



ENERGY

PATHWAY

ACADEMIC AND CAREER PLANNING

Pathway to Sucess

Energy



A career in Energy offers the opportunity to contribute to the sustainable production and management of vital energy resources. With a wide range of career paths, from renewable energy to energy conservation, this field blends innovation, technology, and a commitment to environmental stewardship.

Career Options

Explore and discover potential career options in the fields related to Energy.

Degree, Certification, and Training Options

Explore the degrees, certifications and training options that are available to help you be successful in the fields related to Energy.

Course/CTE Options

Explore the course and program options that are available to students while still in high school to help them prepare for a career in Energy.

Resume Builders

Explore the possible experiences that will help build a strong resume.

Career Options

Energy

There are several ways to start a career in Energy. The quickest route is on-the-job training, where employees learn while working. Another option is earning a certification, which typically takes a few months to a year. For those seeking more in-depth education, a college degree can take 2 to 6 years to complete. Below are a few examples of options for each pathway, though this list is not exhaustive.

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Jobs That Require On-The-Job Training

- Solar Panel Installer
- · Oil Rig Worker
- · Gas Meter technician
- Water Treatment Plant Operator
- Renewable Energy Systems Installer
- Energy Equipment Operator
- Pipeline Technician
- Maintenance Worker
- Utility Line Worker

02

Jobs that Require a Certification

- Certified Solar Energy Technician
- Certified Wind Turbine Technician
- Green Building Certification Professional
- Certified Energy Manager
- Certified Energy Risk Professional

- Energy Storage System Tech
- Certified Biomass Technician
- Certified Geothermal Installer
- Certified Substation Technician
- Energy Efficiency Consultant

03

Jobs That Require A Degree

- Renewable Energy Engineer
- Petroleum Engineer
- Electrical Engineer
- Sustainability Manager
- Mechanical Engineer

- Hydropower Engineer
- Nuclear Engineer
- Energy Policy Analyst
- Environmental Consultant
- Clean Energy Project Manager



Finding On-The-Job Training

Energy



Resources

Michigan Works

Michigan Works has resources that can help locate available jobs and aide in your necessary training.

1118 East Easterday Avenue Sault Ste. Marie, MI 49783

Phone: (906) 635-1752

Fax: (906) 635-0115

Michigan Relay Center 711

Monday through Friday: 8-5 EST

On-the-job training is an excellent way to start a career in the Energy field, offering the opportunity to learn essential skills while working. This handson training is often customized to the specific role, allowing you to gain practical experience from day one. Many employers in the energy industry, including power plants, renewable energy companies, utility providers, and energy consulting firms, offer onthe-job training. To find these opportunities, check local job listings, explore company websites, or reach out to industry associations that can connect you with employers offering this type of training.

<u>Indeed</u>

Indeed is a great tool to search for available jobs in your area.

Energy Obtaining a Certificate

Certificate Programs

Alpena Community College

Utility Tech - Certification

<u>Utility Tech Advanced - Certification</u>

Northwestern Michigan College

<u>Renewable Energy Technology Electrical -</u> Certification

<u>Renewable Energy Technology HVAC - Certification</u>

Michigan Technological University

<u>Electrical Power Engineering - Certification</u>

Certificate programs in the Energy Career Cluster offer specialized training that can be completed in a few months to a year. These programs provide valuable skills and credentials that can help advance your career in the energy sector. You can find certificate programs at community colleges, technical schools, and through online platforms. Many industry organizations also offer certification programs in areas such as renewable energy, energy efficiency, and environmental sustainability. To explore options, check with local educational institutions, online course providers, or professional associations related to energy and environmental fields.

Energy Obtaining a Degree

Bachelor/Associate Degrees

Alpena Community College

<u>Utility Tech - Associate</u> <u>Electrical Systems technology -Bachelor</u>

Northwestern Michigan College

<u>Water Quality & Environmental</u> <u>Technology - Bachelor</u>

Lake Superior State University

General Engineering Technology - Associate

General Engineering - Associate

Natural Resource Technology - Associate

Electrical Engineering Technology - Bachelor

Electrical Engineering - Bachelor

Environmental Science - Bachelor

Michigan Technological University

Electrical Engineering - Bachelor

Electrical Engineering Technology - Bachelor

Environmental Engineering - Bachelor

<u>Environmental Science & Sustainability - Bachelor</u>

Degree programs in the Energy Career Cluster provide in-depth knowledge and training, typically taking four to six years to complete. These programs cover a wide range of topics, from renewable energy technologies to energy management and sustainability practices, and can open doors to advanced career opportunities in the energy sector. You can find degree programs at universities, colleges, and specialized institutions, both on-campus and online. Many schools offer bachelor's and master's degrees in fields such as energy engineering, environmental science, and sustainable energy systems. To explore options, visit university websites, consult with academic advisors, or research programs through professional organizations related to the energy industry.

Courses/CTE Options

Energy

Plan your schedule with your future goals in mind by exploring common courses, AP courses, CTE programs, and opportunities to earn college credit while still in high school.



Sault High Courses

- Chemistry/Honors Chemistry
- Physical Science
- Environmental Science
- Anatomy & Physiology
- Physics



AP Courses

- AP Biology
- AP Language
- AP Computer Science



CTE Programs

Sault Area Career Center does not currently offer a CTE program for this cluster, however you can speak with the CTE director, Kellie Greener for WBL and Less-than-class-size opportunities.



Dual/Concurrent Enrollment

- College Chemistry
- Other related options can be talked about with your Counselor or visits the information page HERE.

See Sault High School Full **Course Offerings**.

Resume Builders

Job Shadow Experiences

Students who engage in job shadow experiences show proven interest in their future and dedication to their success. If you have questions about job shadowing or want help finding an opportunity contact the MTSS Coordinator.

Intern/Externships

Internships and externships provide valuable opportunities for high school students to gain real-world experience, develop new skills, and explore potential career paths. These experiences can significantly benefit students, both professionally and personally.

Leadership Positions

Holding Leadership Positions shows dedication and passion by the student. It also can be a look into the students hobbies.

Student Organizations

Joining Student Organizations shows a balance in priorities. Please see the Sault Ste Marie **Student Organizations** to find an organization to join!

Volunteer Experiences

Volunteering is a great way to get experience and explore postsecondary options.