

Grand Rapids Community College – Western Michigan University Teacher Education Preparation Program

Program of Work for Air Conditioning, Refrigeration & Heating

The articulated program will allow a student to complete a teacher education program with a major in **Air Conditioning, Refrigeration & Heating (with VT endorsement)** and a teachable minor in an appropriate program. **Note:** The VT endorsement requires 4000 hours of recent and relevant work experience.

University Graduation Requirements include:

- Minimum: 122 credits
- Minimum: 2.0 cumulative GPA (Occupational Education program requires a 2.5)
- Minimum: 30 credits from WMU (No credit by exam, self-instructional, or correspondence except General University Studies (GUS) through Extended University Programs)
- Minimum: 10 of the last 30 credits from WMU (No credit by exam, self-instructional, or correspondence except GUS)
- Minimum: One-half total required credits from 4-year institution

- I. Admission to the WMU teacher education program will include these requirements:
 - A. 2.5 or higher Grade point
 - B. Satisfactory completion of the State of Michigan Basic Skills Test (math, reading, communication)
 - C. CD 118 (GRCC) or Human Growth and Development-ED 250 at WMU satisfactorily completed

II. Teaching **major** satisfied at GRCC by taking 30 credits from the following:

EL 144	Basic Electricity	3 credits
ER 110	Basic Refrigeration	2 credits
ER 111	Refrigeration Applications	2 credits
ER 121	Metallic & Non Metallic Joining Tech	2 credits
ER 128	Heating and Cooling Controls	3 credits
ER 135	Heating Theory/Applications	2 credits
ER 136	Air Conditioning Theory	2 credits
EL 163	Electrical Troubleshooting	2 credits
ER 174	Mechanical Blueprint Reading and Sketching	3 credits
ER 221	Duct Design & Construction	3 credits
ER 230	HVACR Electronic Controls	3 credits
ER 246	Mechanical Codes	2 credits
ER 275	Commercial Refrigeration	3 credits
ER 276	Advanced Air Conditioning, Refrigeration and Heating	3 credits
MN 116	Welding	2 credits

Teaching **minor** satisfied by taking at least 20 semester hours of WMU courses in an appropriate secondary education minor.