

# CAREER & TECHNICAL EDUCATION PROGRAM OFFERINGS



EASTERN UPPER PENINSULA  
INTERMEDIATE SCHOOL DISTRICT

# WELCOME TO CAREER AND TECHNICAL EDUCATION IN EASTERN UPPER PENINSULA INTERMEDIATE SCHOOL DISTRICT!

All schools within the Eastern Upper Peninsula Intermediate School District have access to Career Technical Education. In 2017 the voters of the region passed a millage to help support Career Technical Education. The goal of the millage was to give all students in the region access to two CTE courses.

Career and Technical Education is an essential component of the total education system. CTE prepares students with technical, academic, and employability skills for success in the workplace and in further education. All approved CTE programs in Michigan must align their local curriculum to postsecondary and industry standards. Students meeting the program standards have the opportunity to earn college credit and/or certifications.

Career and Technical Education is critical to our workforce development. CTE prepares students for the world of work by introducing them to workplace competencies in a real-world, applied context. The curricula within these programs are shared with employers and advisory boards throughout the region. Working with these employers, the academic programs are driven by project-based, hands-on learning.

Enrollment for all CTE courses is done through the student's high school counselor.

Sincerely,  
Tammy Rutledge, *EUPISD CTE Administrator*







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# BUSINESS ADMINISTRATION

Business Administration provides students an opportunity to gain experience using state-of-the-art equipment while learning about all aspects of business. Students will develop essential professional skills needed in an ever-changing workforce. In addition, students have an opportunity to obtain industry-recognized certifications in Microsoft Office, Professional Communications, and Entrepreneurship and Small Business.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Administrative Assistant
- HR Specialist
- Event Planner
- Market Research Analyst
- Manager
- Entrepreneur



*Business students competing at BPA States. Business Administration focuses on preparing students for all careers in any career pathway.*

# ACCOUNTING/ FINANCE

The Accounting/Finance program introduces students to the basics of the financial world. These basics are in EVERY business, no matter the industry! Every business needs a financial system and employees to run the system. Students learn to plan, record, analyze and interpret financial information. These skills will be useful regardless of your future employment.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Banking
- Insurance
- Accountant
- Bookkeeping
- Entrepreneurship
- Retail









# DIGITAL BUSINESS

This Digital Business course is designed to explore the world of online business and how all aspects of a business work together. This class can be taken for 1 hour or a 2 hour block every year! (10th -12th grade). Students taking the class for a 2nd hour or for multiple years... can earn as many industry recognized certifications as they can muster in a wide variety of topics relating to Business, Marketing and Computer Science. Students can also gain valuable real-world experiences through countless WBL (work-based learning) opportunities available for students around the community.

Students can earn up to 13 articulation credits (college credits) by successfully completing the class, while also having the opportunity to receive industry recognized certifications within Business, Marketing, Graphic Design, Video Production, Gaming and Computer Science.

## **Certifications include but are not limited to:**

1. Adobe Creative Suite (Photoshop, Illustrator, InDesign, Animate, Premiere Pro, and Dreamweaver)
2. Professional Communication
3. IT Specialist Certifications in Java, JavaScript, HTML/CSS, HTML5 Application Development, Python, and Software Development
4. Unity
5. Facebook Certified Digital Marketing Associate
6. Stukent Mimic Social Media
7. Hootsuite Social Media
8. CIW Internet Business Associate
9. (VR) Virtual Reality

Over 300 course certifications from colleges and universities all over the world are also made available to the students through the class Coursera program.

## **LOCATIONS**

Sault Area Career Center

## **RELATED OCCUPATIONS**

- Advertising Designer • Graphic Designer
- Animation Artist • Web Designer
- Social Media Manager and/or Strategist
- Market Research Analyst • Marketing Manager
- Digital Marketing Specialist • Film or Video Editor
- Business Owner/Independent Contractor
- Software, Computer and/or Robotic Engineering
- Computer and/or Video Game Programming
- Computer Animation, Game Designer

# STUDENT LEADERS

DIGITAL BUSINESS CLASS

Student Leaders for Sault Area High School's  
Digital Business Program for the 23-24 School Year



*This class provides students with real-world skills and certifications that they need in college and in the workforce!*



# FINANCIAL MARKETING

Students will focus on consumer math and personal finance topics during the first year of the program and beginner accounting concepts the second year. Each year, students will be immersed in the daily operations of the school store and café, social media promotions, and special events. This is an extremely hands-on curriculum that will cover the essentials of marketing, organizing, and planning events and relies heavily on active, enthusiastic participation!

