

## Trades Details Summary

Trade Name	Description	Duration (Days)
AC Mechanic	To give Technical Training in AC Mechanic trade	18

### Theory (AC Mechanic)

Topic	Keylearning Outcomes	Equipment Required	Duration
Faults, Causes & Remedy for Air Conditioner	Window AC, Split AC, Refrigerator, Railway Air Conditioners, Water Cooler	Trainer Guide, personal protective equipment(PPE)	2:0
Registration of participants	• Covid Declaration • Participants Profile • Introduction	White Board	2:0
AC Mechanic safety & Knowledge about PPEs	• What is safety • Awareness about General Safety • Mechanic Safety • Use of PPEs: Hand Gloves, Safety Goggles, Apron, Earplugs • Advantages of Safety • Do's & Don'ts	Presentations, Trainer Guide, personal protective equipment (PPE)	2:0
Introduction to AC Mechanic Trade	• AC System • Different types of AC system: Uses of Air conditioning	Trainer Guide	2:0
Measuring Instruments for Air conditioning	Types of Measuring Instruments, Multimeter, Tong tester, Megger, Earth Tester, Sling Psychrometer, Voltmeter, Ampere meter, Pressure Gauge, Vacuum Gauge, Compound Gauge, temperature sensor, Digital Thermometer, Thermostat	Trainer Guide	2:0
Refrigeration system & Parts of Refrigeration	Compressor, evaporator (cooling coil), Suction line, Discharge line, Thermostat expansion valve, Receiver, Condenser, Refrigerant gas, Blower fan, exhaust fan, Air filter	Trainer Guide	2:0
AC Mechanic -requirement and use of Tools	Different types of tools, screw drivers, Pliers, Pipe cutter, Tube cutter, Small gas cylinder, Tube bender, Roller bender, Valve key, Packing key, Allen key, Ratchet Wrench, Gasket Punch, Hammer, Files, Hecksaw, Steel scale, tri square, Drill machine, Wrench, Vice, Wire gauge, Electric Soldering Iron, Punching tool & Flaring tool	Trainer Guide, personal protective equipment (PPE)	2:0
Role of Electricity & Operation of Electrical equipment	Single phase or three phase power supply, MCB/MCCB, Compressor motor, Condenser motor, Control circuit, Starting & Running capacitor, Motor overload protector, Electrical Relays* (Current Relay, Voltage Relay & Starting Relay)	Presentations, Trainer Guide, personal protective equipment(PPE)	2:0
Different type of Air Conditioning equipments (Repairs & Service)	Window AC, Split AC, Central Air Conditioner, Water cooler, Refrigerator, Railway Air Conditioners	Presentations, Trainer Guide, personal protective equipment(PPE)	2:0
Installation of Air Conditioner	Measures for installation of various Air conditioning equipments	Training Kit (Presentations, Trainer Guide, personal protective equipment(PPE)	2:0
Financial Management	• Financial Management • Resources/Fund availability by Bank	Presentations, White Board	2:0
Doubt Clearing	• Feed Back • Group discussion	Presentations, White Board	2:0
Valedictory	• Work Ethics • Personal Financial Planning • Health	Presentations, White Board	2:0
Effective Communication	• Subordinates • Peers • Superiors, Customers	Audio-Video	5:0
First Aid	• Electrocutation • Cut • Bleeding • Faint • Bandage • Resuscitation • Ambulance	Audio-Video	4:0
Material Handling	• Movement of Raw Material • Movement of Finished Material • Waste Segregation • Cleanliness • Stacking	Audio-Video	3:0
Orientation Programme & Introduction about Entrepreneurship	• Entrepreneur, Entrepreneurship and Enterprise • Scheme & Types of Entrepreneurship • Importance of Entrepreneurship • Entrepreneurship Opportunities & Challenges • Startup Business • Cash Flow * Incubation Centre like DIC & IIT (BHU)	Presentations, Trainer's Guide	2:0

Financial Management	• Financial Management • Resources / Fund availability by Bank • Loan Scheme like Mudra Loan	Presentations, Trainer's Guide	2:0
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### Practical (AC Mechanic)

Topic	Keylearning Outcomes	Equipment Required	Duration
AC Mechanic-Practical-6	Testing of Electrical Circuit in Window type AC system	Trainer Guide	8:0
AC Mechanic-Practical-7	Servicing of Window type AC system	Trainer Guide	6:0
AC Mechanic-Practical-1	Charging the Refrigerant from Supply cylinder to service cylinder	Trainer Guide	5:0
AC Mechanic-Practical-2	Replacement of Compressor in AC unit	Trainer Guide	5:0
AC Mechanic-Practical-3	To remove air from AC system	Trainer Guide	6:0
AC Mechanic-Practical-4	Checking the leakage in Refrigeration system	Trainer Guide	8:0
AC Mechanic-Practical-5	Charging the Refrigerant from Refrigeration system	Trainer Guide	8:0
AC Mechanic-Practical-8	Installation of Window type AC system	Trainer Guide	6:0
AC Mechanic-Practical-9	Servicing of domestic Refrigerator	Trainer Guide	6:0