HEATING, VENTING, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY AAS

The Heating, Venting, Air Conditioning, and Refrigeration (HVACR) Technology Program prepares students with training in the heating, air conditioning, ventilation, and refrigeration field, both commercial and residential. Skills learned will enable graduates to choose from a variety of occupations such as service, installation, design and maintenance. Program flexibility allows students to enter at their existing level of competency and continue training to an employable skill level. Classroom instruction is provided in basic electricity, hydronic heating, commercial refrigeration, gas and oil heating systems, air conditioning, and general maintenance skills. Emphasis is placed on developing a logical approach to servicing, troubleshooting, and repair through directed practice.

Nationally accredited through HVAC Excellence. Articulation agreement with the United Association Union of Plumbers, Fitters, Welders and Service Technicians. Approved program with the Idaho Division of Occupational and Professional Licenses.

Entrance Requirements:

- Program has semester admittance (Fall and Spring)
- The prospective students must have a current valid driver's license while enrolled in the program and have no DUI's in the past 12 months
- Enrollment priority is on a first-come, first-served basis as determined by the student's faculty advising date
- Aleks score in Math of 14 or higher, Writing Placement Exam of 2 or higher, or equivalent college placement exam scores.

Upon completion of the AAS degree, the student will possess technical skills in:

- Knowledge of residential, commercial, and industrial HVACR systems
- Application of systematic and analytical troubleshooting processes
- Analysis of the properties of air, refrigerants and fuels
- Application of safety procedures
- Evaluation of energy usage and cost reduction strategies
- Comprehension of energy transfer in the form of heat, electricity, and kinetic motion
- Knowledge in plumbing, electrical, mechanical and structural trades
- Analysis of international, state, and local building codes
- Application of HVACR service, installation, maintenance, and design procedures
- Evaluation of system performance

General Education Requirements

Code	Title	Credits
Written Communication		
ENGL-101	WRITING AND RHETORIC I	3.00
Oral Communication		
Select one of the following:		3.00
COMM-101	FUNDAMENTALS OF ORAL COMMUNICATION	
COMM-203	SMALL GROUP COMMUNICATION	
COMM-204	PUBLIC SPEAKING	
Mathematical Ways of Knowing		
MTHPT-137	MATH FOR TECHNOLOGY	4.00
Social & Behavioral Ways of Knowing		
Select one of the following:		3.00
ANTH-102	CULTURAL ANTHROPOLOGY	
ANTH-120	WORLD PREHISTORY	
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES	
ECON-201	PRINCIPLES OF MACROECONOMICS	
ECON-202	PRINCIPLES OF MICROECONOMICS	
GEOG-102	INTRODUCTION TO GEOGRAPHY	
HIST-101	WORLD HISTORY I	
HIST-102	WORLD HISTORY II	
HIST-111	UNITED STATES HISTORY I	

HIST-112	UNITED STATES HISTORY II
HRPT-184	DIVERSITY IN ORGANIZATIONS
HRPT-185	HUMAN RELATIONS IN ORGANIZATIONS
POLS-101	AMERICAN NATIONAL GOVERNMENT
POLS-237	INTERNATIONAL POLITICS
POLS-285	COMPARATIVE GOVERNMENT
PSYC-101	INTRODUCTION TO GENERAL PSYCHOLOGY
PSYC-205	LIFESPAN DEVELOPMENTAL PSYCHOLOGY
SOC-101	INTRODUCTION TO SOCIOLOGY
SOC-102	SOCIAL PROBLEMS
SS-184	DIVERSITY IN ORGANIZATIONS
SS-185	HUMAN RELATIONS IN ORGANIZATIONS
Additional General Education Core	**3.00**
*Additional Core Course cannot be used to fulfill a requirement above.	
Select the link below to review LC State's General Education Core courses	
http://catalog.lcsc.edu/general-education (http://catalog.lcsc.edu/general-education/)/	
Total Credits	**16.00**

