

Heating, Ventilation, Air Conditioning, and Refrigeration (BP/EP) Associate in Applied Science Degree

Semester Sequence

Offered at Brooklyn Park and Eden Prairie

First Semester

HVAC1000	Electrical Circuits	3
HVAC1005	OSHA 30-Hour Construction Safety Training	2
HVAC1010	1PH Motors and Auxiliary Controls	2
HVAC1020	Tube and Pipe Fabrication	2
HVAC1040	Basic Refrigeration	4
HVAC1050	Refrigerant Transition and Recovery	1
HVAC1055	Refrigeration Certification Exam	0
HVAC1110	Electrical Diagrams	2

Total Credits 16

Second Semester

HVAC1030	Sheet Metal	2
HVAC1071	Gas Heat Systems	4
HVAC1120	Psychrometrics	1
HVAC1140	Central Air Conditioners	3
HVAC1146	Residential Heat Pumps	2
HVAC1151	Hydronic Heat Systems	2
SOCI1100	Introduction to Sociology	3
	or	
	Choose 3 credits from MnTC Goal Area 5	3
	Technical Studies Electives	1

Total Credits 18

Summer Semester

General Education Electives	6
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Total Credits 6

Third Semester

(HVAC Courses offered at Eden Prairie only)

HVAC2001	Packaged Heating and Cooling Equipment	4
HVAC2005	Commercial HVAC/R Safety and Servicing Procedures	2
HVAC2010	Commercial Heat Pump Systems	2
HVAC2030	Commercial Ice Making Machines	3
HVAC2041	Gas/Refrigeration (Mechanical) Code	1
HVAC2050	Electrical for Commercial HVAC&R Equipment	2
PHIL1100	Critical Thinking for College Success	3
	or	
PHYS1005	Introductory Physics I	3
	or	
	Choose 3 credits from MnTC Goal Area 2	3

Total Credits 17

Fourth Semester

(HVAC Courses offered at Eden Prairie only)

HVAC2111	Low Pressure Steam and Water Boilers	2
HVAC2121	Refrigerated Coolers and Cases	4
HVAC2130	Supermarket Refrigeration	3
HVAC1035	National Electrical Outcome Assessment	0
HVAC1045	National Air Conditioning Assessment	0
HVAC1065	National Gas Heat Outcome Assessment	0
COMM1250	Interpersonal Communication	3
	or	
	Choose 3 credits from MnTC Goal Area 1	3
	Technical Studies Electives	3

Total Credits 15

Technical Studies Electives

Recommended:

HVAC1015	Residential Heat Load Calculation	1
HVAC1025	Mini-Split Air Conditioners	1
HVAC1060	Low Global Warming Potential (GWP) Refrigerant Certification	1
HVAC1081	Oil Heat Systems	1
HVAC1090	Low Global Warming Potential (GWP) Refrigerant Certification Exam	0
HVAC1100	Service Call Completion	1
HVAC1155	Radiant Heat Systems	1
HVAC1160	Air Quality Systems	1
HVAC1175	R-410A Certification Training	1
HVAC1181	MN Class CBoiler Operator License	3
HVAC1185	R-410A Certification Exam	0
HVAC1190	MN Special Boilers License	1
HVAC2020	Pneumatic Controls	2
HVAC2025	Introduction to HVAC/R Building Automation Controls (BAC)	2
HVAC2045	Hydrocarbon Refrigerant Certification	1
HVAC2055	Hydrocarbon Refrigerant Certification Exam	0
HVAC2060	Computer Room Air Conditioning	1
HVAC2100	Water Chiller Machines	3
HVAC2165	Air Handling Units	1
HVAC2170	HVAC/R Externship	1

Choose a Total of: 4 Credits

General Education Electives

Choose credits from Hennepin Technical College's Minnesota Transfer Curriculum (MnTC) general education courses.

Choose a Total of: 6 Credits

MnTC Goal Area 1

A complete list of MnTC courses and Goal Areas that can be used to meet General Education requirements can be

found at www.hennepintech.edu. The same course cannot satisfy more than one MnTC Goal Area requirement.

COMM1200	Intercultural Communication	3
COMM1250	Interpersonal Communication	3
COMM1260	Small Group Communication	3
COMM1280	Public Speaking	3
ENGL1070	Technical Writing	3
ENGL1100	Writing and Research	4
ENGL1250	Short Form Composition and Reporting	4
ENGL1300	Introduction to Creative Writing	3

MnTC Goal Area 2

BIOL1000	Biology in Society	4
BIOL1100	Nutrition and Health	3
BIOL1300	Introduction to Forensic Science	3
BIOL1400	Human Biology	4
BIOL2005	General Biology I	4
BIOL2125	Anatomy and Physiology I	4
BIOL2225	Anatomy and Physiology II	4
BIOL2235	Microbiology	4
COMM1260	Small Group Communication	3
MATH1150	Applications of Quantitative Reasoning	3
PHIL1100	Critical Thinking for College Success	3
PHYS1005	Introductory Physics I	3
PHYS1010	Introductory Physics II	3
SOCI1100	Introduction to Sociology	3

MnTC Goal Area 5

ECON1200	Principles of Microeconomics	3
ECON1300	Principles of Macroeconomics	3
ENGL1200	Introduction to Humanities	3
HIST1400	Contemporary World History	3
POLI1000	Introduction to American Government and Politics	3
PSYC1000	General Psychology	3
PSYC1200	Psychology Throughout the Lifespan	3
PSYC1300	Abnormal Psychology	3
SOCI1100	Introduction to Sociology	3
SOCI1200	Marriage and Family	3
SOCI1400	Race in America	3
SOCI1500	Introduction to Criminal Justice	3
SOCI1600	Food and Society	3

Graduation (72 credits)

Semester listings reflect the recommended sequence. Due to circumstances beyond our control, the information herein is subject to change without notice.

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