



SCIENCE, TECHNOLOGY, ENGINEERING AND MATH

PATHWAY

ACADEMIC AND CAREER PLANNING

Pathway to Sucess



Science, Technology, Engineering and Math

A career in Science, Technology,
Engineering, and Math (STEM)
offers the opportunity to drive
innovation and solve complex
problems across various industries.
With diverse career paths in fields
like engineering, computer science,
biotechnology, and environmental
science, STEM professionals
combine creativity, technical
expertise, and a passion for
advancement to make a
meaningful impact on the world.

Career Options

Explore and discover potential career options in the fields related to science, technology, engineering and math.

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 Science, technology, engineering and math.

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 science, technology, engineering and math.

Resume Builders

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

Career Options

Science, Technology, Engineering and Math

There are several ways to start a career in Science, Technology, Engineering, and Math (STEM). The quickest is through on-the-job training, where you can gain hands-on experience while learning. Another option is earning a certification, which typically takes a few months to a year and provides specialized knowledge. For those seeking more education, a college degree usually takes 2 to 6 years, depending on the field. Below are a few examples of options for each pathway, though this list is not exhaustive.

01

Jobs That Require On-The-Job Training

- IT Help Desk Technician
- Cable/network Installer
- Lab Technician Assistant
- Survey Technician
- Medical Lab Assistant

02

Jobs that Require a Certification

- Web Developer
- Mechatronics Technician
- GIS Technician
- 3D Printing Technician
- Data/Al Analyst

03

Jobs That Require A Degree

- Manufacturing Engineer
- Design Engineer
- Drafter
- Equipment Technician
- Biostatistician



Finding On-The-Job Training

Agriculture, Food and Natural Resources



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 a great way to start a career in Agriculture, Food, and Natural Resources, allowing you to learn essential skills while working. This type of training is typically hands-on and tailored to the specific job, so you can gain experience right from the start. Many employers in this field offer on-the-job training, including farms, agricultural companies, food processing plants, and conservation organizations. To find opportunities, check local job listings, visit company websites, or reach out to industry associations that may 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.

Science, Technology, Engineering and Math Obtaining a Certificate

Certificate Programs And Associate Degrees

North Central Michigan College

Mechatronics - Certificate

Biology- Associate

<u>Mechanical Engineering - Associate</u>

<u>Engineering Technology - Associate</u>

Lake Superior State University

<u>Chemistry - Associate</u>

Cannabis Science - Associate

<u>Electrical Engineering</u> <u>Technology - Associate</u>

General Engineering - Associate

Certificate programs in Science, Technology, Engineering, and Math (STEM) 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 STEM fields. You can find certificate programs at community colleges, technical schools, and online platforms. Many industry organizations also offer certifications in areas such as data analysis, engineering technologies, software development, and cybersecurity. To explore your options, check local educational institutions, online course providers, or professional associations related to STEM.

<u>Manufacturing Engineering Technology - Associate</u>

<u>Natural Resource Technology - Asscoaite</u>

Science, Technology, Engineering and Math Obtaining a Degree

Bachelor/Associate Degrees

Lake Superior State University

<u>Biology</u>

Chemistry

Cannabis Chemistry

Conservation Biology

Environmental Science

<u>Geology</u>

Manufacturing Engineering Technology

Mathmatics

Mechanical Engineering

Northern Michigan University

Ecology

Zoology

Biochemistry

Medicinal Plant Chemistry

<u>Clinical Laboratory Science</u>

Mechanical engineering Technology

Earth Science

Mathmatics

Physics

Degree programs in Science, Technology, Engineering, and Math (STEM) provide in-depth knowledge and training, typically taking four to six years to complete. These programs cover a wide range of topics, including mathematics, computer science, engineering principles, and scientific research, and can lead to advanced career opportunities. You can find degree programs at universities, colleges, and specialized institutions, with options for both on-campus and online learning. Many schools offer bachelor's and master's degrees in fields such as science, engineering, biotechnology, and physics. To explore your options, visit university websites, consult with academic advisors, or research programs through professional STEM organizations.

Courses/CTE Options

Science, Technology, Engineering and Math

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
- Physical Science
- Environmental Science
- Anatomy
- 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.

Honors Chemistry

Computer Science



Dual/Concurrent Enrollment

- College Chemistry
- Other Health and Science related options can be talked about with your Counselor or visits the information page <u>HERE</u>.

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

Resume Builders

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.