Program Requirements

Code	Title	Credits
Technical Core		
HVACR-115	BASIC ELECTRICITY	5.00
HVACR-120	HVAC PRINCIPLES	5.00
HVACR-130	TRADE SKILLS	5.00
HVACR-140	MECHANICAL SYSTEMS MAINTENANCE	5.00
HVACR-225	REFRIGERATION THEORY	5.00
HVACR-230	ADVANCED HVACR CONTROLS	5.00
HVACR-235	A/C SYSTEM DESIGN AND INSTALLATION	6.00
HVACR-240	DUCT FABRICATION	2.00
HVACR-250	GAS CODE REVIEW	2.00
HVACR-255	HEATING SYSTEMS	6.00
HVACR-260	MECHANICAL AND ELECTRICAL CODE REVIEW	2.00
HVACR-265	HYDRONIC SYSTEMS	2.00
HVACR-294	INTERNSHIP	2.00
Total Credits		**52.00**

Sequential Plan of Study - Even Year

Course	Title	Credits
First Year		
Fall		
ENGL-101	WRITING AND RHETORIC I	3.00
HVACR-115	BASIC ELECTRICITY	5.00
HVACR-225	REFRIGERATION THEORY	5.00
HVACR-230	ADVANCED HVACR CONTROLS	5.00
	Credits	**18.00**
Spring		
CORE	Oral Communication	3.00
HVACR-120	HVAC PRINCIPLES	5.00
HVACR-235	A/C SYSTEM DESIGN AND INSTALLATION	6.00
HVACR-240	DUCT FABRICATION	2.00
HVACR-260	MECHANICAL AND ELECTRICAL CODE REVIEW	2.00
	Credits	**18.00**

Second Year		
Fall		
CORE	Social & Behavioral Ways of Knowing	3.00
HVACR-250	GAS CODE REVIEW	2.00
HVACR-255	HEATING SYSTEMS	6.00
HVACR-265	HYDRONIC SYSTEMS	2.00
MTHPT-137	MATH FOR TECHNOLOGY	4.00
	Credits	**17.00**
Spring		
CORE	Additional General Education Course	3.00
HVACR-130	TRADE SKILLS	5.00
HVACR-140	MECHANICAL SYSTEMS MAINTENANCE	5.00
HVACR-294	INTERNSHIP	2.00
	Credits	**15.00**
	Total Credits	**68.00**

Sequential Plan of Study - Odd Year

Course	Title	Credits
First Year		
Fall		
ENGL-101	WRITING AND RHETORIC I	3.00
HVACR-115	BASIC ELECTRICITY	5.00
HVACR-250	GAS CODE REVIEW	2.00
HVACR-255	HEATING SYSTEMS	6.00
HVACR-265	HYDRONIC SYSTEMS	2.00
	Credits	**18.00**
Spring		
CORE	Oral Communication	3.00
HVACR-120	HVAC PRINCIPLES	5.00
HVACR-130	TRADE SKILLS	5.00
HVACR-140	MECHANICAL SYSTEMS MAINTENANCE	5.00
	Credits	**18.00**
Second Year		
Fall		
CORE	Social & Behavioral Ways of Knowing	3.00
HVACR-225	REFRIGERATION THEORY	5.00
HVACR-230	ADVANCED HVACR CONTROLS	5.00
MTHPT-137	MATH FOR TECHNOLOGY	4.00
	Credits	**17.00**
Spring		
CORE	Additional General Education Course	3.00
HVACR-235	A/C SYSTEM DESIGN AND INSTALLATION	6.00
HVACR-240	DUCT FABRICATION	2.00
HVACR-260	MECHANICAL AND ELECTRICAL CODE REVIEW	2.00
HVACR-294	INTERNSHIP	2.00
	Credits	**15.00**
	Total Credits	**68.00**

View on YouTube (https://www.youtube.com/watch/?v=afy8pOfp9Wg)

Graduates from Heating, Ventilation, Air Conditioning, and Refrigeration Technology go on to obtain careers in a variety of career fields:

- A/C Technician
- HVAC Installer
- HVAC Mechanic
- Service Technician
- Commercial Refrigeration Technician