principles of CCS7 system**
- 3 Knowledge step program**
- 4 Principles of 5ESS exchanges operation**
- 5 Infrastructure & value-added telecommunication services for customer sales**
- 6 Microprocessor equipments**
- 7 EWSD exchanges node commander**
- 8 Subscribing new subscribers in the service using (Cilmage) program**
- 9 Integrated services digital network (ISDN)**
- 10 Operation & maintenance of OCB 283 exchange**
- 11 An introduction to EWSD exchanges**
- 12 Ways of earth fault protection**
- 13 Operation & maintenance of ACE10 subscribers stage**
- 14 Intelligent network**
- 15 Using computers in dealing with new subscribers operating particulars**
- 16 Digital telecommunications principles (Advanced)**
- 17 Link methods between exchanges**
- 18 Principles of electrical engineering for personnel working at fault centers**
- 19 Logic circuits**
- 20 Principles of OCB283 exchanges**
- 21 Data network services**
- 22 Net manager center**
- 23 ISDN services**
- 24 EWSD exchanges operation & maintenance (advanced course)**
- 25 TELIC exchanges operation & maintenance (private exchanges)**
- 26 5ESS exchange traffic analysis**

- 27 VER.11EWSO operation & maintenance
- 28 Principles of digital exchanges
- 29 EWSO exchanges operation & maintenance
- 30 Fault alarms of EWSO exchanges equipment
- 31 An introduction to digital exchanges systems
- 32 X.25 protocol operation & maintenance
- 33 Link signal No. 7
- 34 Principles of NEAX 61-E exchanges
- 35 Data networks execution & maintenance
- 36 Operation of protocol analyzer equipment
- 37 Basic course for German exchanges operation & maintenance (1st level)
- 38 Basic course for German exchanges operation & maintenance (2nd level)
- 39 German exchanges power node
- 40 AXE10 electronic exchange GSS (Group Switch Stage) operation & maintenance
- 41 Exchange Air Conditioning
- 42 Maintenance & Elimination of Diesel Faults for Exchanges

