



## PROFESSIONAL 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 Program:

- 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 overhauling 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



# Cambridge

Technical College

Program	Professional Diploma of Refrigeration and Air Conditioning		
Hours	240 Training Hours		
Duration	Academic Year (9 Months)		
	Subject	Training Hours	Code
	English Language 101	20	EN101
	English Language 102	20	EN102
	Introduction: Refrigeration and Air Conditioning and Safety	10	RAC01
	Fitting & Welding	10	RAC02
	Primary & secondary refrigerants	10	RAC03
	Thermal insulation	10	RAC04
	Gas Charging, Testing & Faults Diagnosis	10	RAC05
	Industrial Visit	10	RAC06
	Observation, Analysis of Carnot cycle	10	RAC07
	Electronic Controls, Transistors	12	RAC08
	Commercial Compressor & Capacity Control	12	RAC09
	Cooling Tower	10	RAC10
	Water Softening Plants, Chillers	12	RAC11
	Refrigerant controls	12	RAC12
	Erection of plants, Ducts, HVAC, VAV system	16	RAC13
	Psychrometry, Heat load estimation	16	RAC14
	Practical Training	40	RAC15