

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 Building Safety.

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 qualify for MTHPT-103 and ENGL-101.

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

Select one of the following: 3.00-5.00

ANTH-360	RACE AND ETHNICITY
ART-100	INTRODUCTION TO ART
BIOF-100	INTRODUCTION TO BIOINFORMATICS
BIOL-100	CONCEPTS OF BIOLOGY
BIOL-120	PLANTS AND PEOPLE
BIOL-123	BIOLOGY IN FILM
BIOL-175	HUMAN BIOLOGY
BIOL-227	HUMAN ANATOMY AND PHYSIOLOGY I
CHEM-100	CONCEPTS OF CHEMISTRY
CHEM-105	GENERAL, ORGANIC AND BIOCHEMISTRY
CHEM-111	PRINCIPLES OF CHEMISTRY I
CITPT-108	INTRODUCTION TO COMPUTER SCIENCE
COMM-345	INTERCULTURAL COMMUNICATION
CS-108	INTRODUCTION TO COMPUTER SCIENCE
ENGL-175	LITERATURE AND IDEAS
ENGL-257	WORLD CLASSICS
ENGL-258	INTERNATIONAL LITERATURE
ENGL-260	NATIVE AMERICAN LITERATURE
ENGL-261	MYTHOLOGIES
ENGL-474	NATIVE AMERICAN WRITTEN LITERATURE
FSCI-101	INTRODUCTION TO FORENSIC SCIENCE
GEOL-101	PHYSICAL GEOLOGY
GEOL-120	INTRODUCTION TO EARTH SYSTEMS
GIS-271	GEOGRAPHIC INFORMATION SYSTEMS
HUM-101	THE ART AND HISTORY OF THE MOTION PICTURE
HUM-150	INTRODUCTION TO THE ARTS
ID-240	INTEGRATED SCIENCE II
ID-300C	ETHICS AND IDENTITY
ID-301A	HELLS CANYON INSTITUTE
KIN-220	SOCIAL-CULTURAL ASPECTS OF SPORTS
MUS-101	SURVEY OF MUSIC
MUS-102	MUSIC IN AMERICA
MUS-150	WORLD MUSIC
MUS-151	HISTORY OF MUSICAL THEATER
MUS-152	HISTORY OF JAZZ AND POPULAR MUSIC STYLES
NP-101	NEZ PERCE LANGUAGE AND CULTURE
NP-102	NEZ PERCE LANGUAGE AND HISTORY
NS-140	INTEGRATED SCIENCE I

NS-150	INTRODUCTION TO NATURAL SCIENCES
NS-174	NATURAL SCIENCE FOR ELEMENTARY EDUCATOR
PHYS-111 or PHYS-112	GENERAL PHYSICS I GENERAL PHYSICS II
PHYS-171	PHYS SCIENCES FOR ELEMENTARY EDUCATORS
PHYS-205	DESCRIPTIVE ASTRONOMY
PHYS-211	PHYSICS FOR SCIENTISTS AND ENGINEERS I
SPAN-101	ELEMENTARY SPANISH I
SPAN-102	ELEMENTARY SPANISH II
SPAN-201	INTERMEDIATE SPANISH I
SPAN-202	INTERMEDIATE SPANISH II
SS-184	DIVERSITY IN ORGANIZATIONS
SS-185	HUMAN RELATIONS IN ORGANIZATIONS
THEA-101	SURVEY OF THE THEATER
Total Credits	16.00-18.00

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
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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
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Total Credits	68.00
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Sequential Plan of Study - Odd Year

Course	Title	Credits
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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
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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
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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
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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
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Total Credits	68.00
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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