In addition, students have the opportunity to grow and develop relationships as they learn to successfully work in groups, demonstrate their leadership, work ethic and professionalism.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Entrepreneurship
- Accountant
- Insurance
- Bookkeeper
- Retail
- Banking





*Business Professionals of America Students.*



*Students pricing new items in Varsity Blues.*



# EDUCATION

The Early Childhood Education CTE Program provides students the opportunity to participate in learning labs within the CTE classroom and onsite in early learning classrooms. Students can earn a CDA (Child Development Associates) certificate upon completion of the CDA coursework and demonstrated competency. Students are provided opportunities for paid work-based learning.

The K-12 Education program provides valuable classroom and field experience that will develop important foundational skills for postsecondary education fields of study.

## LOCATIONS

Rudyard High School

*Virtual distance learning  
options for all schools in the  
Eastern Upper Peninsula  
Intermediate School District*

Sault Area Career Center  
Early Childhood

## RELATED OCCUPATIONS

- High School Teacher (Secondary)
- Middle School Teacher (Secondary)
- Elementary School Teacher
- Elementary Specials Teacher (Art, PE, Music)
- Special Education Teacher
- School Guidance Counselor
- School Social Worker
- Media Specialist
- Childcare Worker
- Preschool Teacher
- School Administrator
- College Professor
- Human Resource Administrator
- Corporate Training and Development
- Author of Educational Materials



*CTE Teacher Cadets helping in classes.*



# NATURAL RESOURCES & CONSERVATION

Are you someone who enjoys nature and the outdoors? Are you someone interested in learning how to use our local natural resources in ways that would benefit the environment? Would you like to work on hands-on projects outside instead of always being in the classroom? Would you be interested in learning conservation techniques in the field alongside natural resource professionals? Would you be interested in earning up to 6 articulated credits? This class could put you on a career path in conservation and natural resources.

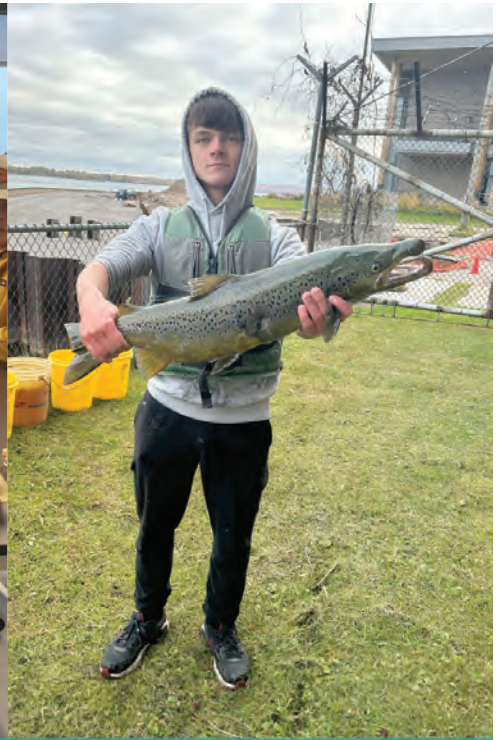
## LOCATIONS

Lake Superior State  
University's Center for  
Freshwater Research  
Education

## RELATED OCCUPATIONS

- Fisheries Biologist
- Wildlife Biologist
- Forestry
- DNR Officer
- Park Ranger
- Naturalist
- Farming
- Parks and Recreation
- County Extension Agent
- Conservation Engineer
- Watershed Coordinator
- Invasive Species Coordinator
- District Conservationist
- Soil Conservation Technician





*Students identifying skulls, participating in LSSU Atlantic salmon fish hatchery activities, and practicing forestry skills.*





# CYBERSECURITY

Cybersecurity is designed to build skills in technology from the Repair Tech level up through Networking, Linux, and Securities using a variety of disciplines. Hands on and online learning allow students to attend class remotely each day regardless of their school district. This allows students to stay in respective district and still participate in class at Pickford.

Students can earn a variety of Industry Certifications from TestOut and CompTIA.

## LOCATIONS

Pickford High School - *Virtual*

## RELATED OCCUPATIONS

- PC Repair Technician
- Network Administration
- Cybersecurity
- Cyber Analyst
- Ethical Hacker
- Cyber Analyst
- Computer Forensics Analyst
- Information Security
- All things IT!





# WELDING TECHNOLOGY

Students will get hands on experience with different types of welding and cutting processes which include Shielded Metal Arc Welding, Gas Metal Arc Welding, Flux Core Arc Welding, Gas Tungsten Arc Welding, Oxy-Acetylene Cutting, Manual Plasma Cutting, and CNC Plasma Cutting.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Welders
- Pipe Fitter
- Boilermaker
- Tool and Die
- Millwrights
- Plumber
- Iron Worker







*Students Oxy-Acetylene Cutting.*



# SMALL ENGINE REPAIR - MARINE

The Small Engine Program will provide students with the fundamental knowledge and skills of small engines. The particular emphasis of the program is on the service and repair of both 2-stroke and 4-stroke portable outboard motors.

