

HEATING, VENTILATING & AIR CONDITIONING

HVAC Major

TECHNOLOGY & WORKFORCE DEVELOPMENT DIVISION

Program of Study

The Heating, Ventilating, and Air Conditioning (HVAC) program trains technicians with a strong theoretical background and hands-on experience. HVAC technicians will obtain a solid background in applied electricity and electronics.

Terra graduates are well-prepared to install and service residential and light commercial HVAC equipment along with light commercial refrigeration equipment.

The faculty has identified the following Learning Outcomes for all graduates:

- Be certifiable in National Refrigerant Transition and Recovery procedures by passing the national EPA mandated exam.
- Demonstrate the ability to understand and apply theoretical and practical knowledge of residential heating and air conditioning systems, and light commercial refrigeration systems for service work and installation.
- Demonstrate an understanding of the application and calibration of HVAC and refrigeration control systems.
- Demonstrate the ability to design and fabricate sheet metal ductwork systems and their basic components.

POTENTIAL OCCUPATIONS:

- Systems Installer
- Service Technician
- Lab Technician
- Self-employed HVAC Contractor
- Mechanical Systems Technician
- Energy Management Technician

Associate of Applied Science

TECHNICAL CONCENTRATION

		Credit Hrs.
REF	1100	Refrigeration I 4
REF	1120	Electricity for HVAC I 4
REF	1220	Electricity for HVAC II 4
REF	1250	Refrigeration II 4
REF	1350	Refrigeration III 4
REF	2150	Heating Systems I 3
REF	2160	Air Conditioning Systems 3
REF	2280	Heating Systems II 3
REF	2330	Electronics 4
REF	2500	Troubleshooting (Capstone) 3
		Total Technical Credit Hours 36

GENERAL EDUCATION AND RELATED COURSES

GEN	1000	First-Year Seminar 1
CIT	1090	Computer Fundamentals 3
EET	2240	Electrical Codes and Prints 3
Choose One:		ENG 1050 College Composition I or ENG 1020 3
ENG	1900	Technical Writing 3
MFG	1020	Safety 1
MTH	1150	Math for Trades 4
PHY	1070	Survey of Physics 3
PHY	1075	Survey of Physics Lab 1
SPE	2010	Effective Speaking 3
		*Humanities Elective 3
		*Social Science Elective 3
		Total General Education & Related Credit Hours 31

TOTAL CREDIT HOURS **67**

- * See page 95 for a listing of specific electives.
See your advisor for appropriate course selection.

For available Certificate Program options, see catalog pages 97-103.

- ** All students graduating from Terra State Community College with an Associate degree of any kind will be functionally proficient in common computer operations and applications. Please see your academic advisor or academic division office for further details.

To determine when courses are scheduled, see program curriculum sheet which is available from the Enrollment Services office in Building A/Room 100, from the Technology and Workforce Development Division office, Building E, Room 107 or on the web at www.terra.edu.