

Heating, Ventilation, Air Conditioning and Refrigeration

HVAC 1014	Basic Electricity	4 credits
HVAC 1013	Schematics	3 credits
HVAC 1023	Air Properties	3 credits
HVAC 1033	Intro to Air Conditioning	3 credits
HVAC 1043	Heating Technology	3 credits
HVAC 1054	Residential Systems	4 credits
HVAC 1064	Refrigeration Systems	4 credits
HVAC 1074	Air Conditioning Systems	4 credits
HVAC 1083	Tubing, Pipe, and Welding	3 credits
TECH 1101	Computer Technology	1 credit
TECH 1102	Technical Communications	2 credits
		<hr/>
		34 credits

HVAC 1074 Air Conditioning Systems (3-3-4)

This course is a comprehensive study of A/C systems and the practical applications and installation of air conditioning units. Testing procedures, parts removal, and installation are covered in depth. Prerequisite: Basic Electricity, Air Properties, and Schematics. Spring

HVAC 1023 Air Properties (3-0-3)

This course is designed for the study of air properties and the instrumentation to meet the environmental needs of structures, residential and commercial, and the factors involved in the calculation of heating and cooling loads. Fall

HVAC 1014 Basic Electricity (3-3-4)

This course is designed to acquaint the student with the theory and practice of using electricity as it applies to HVAC technology. Fall/Spring

HVAC 1043 Heating Technology (2-3-3)

This course is designed to cover the construction, design, operation, and servicing of fossil fuel heating equipment, and heat pumps, both air to air and geothermal. Also included is the thermodynamics of heat flow, humidification, dehumidification, and filtering. Co-requisite: Basic Electricity, Air Properties, and Schematics. Fall

HVAC 1033 Introduction to Air Conditioning (3-0-3)

This course is designed to teach the principles of the basic refrigeration cycle, including temperature-pressure relationships, evaporation, condensation, heat transfer, and refrigerants. Also included is the identification and use of hand tools, principles of measurement, and safety principles and practices. Fall

HVAC 1064 Refrigeration Systems (3-3-4)

This course is a comprehensive study of mechanical refrigeration systems emphasizing proper service techniques through analysis of the problem. Testing procedures, parts removal, and installation are covered in depth. Prerequisite: Basic Electricity, Air Properties, and Schematics. Spring

HVAC 1054 Residential Systems (3-3-4)

This course is a comprehensive study of the major components and control devices and their applications. Testing procedures, parts removal, and installation are covered in depth. Prerequisite: Basic Electricity, Air Properties, and Schematics. Spring

HVAC 1013 Schematics (3-0-3)

This course is designed for the student to learn to read, draw, and interpret wiring diagrams and place the circuitry in operative arrangements with electrical and electronic symbols. Also included is the study of the distribution mediums such as duct design and sizing. Fall

HVAC 1083 Tubing, Pipe, and Welding (2-3-3)

This course is designed to cover the process of identifying tubing and piping with practical applications in sizing and fitting to different configurations using mechanical fittings, soft soldering, silver brazing, aluminum brazing, and equipment usage. Practical application is provided in the lab. Spring