## LOCATIONS

Cedarville High School

## RELATED OCCUPATIONS

- Marine Service Technician
- Small Engine Mechanic
- Automobile Mechanic
- Motorcycle Mechanic
- Service Center Manager





# GREAT LAKES BOAT BUILDING SCHOOL

*A Marine Trades Institution*

*Students who successfully complete the Small Engine Program with at least a C average will be eligible for a \$1500 scholarship for the Marine Service Technology program at The Great Lakes Boat Building School in Cedarville.*

# MECHATRONICS & ROBOTICS

The term may be unfamiliar, but it simply comes from combining the words mechanical and electronics, though it includes even more; mechatronic systems are also computer controlled. It is an integrated, multidisciplinary study of various systems that work together to form the basis of “smart” devices.

Students will learn about robots, machines, electronics, pneumatics & hydraulics, electrical motor controls, sensors, computer-aided design (CAD), programming, programmable logic controls (PLC), diagnostics, computer numeric control (CNC), and other topics related to automated systems & robots.

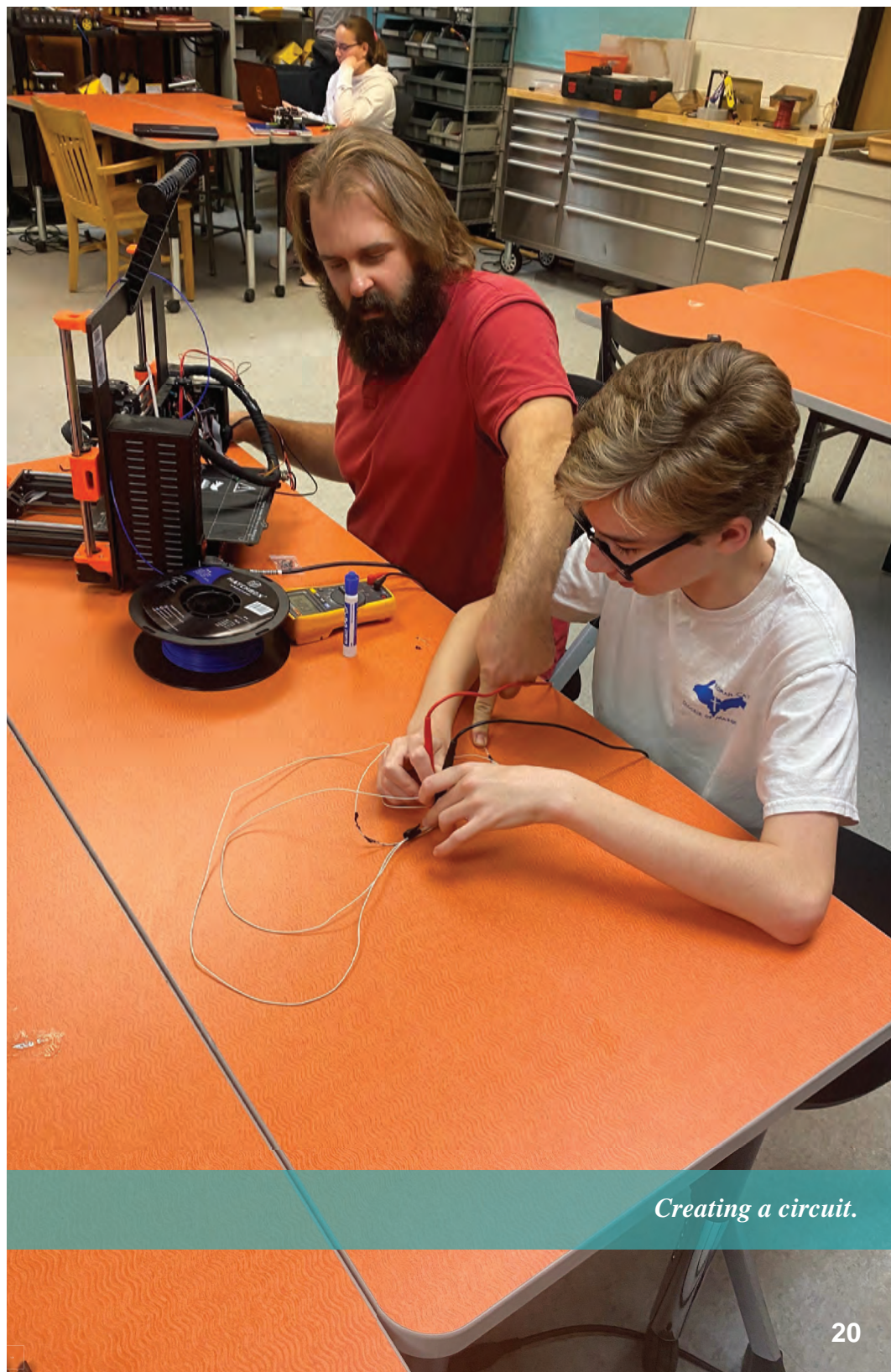
## LOCATIONS

Rudyard High School

## RELATED OCCUPATIONS

- Robot Programmer
- Controls Engineer
- Electrical Technician
- Electrician
- Fluid Power Technician
- Machine Builder
- Mechanical Engineer
- Mechatronics Engineer
- HVAC Technician
- Process Engineer
- Logistics





