

SYLLABUS FOR CONSTRUCTION ELECTRICAL WIREMAN TRADE

Duration at Skills Training Institute : **600 Hrs**
(Spread in three months)

- 1. Introduction to ITI** : **3 Hrs**
- 2. Introduction to the Trade** : **3 Hrs**
- 3. Introduction to Trade Glossary** : **6 Hrs**
- 4. Introduction to Tools & Equipment** : **12 Hrs**
 - * Hand tools of the trade
 - * Bench Tools
 - * Electrical Drill
 - * Microgauge
- 5. Documentation** : **24 Hrs**
 - * Basic Theory
 - * Basic Sketches
 - * IEE Rules
 - * Log sheets
 - * Store requisition
- 6. Materials** : **16 Hrs**
 - * P.V.C. Flexible Cables
 - * LT Cables
 - * HT Cables
 - * Telephone Cables
 - * Wires
 - * Conduits
 - * Switch Gears
 - * Electrical Fixtures
- 7. Testing** : **16 Hrs**
 - * Line Tester
 - * Continuity Tester
 - * Earth Tester
 - * Megger
 - * Multimeter
 - * Clamp Meter
 - * Tacho Meter
 - * Hydro Meter
 - * Discharge Tester
 - * Phase Sequence Meter
 - * Growler

- 8. Safety : 24 Hrs**
- * Causes of Accident
 - * Type of Extinguishers
 - * Artificial Respiration
 - * Reason for Shock
 - * Method of Isolating Supply
 - * Personal Safety & Responsibility
 - * Working at Height Ladder/Scaffold
- 9. Practice Modules : 348 Hrs**
- F1. Workshop Practice : 44 Hrs
- * Making external thread on mild steel (MS) rod
 - * Type of filing
 - * Checking the flatness and square of the surface
 - * Method of using centre punch
 - * Method of hack sawing
 - * Drilling through holes
 - * Internal threading
 - * Operate an electrical drill
 - * Use of Jig saw for cutting metal sheet
 - * Holes by knock out punch
 - * Holes by holes saw cutter
 - * Safety
 - * Site tidiness
- F2. Wire Termination & Joints : 28 Hrs
- * Termination to metal clad top & other plug top
 - * Connecting up appliance socket
 - * Basic flexible joints
 - * Safety
 - * Site tidiness
- F3. Cable Glanding, Termination Lug and Soldering : 28 Hrs
- * Soldering procedure
 - * Basic wire soldering
 - * Soldering in lug
 - * Crimping procedure
 - * LT cable joint
 - * Making hold in GI sheet by coldchisel for Glanding
 - * Safety
 - * Site tidiness
- F4. Basic Wiring (P.V.C.) : 32 Hrs
- * One lamp controlled by one SPT switch
 - * Two lamp controlled by two independent SPT switch

- * Independently controlled one lamp and one socket
- * Connection of measuring instrument rotary switch
- * Safety
- * Site tidiness

F5. Basic Wiring MS : 32 Hrs

- * Cut thread on MS pipe using a die stock
- * One lamp controlled by one SPT switch metal conduit
- * Two lamp controlled by two SPT switch in metal conduit
- * Independently controlled one lamp and one socket in metal conduit
- * Safety
- * Site tidiness

F6. Basic Wiring (Concealed Type) : 32 Hrs

- * Method of marking through Plumb bob, Spirit level & Water level
- * Wall Chasing for wiring
- * Fixing DB, Switchboard & other electrical boards
- * One lamp controller by one SPT switch in concealed
- * Two lamp controlled by two SPT switch in concealed
- * Independently controlled one lamp and one socket in Concealed
- * Safety
- * Site tidiness

F7. Termination & Fault Finding in Construction M/C. & Fittings : 32 Hrs

- * Memco Rectifier
- * K320 Generator
- * Transformer 2 Phase
- * Transformer 3 Phase
- * Rod binding M/c.
- * Halogen Fitting
- * Sodium vapor fitting
- * Safety
- * Site tidiness

F8. Simple Control Circuit : 32 Hrs

- * DOL Starter
- * Forward & Reverse Starter
- * Star delta starter
- * Connection of measuring instrument, rotary switch
- * Safety
- * Site tidiness

F9. Making of Earth Pit	: 48 Hrs
* Installation of earth electrode as per IE rule	
* Safety	
* Site tidiness	
F10. Testing of Circuits	: 32 Hrs
* Insulation test	
* Continuity test	
* Polarity test	
* Phase sequence test	
* Panel board test	
* Earth test	
* Secondary Battery test	
* Simple fault finding	
* Armature test	
* Safety	
* Site tidiness	
10. Introduction to Trade on Job Site	: 64 Hrs
11. Revision	: 60 Hrs
12. Final Testing & Evaluation	: 24 Hrs