



Diploma in Mechanic Ref. & Air Conditioner

ITI in Refrigeration and Air Conditioning is a certificate course that a student opts after the completion of matriculation examination (Class 10th). It comes under the category of vocational courses and its call as an ITI trade.

It is a specialized course that covers topics related to air conditioning and refrigeration process and working of different parts of cooling devices. Refrigeration and Air Conditioning is all about the maintenance of different parts of Refrigeration and Air Conditioning devices.

A student enrolled in ITI in Refrigeration and Air Conditioning course learn various skills and grab knowledge related to the servicing and repair of refrigerators, air conditioners, air coolers, coolants of vehicles etc.

It is a professional-oriented course and candidates with a certification in ITI Refrigeration and Air Conditioning can secure a specialized job after the completion of course.

ITI Course/Trade in Refrigeration and Air Conditioning Syllabus

ITI in Refrigeration and Air Conditioning is a short term course and the complete syllabus of the course is covered in under two semesters in most of the ITI in India.

The general topics covered in the two semesters are given below -

Semester 1

- Introduction: Refrigeration and Air Conditioning and Safety
- Fitting & Welding
- Electricals & Electronics
- Primary & secondary refrigerants



केन्द्रिय शैक्षणिक एवम् तांत्रिक माहिती संशोधन समीती CENTRAL EDUCATION & INFORMATION TECHNOLOGY RESEARCH COMMITTEE AN AUTONOMOUS INSTITUTION REGD.BY THE GOVT. OF NOT OF DELIHI UNDER ITA 1882 GOVT. OF INDIA REGD.BY NCS-MINISTRY OF LABOUR AND EMPLOYMENT GOVT.OF INDIA REGD. AT MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES(MSME), GOVT.OF INDIA



- Thermal insulation
- Lubrication
- Gas Charging, Testing & Faults Diagnosis
- Commercial RAC plants & Car air-conditioners 02
- Industrial Visit
- Project Works

Semester 2

- Observation, Analysis of Carnot cycle
- Non-Conventional Refrigeration system.
- Electronic Controls, Transistors
- Commercial Compressor & Capacity Control
- Cooling Tower

•

- Water Softening Plants, Chillers
- Refrigerant controls
- Food Preservation, Refrigerants, Lubrication
- Erection of plants, Ducts, HVAC, VAV system
- Psychrometry, Heat load estimation,
- Commissioning & preventive maintenance of different plants