



All correspondence should be addressed to the Director

**CONTENT OF SHORT TERM COURSES**

Course Code	TITLE	Duration (Weeks)	Learning outcome
<b>HVAC</b>			
H-1	Repair and maintenance of No Frost Double Door Refrigerator with inverter technology.	01	1) Identify the electrical and electronic components 2) Testing electrical components 3) Leak testing, evacuation and gas charging. 4) Installation of refrigerator.
H-2	HVAC (Heating Ventilation and Air conditioning) - Level 1	01	1. Identification and operations of Air conditioning machines. 2. Leak testing, Evacuation and gas charging in Air conditioning machine 3. Psychometric process. 4. Measurements in Air conditioning machine. 5. Service and maintenance in Air conditioning machines.
H-03	Repair and maintenance of Invertor split Air Conditioner	01	1) Identifications of electrical and mechanical components of Invertor split Air Conditioner. 2) Testing electrical components and wiring in Invertor split Air Conditioner. 3) Evacuation and gas charging in Invertor split Air Conditioner. 4) Performance testing in Invertor split Air Conditioner. 5) Installation of a Invertor split Air Conditioner.

Course Code	TITLE	Duration (Weeks)	Learning outcome
<b>AUTOMATION</b>			
AM-1	Electrical controls	01	1)Operation and control of 1 phase and 3 phase AC Motors 2)Operation by logic control by push button, 3)Connection of 3 Phase Induction Motor with Power Supply using all control components in control circuit 4)Connection and reading of measuring instruments connected to Motor
AM-3	Basic PLCs and Ladder Programming	01	1)Understand the basic and application of GE PLC 2)Understanding and practicing GE PLC programming using VPLCT-03 in basic applications
AM-4	Industrial Applications using PLC	01	1)Understand the use and application of GE PLC in Industries 2)Understanding and practicing GE PLC programming using VPLCT-03 in industrial applications
AM-5	Basics of AC Drive	01	1)Operation of AC Drive with three Phase Induction Motor, 2)Identification of parts of AC Drive panel/system 3)Uploading of parameters/Commissioning of Induction Motor for operation, 4)Editing of parameters for desired operation of 3 Phase AC Motor
AM-9	Embedded system and its application(PIC16F877A)	01	1) Understand the use of embedded system in Industrial Automation 2) Upgraded skill in PIC programming
<b>CAD</b>			
CAD-01	AutoCAD(Mechanical)	02	1. An ability to create 2D and 3D plans and designs. 2. Use shortcuts to improve productivity 3. Draw orthographic views of shapes 4. Draw isometric view of shapes (3 views) Format and print designs
<b>Computer Hardware &amp; Network Maintenance</b>			
CH-1	Certificate course in Computer Hardware & Network Maintenance	02	1. Identify the components of a PC, 2. Install OS in PC 3. Install application softwares and antivirus. 4. Connect peripherals to PC, 5. Back up and retrieve data from PC 6. Identify faults of PC 7. Troubleshoot faults of a PC. 8. Set up a computer LAN network, 9. Configure computer LAN network 10. Troubleshoot computer network.

GREEN TECHNOLOGY			
GT1	Operation and maintenance of Solar PV system	02	<ol style="list-style-type: none"> <li>1. Understand and verify natural planetary movements and sunlight's path.</li> <li>2. Demonstrate characteristics of Photovoltaic cells, Modules, Batteries and Charge controllers.</li> <li>3. Construct and demonstrate Solar DC appliances.</li> <li>4. Connect, test, undertake maintenance and disposal of solar batteries.</li> <li>5. Connect and test solar panel, Charge controller, Battery bank and Inverter.</li> <li>6. Prepare bill of materials for small, medium and mega solar PV projects.</li> <li>7. Perform various tests and measurement pertaining to PV Modules and their installation.</li> <li>8. Perform operation, Maintenance and testing of PV system with best practices.</li> </ol>

**Director reserves the right to alter or cancel course(s) without assigning any reason.**