

## 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

Program	Diploma of Refrigeration and Air Conditioning	
Credit Hours	72 Credits	
Duration	Academic Year (9 Months)	
Diploma of Refrigeration and Air Conditioning		
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