

Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R)

Associate of Applied Science

The AAS degree in heating, ventilation, air conditioning and refrigeration trains technicians to design, install and maintain complex heating, cooling and refrigeration systems in structures of all sizes and functions, from homes to casino resort hotels. The HVAC/R program combines classroom instruction with hands-on practice and provides industry upgrade training on an on-going basis.

General Education Requirements

Diversity	(3 credits)
Refer to the 'Diversity' section of the general education description of this course catalog for a list of approved courses. (See page B-9) Designated diversity courses can be used to fulfill other general education or major requirements.	
English/Communications	6 credits
Human Relations	3 credits
Quantitative Reasoning	3 credits
Science	3 credits
Social Science/Humanities	3 credits
U.S. and Nevada Constitutions	3 credits
Total General Education Requirements	21 Credits

Core Requirements

AIT 110	General Industrial Safety	1
BI 101	Introduction to Building Codes	3
CONS 120	Blueprint Reading and Specification	3

Total Core Requirements	7 Credits
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Emphasis Requirements

AC 102	Refrigeration Theory	3
AC 150	Basic Refrigeration Servicing	6
AC 205	HVAC Control Systems	4
ADT 105	Architectural Drafting I	5
ADT 230	Mechanical and Electrical Equipment for Buildings	3
MT 102	Fundamentals of Industrial Electricity	3

Choose one of the following:

AC 106	Residential Gas Heating	(6)
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- or -

AC 200	Commercial Refrigeration I	(6)
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Total Emphasis Requirements	30 Credits
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Elective Requirements

Choose six credits from the following:

AC 111	Heat Pumps	3
AC 210	Boiler Operation and Maintenance	3
AC 295	Internship HVAC Career	3
CONS 121	Principles of Construction Estimating	3
CONS 211	Construction Cost Control	3
Any other AC course		

Total Elective Requirements	6 Credits
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Total Degree Requirements	64 Credits
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Suggested Course Sequence

First Year	Course #	Title	Credits
1st Semester			
Emphasis	AC 102	Refrigeration Theory	3
Emphasis	ADT 105	Architectural Drafting I	5
Core	AIT 110	General Industrial Safety	1
Quantitative Reasoning	MATH 108	Math for Technicians	3
Emphasis	MT 102	Fundamentals of Industrial Electricity	3
			Total 15
2nd Semester			
Emphasis	AC 205	HVAC Control Systems	4
Core	BI 101	Introduction to Building Codes	3
Core	CONS 120	Blueprint Reading and Specification	3
Communications	ENG 107	Technical Communications I	3
Science	PHYS 100	Introductory Physics	3
			Total 16
Second Year	Course #	Title	Credits
3rd Semester			
Elective		Choose from list	3
Social Science/ Humanities/ Diversity	AAD 201	History of the Built Environment	3
Emphasis	AC 150	Basic Refrigeration Servicing	6
U.S. and Nevada Constitutions	Elective		3
English	ENG 101	Composition I	3
			Total 18
4th Semester			
Elective		Choose from list	3
Emphasis	AC 106	Residential Gas Heating	6
Emphasis	ADT 230	Mechanical and Electrical Equipment for Buildings	3
Human Relations	CE 201	Workplace Readiness	3
			Total 15
			Degree Total 64