

This program provides the knowledge and skills for entry into the air conditioning, heating and refrigeration industry in the areas of installation and maintenance as well as upgrading and refresher courses for those already employed in the field. All heating, air conditioning, and refrigeration classes will be updated to reflect today's changing energy efficiency requirements. LEED requirements will be incorporated into all curriculum and additional classes will be offered to support the new energy efficiency needs. Please consult with a construction technology advisor at 303.914.6367.

Bachelor of Science transfer program: All Construction Technology Associate of Applied Science graduates are eligible to participate in the Colorado Community College Pathways program, a strategic partnership between DeVry University – Colorado and Red Rocks Community College. Students may transfer 80+ credit hours from Red Rocks Community College to DeVry University and complete a Bachelor of Science in Technical Management in as few as two semesters. Additionally, graduates of the HVAC/R Program may transfer to Ferris State University to pursue a baccalaureate degree. Contact your Construction Technology advisor for details.

Related course work may be found under:
Construction Technology, Electricity, Industrial Maintenance Technology, Process Technology, and Renewable Energy Technology.

Degrees: Associate of Applied Science

Air Conditioning, Heating and Refrigeration
Air Conditioning
Refrigeration
Heating
Hydronic Heating

Certificates:

Air Conditioning
Level I Refrigeration
Level II Refrigeration
Refrigeration
HVAC Fundamentals
HVAC Controls Technician
Forced-Air Heating
Hydronic Heating

AAS Degree

Air Conditioning, Heating and Refrigeration

Required Courses	Credits
Level I Refrigeration Certificate	10.5
HVA 110 Fundamentals of Gas Heating	4
HVA 111 Piping Skills	4
HVA 132 Air Conditioning and Refrigeration Controls	4
HVA 134 Air Conditioning Systems	4
HVA 162 Heating Controls	4
HVA 206 Mechanical Codes	4
HVA 240 Servicing Forced Air Systems	4
HVA 247 Hot Water Heating Systems	4
Construction Technology Core Requirements	4
Choose a minimum of 4 credits from the following course prefixes: ENT, ENY AEC, OSH.	
General Education Courses (See AAS Degree Requirements)	15
Total Credits	61.5

AAS Degree

Air Conditioning

Required Courses	Credits
Air Conditioning Certificate	34.5
HVA 263 Chillers	4
Construction Technology Core Requirements	8
Choose a minimum of 8 credits from the following course prefixes: ENT, ENY AEC, OSH.	
General Education Courses (See AAS Degree Requirements)	15
Total Credits	61.5

AAS Degree

Refrigeration

Required Courses	Credits
Refrigeration Certificate	30.5
HVA 231 Pneumatic Controls	4
HVA Electives	4
Construction Technology Core Requirements	8
Choose a minimum of 8 credits from the following course prefixes: ENT, ENY AEC, OSH.	
General Education Courses (See AAS Degree Requirements)	15
Total Credits	61.5

AAS Degree

Heating

Required Courses	Credits
HWE 113 First Aid and CPR	0.5
OSH 127 10-HR Construction Industry Standards	1
HVA 111 Piping Skills	4
HVA 105 Electricity for HVAC/R	4
HVA 110 Fundamentals of Gas Heating	4
HVA 140 Basic Sheet Metal	4
HVA 162 Heating Controls	4
HVA 206 Mechanical Codes	4
PLU 208 International Fuel Gas Code	4
HVA 240 Servicing Residential Forced Air Systems	4
HVA 247 Hot Water Heating Systems	4
HVA 257 Low Pressure Steam Heating	4
Construction Technology Core Requirements	4

Choose a minimum of 4 credits from the following course prefixes:
ENT, ENY AEC, OSH.

General Education Courses (See AAS Degree Requirements)	15
Total Credits	60.5

AAS Degree

Hydronic Heating

Required Courses	Credits
Hydronic Heating Certificate	37.5
Construction Technology Core Requirements	10

Choose a minimum of 10 credits from the following course prefixes:
ENT, ENY AEC, OSH.

General Education Courses (See AAS Degree Requirements)	15
Total Credits	62.5

Certificate

Air Conditioning

Required Courses	Credits
Level 1 Refrigeration Certificate	10.5
HVA 111 Piping Skills	4
HVA 132 Air Conditioning and Refrigeration Controls	4
HVA 134 Air Conditioning Systems	4
HVA 140 Basic Sheet Metal	4
HVA 206 Mechanical Codes	4
HVA 261 Air Conditioning Systems Service and Repair	4
Total Credits	34.5

Certificate

Level I Refrigeration

Required Courses	Credits
HWE 113 First Aid and CPR	0.5
OSH 127 10-HR Construction Industry Standards	1
HVA 102 Basic Refrigeration	4
HVA 105 Electricity for HVAC/R	4
HVA 113 Refrigerant Recovery Training	1
Total Credits	10.5

Certificate

Level II Refrigeration

Required Courses	Credits
Level I Refrigeration Certificate	10.5
HVA 111 Piping Skills	4
HVA 132 Air Conditioning and Refrigeration Controls	4
HVA 233 Advanced Refrigeration or HVA 261 A/C Systems Service and repair	4
Total Credits	22.5

Certificate

Refrigeration

Required Courses	Credits
Level I Refrigeration Certificate	10.5
HVA 111 Piping Skills	4
HVA 122 Commercial Refrigeration or HVA 233 Advanced Refrigeration	4
HVA 132 A/C and Refrigeration Controls	4
HVA 206 Mechanical Codes	4
HVA xxx HVA Electives	4
Total Credits	30.5

Certificate

HVAC Fundamentals

Required Courses	Credits
HWE 113 First Aid and CPR	0.5
OSH 127 10-HR Construction Industry Standards	1
HVA 102 Basic Refrigeration	4
HVA 105 Electricity for HVAC/R	4
HVA 110 Fundamentals of Gas Heating	4
HVA 113 Refrigerant Recovery Training	1
Total Credits	14.5

Certificate

HVAC Controls Technician

Required Courses	Credits
HWE 113 First Aid and CPR	0.5
OSH 127 10 HR Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
HVA 110 Fundamentals of Gas Heating	4
HVA 132 Air Conditioning/Refrigeration Controls	4
HVA 162 Heating Controls	4
HVA 231 Pneumatic Controls	4
Total Credits	21.5

Certificate

Forced-Air Heating

Required Courses	Credits
HWE 113 First Aid and CPR	0.5
OSH 127 10-HR Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
HVA 110 Fundamentals of Gas Heating	4
HVA 111 Piping Skills	4
HVA 140 Basic Sheet Metal	4
HVA 162 Heating Controls	4
HVA 206 Mechanical Codes	4
PLU 208 Fuel Gas Code	4
HVA 240 Servicing Residential Forced Air Systems	4
Total Credits	33.5

Certificate

Hydronic Heating

Required Courses	Credits
HWE 113 First Aid and CPR	0.5
OSH 127 10-HR Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
HVA 110 Fundamentals of Gas Heating	4
HVA 111 Piping Skills	4
HVA 162 Heating Controls	4
HVA 206 Mechanical Codes	4
HVA 247 Hot Water Heating Systems	4
HVA 257 Low Pressure Steam Heating	4
HVA 267 Radiant Heating Systems	4
PLU 208 Fuel Gas Code	4
Total Credits	37.5