

# **ENGINEERING**



# 6 Months Program

3 Months E-Learning 3 Months Internship



# What is AC Repair Engineering

The AC Repair process is essentially the process of restoring an air conditioner to working order. Though each unit requires a unique approach to service, the general method involves inspecting the various components of the system, servicing what needs servicing and performing any repairs that are deemed necessary.

# **Tutor Details**

Mr. Arul Prakash is an outstanding specialist in Air Conditioning and Cooling Technology with a notable B.Voc. in Refrigeration and Air Conditioning. He has a commendable five years of unbeatable professional experience as an AC Technician and two years of experience in Voltas. Ranging from the Installation



**Arul Prakash** 

of Air Conditioning systems, Maintenance & Repair, D.D.C. Building Control & Pneumatic Section, and Refrigerator Service Section, his competence is unmatched.



# Course Structure

- 3 months E-Learning
- 3 months Internship
- ➤ Live Session for Doubt Clearance (Monday to Friday 10 AM to 7 PM)
- > 100% Placement Assistance

# Certification







Certified Automation Professional(CAP)
(PAID)

# **Fees Structure**

Admission Fee: 3,800

Total Fee: 13,800

Avodha provides Job-oriented courses in an affordable price. The total price of our course is ₹13,800/-; but to avail the course, he/she has to pay only ₹3,800/- as an admission fee & rest of the amount ₹10,000/- has to be paid only after getting the job related to the course he/she joined at Avodha, ie., The first installment ₹5,000/- has to pay on the first day of his/her employment in a job wherein they are placed through Avodha. And the second payment of ₹5,000/- needs to be done once the student completes 30 days of employment in the Job they have been placed via Avodha.



# INTRODUCTION

> Definition

## **HISTORY**

- > Methods of Refrigeration
- > Units of Refrigeration
- > Heat and Temperature
- > Pressure
- Work, Power, Energy
- ➤ Laws

# **REFRIGERATION SYSTEMS**

- > Vapor Compressions Systems
- > Vapor Absorption Systems





## PROCESSES INVOLVING IN REFRIGERATION

- Compression
- Condensation
- Expansion
- Evaporation

## **REFRIGERANTS**

- Introduction to Refrigerants
- Classification of Refrigerants
- Properties
- secondary Refrigerants

#### **COMPRESSORS**

- Introduction to Compressors
- Classification of Compressors



- Reciprocating Compressor
- Hermetic Sealed Compressor
- Rotary Compressor
- Centrifugal Compressor

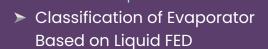
#### **CONDENSERS**

- Factors Affecting Condensation
- Classification of Condensers
- Air Cooled Condenser
- Water Cooled Condenser
- Evaporative Condenser
- Cooling Tower
- Types of Cooling Tower

# **EVAPORATORS**

- Capacity And Heat Transfer of Evaporator
- Types of Evaporators
- Classification of Evaporator Based on Construction





- Classification of Evaporator
   Based on Mode of Heat Transfer
- Classification of EvaporatorBased on Operation Conditions
- > Defrosting

## **EXPANSION DEVICES**

- Types of Expansions Devices
- Hand Operated Expansions Devices
- Automatic Expansions Devices
- > Thermostatic Expansions Devices
- Float Valves





# **APPLICATIONS**

- > Refrigerators And Freezer
- > Room Air Conditioner
- > Industrial Air Conditioning
- > Refrigerated Trucks
- > ICE Manufacture
- ➤ Cold Storage
- > Freeze Drying

# **FANS**

- Capacitor and Types
- > Relays

# TOOLS

- ➤ Basic Tools
- > Refrigeration Tools





# ADDITIONAL CLASSES

- > A/C Remote
- Brazing
- Gas Charging
- Relay Wiring
- > Fan Motor Complaint Outdoor
- Pressure Test
- Protecting Device
- PCB Replacement
- > Thermostat Switch
- ➤ A/C Service Indoor Unit
- > A/C Service Outdoor Unit
- Compressor Fault
- > Fan Leaf Complaint Outdoor
- Types of Fans



- > Abnormal Sound Outdoor
- ➤ Coil Leak and Replacement
- Compressor
- ➤ Split A/C Working
- Swing Complaint
- Water Cooler
- ➤ Window A/C Assembling
- ➤ Window A/C Coil Leak
- ➤ Window A/C Compressor Fault
- ➤ Window A/C Dismantling
- ➤ Window A/C Fan Motor
- ➤ Window A/C PCB Replacement
- ➤ Window A/C Service
- ➤ Working of Window A/C







# Offline Center



Kochi (Head Quarters)



Hyderabad



Mumbai



Bangalore



Chennai



Delhi



Trivandrum



Ernakulam



Kannur







**Thrissur** 



Kottayam



Kozhikode



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