

HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION (AAS)

Catalog Effective Term: Fall 2024

Program Code: APHVCR

Credential: Associate in Applied Science

High Demand Occupation, High Skill Occupation, High Wage Occupation

This program is a capstone to the Heating, Ventilation, Air Conditioning and Refrigeration - Commercial Trade Advanced Certificate. It provides a rigorous heating, ventilation, air-conditioning and refrigeration (HVACR) background with solid preparation for entry-level management positions or transfer to four-year programs offering bachelor degrees in HVACR, technology management, and other technically oriented fields. This program also provides opportunities to obtain advanced certifications which are recognized throughout the heating, ventilation and air-conditioning industry.

Articulation

Eastern Michigan University, several BS degrees

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <http://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php>.

Minimum Credits Required for the Program: 60

Full-Time Students

Course	Title	Credits
First Semester		
HVA 101	Heating, Ventilation and Air Conditioning I	4
HVA 103	Heating, Ventilation and Air Conditioning II	4
WAF 104	Soldering and Brazing	2
Math Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#math)		3
Credits		13
Second Semester		
HVA 102	HVAC Sheet Metal Fabrication	3
HVA 105	Residential and Light Commercial Heating Systems	4
HVA 107	Residential and Light Commercial Air Conditioning Systems	4
Writing Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		14
Third Semester		
HVA 108	Residential HVAC Competency Exams and Codes	3
Speech/Comp. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		6
Fourth Semester		
HVA 201	Energy Audits	4

HVA 203	Refrigeration Systems	3
HVA 205	Hydronic Systems	4
Nat. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci)		3
Credits		14
Fifth Semester		
HVA 202	Air System Layout and Design	3
HVA 207	Commercial Industry Standards with Competency Exams	3
Soc. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci)		3
Arts/Human. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#arthuma)		3
Open Elective(s) to reach a minimum of 60 total credits.		1
Credits		13
Total Credits		60

Part-Time Students

Course	Title	Credits
First Semester		
HVA 101	Heating, Ventilation and Air Conditioning I	4
Math Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#math)		3
Credits		7
Second Semester		
HVA 102	HVAC Sheet Metal Fabrication	3
HVA 103	Heating, Ventilation and Air Conditioning II	4
Credits		7
Third Semester		
HVA 107	Residential and Light Commercial Air Conditioning Systems	4
Writing Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		7
Fourth Semester		
HVA 105	Residential and Light Commercial Heating Systems	4
HVA 201	Energy Audits	4
Credits		8
Fifth Semester		
HVA 108	Residential HVAC Competency Exams and Codes	3
WAF 104	Soldering and Brazing	2
Credits		5
Sixth Semester		
Soc. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci)		3
Speech/Comp. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#writing)		3
Credits		6
Seventh Semester		
HVA 203	Refrigeration Systems	3

2 Heating, Ventilation, Air Conditioning and Refrigeration (AAS)

HVA 205	Hydronic Systems	4
Credits		7
Eighth Semester		
HVA 202	Air System Layout and Design	3
HVA 207	Commercial Industry Standards with Competency Exams	3
Credits		6
Ninth Semester		
Arts/Human. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#arthuma)		3
Nat. Sci. Elective(s) (https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci)		3
Open Elective(s) to reach a minimum of 60 total credits.		1
Credits		7
Total Credits		60