About Renewable Energy Technology

Renewable Energy is one of the most vital resources of the 21st century. Northwestern Michigan College has been offering Renewable Energy training since 2001, drawing students from across the United States and internationally.

Those already working in the trades will find the program is an opportunity to learn a new application of their skills. Newcomers will find a thorough, hands-on curriculum designed for employability upon completion.

Certificate options include:

**HVAC/R**: The specific applications as related to HVAC/R, and a few HVAC/R courses.

**Electrical**: The specific applications as related to producing electricity, and a few electrical courses.

Career Opportunities

Construction and renewable energy are growing fields. Here are some ways you might use your skills:

- Installer
- Service technician
- Field supervisor
- Inspector
- Inside sales manager
- Distributor sales
- Estimator
- Owner
- Trainer
- Commercial contracting
- Residential contracting
- Construction management
- NABCEP Entry-level certification

About Construction Technology

Demand for skilled carpenters, electricians, HVAC/R technicians and plumbers is expected to rise by more than 15% in northern Michigan during the next decade.

NMC’s Construction Technology certificates and Associate degrees allow those already working in the fields to advance their skills. The curriculum is also appropriate for those without previous experience.

**Carpentry**: Skilled carpenters must knowledgeably use specialized tools, read blueprints, frame structures, install doors, windows, cabinets, insulation, finish trim and construct roofs, decks, and stairways.

**Construction Management**: In today’s commercial and residential construction industry, construction managers must have a variety of technical and managerial skills.

**Electrical**: Technical training in Electrical includes skills needed in residential, commercial, and industrial applications, such as electrical theory, National Electrical Code, motors, generators, lighting, and control systems.

**HVAC/R**: NMC’s technical training in HVAC/R includes heating, ventilating, air-conditioning, and refrigeration systems for residential through commercial/industrial applications.

**Facilities Maintenance**: Facilities maintenance requires knowledge in several areas. Technical training covers reading blueprints, general carpentry, tools of the trade, electrical wiring and schematics, and thermodynamics of refrigeration.
Construction and Energy Facilities and Equipment

- Aero Park Laboratories
  - 29,000 sq. ft. facility renovated in compliance with LEED certification standards
  - Student lounge area, student study enclaves
  - 12 flexible lab spaces equipped with trade specific materials

- Renewable energy labs including
  - Solar thermal system (hot water)
  - Solar mobile lab
  - Grid-connected, 8-kw solar photo-voltaic array
  - Geothermal installation

- Professional-grade tools used to construct, install, service and diagnose
  - Carpentry
  - Electrical/Plumbing
  - HVAC
  - Woodworking

Construction Program Highlights

- Interactive labs for hands-on learning
- Learn from instructors with industry experience
- Industry-designed curriculum aligns with national competency standards
- NCCER certified instruction and certification, a national standardized training and credentialing program for the construction industry
- Professional-grade tools and technology
- Attend class just one night per week

Who should consider careers in Construction Technology and Renewable Energy?

- People who like working with their hands
- People who like solving problems
- People who like working outdoors
- People who enjoy working independently or are interested in starting their own business

What you'll find at NMC:

- Transfer courses, two-year associate degrees and professional certificates
- Online learning options
- Small classes, personal attention
- Scholarship opportunities
- Reasonable tuition
- Excellent academic reputation

“Education is key to the future of the construction industry. From developing the next generation of building professionals to ensuring that veteran builders are skilled in the latest developments in homebuilding technology, NMC is a core partner in moving our industry forward in this region.”

Bob O’Hara
Executive Officer, Home Builders Association of the Grand Traverse Area

“The opportunity that I have been given in the construction management program has allowed me to apply what I have learned out in the field. I have begun to understand cost management and blueprint reading which in turn have helped me improve my understanding of how job sites function and the task of managing employees as well. I would personally like to thank the CM program at NMC for giving me the knowledge to pursue a path as a construction manager.”

Dylan Nagel, Hallmark Construction

I Found It Here

nmc.edu/construction