



**Cambridge**  
*Technical College*

## **DIPLOMA OF REFRIGERATION AND AIR CONDITIONING**

The main aim of the Refrigeration and Air Condition Diploma is to prepare a cadre of Refrigeration and Air Condition Mechanic who are competent in adapting a body of knowledge in meeting the requirements and best practices in industries.

The following are the primary objectives of the Refrigeration and Air Condition Mechanic Programme:

- \* Exercise good judgment and resourcefulness in construction, maintenance and workplace health and safety.
- \* Have a thorough knowledge of the principle components of refrigeration systems, heat/cool units and Air Condition electrical and automatic controls used in all aspects of the refrigeration and Air Condition industry.
- \* Be capable of assembling, installing or over hauling all components and be proficient in the use of test instruments.
- \* Know, and be able to apply their knowledge of the installation, and service of HVAC systems in accordance with standards for the industry



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Program	Diploma of Refrigeration and Air Conditioning	
Credit Hours	72 Credits	
Duration	Academic Year (9 Months)	
Fees	2500 USD (\$)	
Scholarship Fees	1200 USD (\$)	
<b>Diploma of Refrigeration and Air Conditioning</b>		
Subject	Code	Credit Hours
English Language 101	EN101	3
Introduction: Refrigeration and Air Conditioning and Safety	RAC01	6
Fitting & Welding	RAC02	3
Primary & secondary refrigerants	RAC03	3
Thermal insulation	RAC04	3
Gas Charging, Testing & Faults Diagnosis	RAC05	3
Industrial Visit	RAC06	6
Observation, Analysis of Carnot cycle	RAC07	3
Electronic Controls, Transistors	RAC08	3
Commercial Compressor & Capacity Control	RAC09	3
Cooling Tower	RAC10	3
Water Softening Plants, Chillers	RAC11	3
Refrigerant controls	RAC12	3
Erection of plants, Ducts, HVAC, VAV system	RAC13	6
Psychrometry, Heat load estimation	RAC14	3
Practical Training	RAC15	18