

# Heating, Ventilation, Air Conditioning & Refrigeration

Offered at MCC-Business & Technology

This program offers degree and certificate options leading to heating, ventilation and air conditioning careers.

A.A.S. HVAC.....	61-63 Credits
Energy Efficiency Certificate.....	40 Credits
HVAC Advanced Certificate.....	39-41 Credits
HVAC Certificate.....	23 Credits

## A.A.S. Heating, Ventilation and Air Conditioning

201805 Revised 10/2020 (Fall 2021)

General Education Requirements	Credits	Semester Taken	Prerequisites
ENGL 101    Composition and Reading I	3		ENGL 90 with a minimum grade of S or appropriate placement score
HIST 120    United States History to 1865 <b>or</b> HIST 121    United States History Since 1865 <b>or</b> POLS 136    Introduction to U.S. National Politics	3		
<b>Option 1:</b> MATH 103    Technical Mathematics I or MATH 120    College Algebra and MATH 104    Technical Mathematics II or MATH 130    Trigonometry <b>Option 2:</b> MATH 150    PreCalculus or higher	5-6		MATH 31 with a grade of S or appropriate placement (MATH 103 and MATH 104) MATH 95 with a grade of C or appropriate placement (MATH 120 and MATH 150) MATH 120 or appropriate placement score (MATH 130)
COMM 100    Fundamentals of Speech	3		ENGL 90 with a minimum grade of S or appropriate placement score.
Any course numbered 100 or higher from the following disciplines: ART, ANTH, COMM, ECON, ENGL, Foreign Language, GEOG (except 104 or 110 and GIS courses), HIST, HUMN, MUSI, PHIL, POLS, PSYC, SIGN, SOSOC, SOCI, THEA	4-5		See Courses section of this catalog for individual course prerequisites.
<b>Minimum Total General Education Credit Hours</b>	<b>18-20</b>		
<b>Specific Program Requirements</b>			
EHSS 111    Intro to Health & Safety for General Industry <b>or</b> EHSS 112    Intro to Health & Safety for Construction	1		
HVAC 109    Electricity for HVAC/R Technicians	4		
HVAC 111    Principles of Heating, Ventilation and Air Conditioning	3		
HVAC 120    Fundamentals of Refrigeration	4		
HVAC 135    Residential Heating and Air Conditioning I	4		HVAC 109 (or take concurrently), HVAC 111, 120
HVAC 136    Residential Heating and Air Conditioning II	4		HVAC 135
HVAC 221    Commercial Refrigeration	4		HVAC 109, 120, 136
HVAC 230    Sheet Metal Layout and Fabrication	4		
HVAC 235    Systems Installation	3		HVAC 136 and 230
HVAC 240    Geo-Thermal & Air Source Heat Pumps	3		HVAC 136
INTE 224    Energy Management, Efficiency and Conservation	3		
<i>6 hours from the following:</i> HVAC/INTE/WELD electives	6		
<b>Total Credit Hours Required</b>	<b>61-63</b>		