

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code: 0832
(Effective Fall 2018 –
Summer 2023)

Heating and Air Conditioning C.A. Pathway

Students will receive instruction on how to install, service, and maintain heating, air conditioning, and refrigeration systems, including sheet metal and electrical, to prepare for entry-level positions. Students completing this certificate may use the credits towards the Heating and Air Conditioning Associate in Applied Science Degree (0836).

For More Information

Contact the Heating and Air Conditioning Program, West Campus Building, Room M127, telephone number (517) 483-1570 or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

| Semester I | Course Title | Prerequisites | Credit/Billing Hours |
|--|--------------------------------|---|-----------------------------|
| Program of Study Requirements | | | |
| <i>Students who have already completed DCTM 102, ELTE 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for HVAC 102. Any of these courses may also be used to fulfill the prerequisite for HVAC 103, HVAC 105 and HVAC 110.</i> | | | |
| HVAC 100 | Fundamentals of HVAC | Reading Level 3 and Writing Level 2 | 3 / 3 |
| HVAC 102 | Industrial/Construction Safety | Reading Level 3 and Writing Level 2 | 2 / 3 |
| HVAC 103 | HVAC/R Piping | Minimum 2.0 in (HVAC 102 or DCTM 102 or ELTE 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 | 3 / 4 |
| HVAC 105 | Sheet Metal Fab & Installation | Minimum 2.0 in (HVAC 102 or DCTM 102 or ELTE 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106) | 2 / 3 |
| HVAC 110 | Applied Electricity I | Minimum 2.0 in (HVAC 102 or DCTM 102 or ELTE 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106) | 3 / 4 |
| Credits | | | 13 / 17 |

| Semester II | Course Title | Prerequisites | Credit/Billing Hours |
|--------------------------------------|---------------------------|--|----------------------|
| Program of Study Requirements | | | |
| HVAC 111 | Applied Electricity II | Minimum 2.0 in (HVAC 100 and HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| HVAC 120 | Heating I | Minimum 2.0 in (HVAC 100 and HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| HVAC 130 | Air Conditioning I | Minimum 2.0 in (HVAC 100 and HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| Credits | | | 9 / 12 |
| Semester III | Course Title | Prerequisites | Credit/Billing Hours |
| Program of Study Requirements | | | |
| HVAC 220 | Heating II | Minimum 2.0 in (HVAC 111 and HVAC 120) and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| HVAC 221 | Introduction to Hydronics | Minimum 2.0 in HVAC 120 and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| HVAC 230 | Air Conditioning II | Minimum 2.0 in (HVAC 111 and HVAC 130) and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| HVAC 240 | Refrigeration I | Minimum 2.0 in (HVAC 230 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 3 | 3 / 4 |
| Credits | | | 12 / 16 |
| Total Credits | | | 34 / 45 |