

Installation & Maintenance of Electronic Equipments in Cell phone towers

Name of the Module: Installation & Maintenance of Electronic Equipments in Cell phone towers

Sector : Electronics

Code : ELC209

Duration : 240 Hrs

Entry qualification : 8th std pass with age atleast 14 years.

MES Modules on Basic Electronics -Repair and Maintenance of Power supply, Inverter and UPS

Terminal competency : Should be able to:

Install antenna

Install and Maintain Generator set, UPS

Install and maintain Base Terminal Station

Contents :

Practical Competencies	Underpinning Knowledge (Theory)
<i>Practice procedures for safety and health hazards measures</i>	<i>Electrical and personal safety, dangers and preventions</i>
<ul style="list-style-type: none"> • Perform cable earthing • Feeder cable clamping • Feeder connector making • Install indoor and outdoor ladder • Cable routing • Install equipment like BTS, TMR • Install antenna 	Programme Contents: <ul style="list-style-type: none"> • Feeder Cables – earthing, clamping, connector • Ladders used – installation of indoor and outdoor ladders • Base Transceiver Station (BTS)– INSTALLATION • Installation of transmission rack (TMR) • Equipment Installation and safety • Installation of Antenna
<ul style="list-style-type: none"> • Install the GSM & MINILINK antenna • Use VSWR meter and measure the signal strength • Perform Microwave alignment • Perform the task of interconnecting the different units in a Base Transceiver Station 	<ul style="list-style-type: none"> • Fundamentals of AC • Microwave spectrum - CDMA, GSM - micro wave link – wave guide • modem multiplexing unit • Switching Multiplexing Unit • Tributary Frame • Distribution Unit • Mini link cable and installation • Antenna- mini-link & serving antenna, antenna maintenance • UPS and its maintenance • Generator set and its Maintenance • Lighting arrestor • Electrical wiring, cabling and routing

Resources:

1. Multimeter
2. Altimeter
3. GPS meter
4. binocular
5. VSWR Meter
6. M4 crimping tool
7. BNC crimping tool
8. SMZ crimping tool
9. MAINTENANCE TOOL KIT consisting of spanners, screw drivers etc
10. clamp meter