*Creating a circuit.*



# WOODWORKING - CABINETRY & FURNITURE

The mission of the program is to provide students with a real-world experience in finish carpentry skills. Furniture construction and industrial process is featured with mill work. Students will construct a large project of their choice and design. Actual cabinet-making shop conditions are duplicated. Students will use power machinery, hand, and air tools. Wood experience and technology taught will enable the student to secure a job in a cabinetmaking shop or related area trade.

## LOCATIONS

Rudyard High School  
Engadine Consolidated Schools

## RELATED OCCUPATIONS

- Cabinet Maker
- Finish Carpenter
- Custom Stair Maker
- Display Designer
- CNC Operator
- Hardwood Floor Installer
- Kitchen Designer
- Countertop Maker
- Solid Surface Technician
- Furniture Designer / Maker
- Sales/Service in Woodworking



*Rudyard CTE Cabinetry Students with a set of Hickory Cabinets built for the Sault Ste. Marie Tribe of Chippewa Indians.*



# CONSTRUCTION TECHNOLOGY

Construction Technology courses are designed to provide students with theories and practical experiences in all areas of construction. Students will be involved in the construction of a project from start to finish. There are areas of study divided into modules where each student spends quality time learning this particular area, including electrical, plumbing, siding, windows/doors, roofing, masonry, kitchen cabinets, drywall and finish trim.

Geometry and Construction is an alternative approach to learning geometry and the skills needed in building projects. A math teacher and a construction teacher will partner together to teach the unique class and students will earn the required geometry credit.

## LOCATIONS

Cedarville High School  
Newberry High School  
St. Ignace High School  
Sault Area Career Center

## RELATED OCCUPATIONS

- Building Trades







*Habitat for Humanity- Deck Build.*



# HEALTH SCIENCE

The curriculum follows the standards of The National Consortium for Health Science Education, which focuses on the professions associated with the health and medical industry. Students will explore the rationale behind basic patient care and medical treatment. They will have exposure to various health careers and fields. State certification may be available for students interested in the nursing assistant role. Students begin in the classroom/lab, focusing on curriculum, practical skills, and medical terminology. Includes CPR certification and clinical site rotation experiences at local health and veterinary organizations.

## LOCATIONS

Sault Area Career Center  
Newberry High School

## RELATED OCCUPATIONS

- Certified Nursing Assistant
- Patient Care Technician
- Registered Nurse
- Licensed Practical Nurse
- Nurse Practitioner
- Physician
- Dentist
- Dental Hygienist
- Physical Therapist
- Occupational Therapist
- Phlebotomist
- and many more!





*Health Sciences students practicing taking vital signs.*





# LAW ENFORCEMENT

The Law Enforcement program is focused on all aspects of the field of criminal justice profession. Students will experience traditional and non-traditional classroom settings, exposing them to multiple law enforcement career opportunities. Students will learn through specialized classroom and practical experiences. Topics encompassing communications, corrections, crime scene processing and investigation, criminal law and procedures, court systems, health and safety, homeland security, juvenile justice, police concepts and skills, and report writing. Students will develop quality oral and written communication skills throughout based on activities across all areas. Students who successfully complete the law enforcement program can earn articulated college credits at colleges and universities both in Michigan, as well as, out of state institutions. Students can earn a National Dispatch Certification upon successful completion of an exam.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Local and Tribal Police Officers
- County Deputies, Marine Deputies
- Detectives and Sergeants
- Michigan Department of Corrections Officers
- Local Sheriff's Offices Jail deputies
- State Police Troopers and K-9
- 911
- Customs and Border Protection officers including Border Patrol and Air and Marine division; ATF-E, BIA, DEA, and FBI agents.



*A senior student practicing her handcuffing during arrest procedures. The student had made contact prior, ran her suspect, and confirmed an outstanding warrant for the suspect. Creating the need for arrest. This exercise builds the students communication skills both in person orally and with radio communication, as well as develops their awareness skills (safety) and complete arrest procedures.*

# DRAFTING

Drafting gives students an understanding of Architectural and Engineering principles in preparation for the workforce or continued education. Students will develop skills of manual and computer aided drafting, 3D printing, laser engraving, vinyl pressing, design techniques, and employability. Students will also be able to participate in close up site experiences, student leadership development, and SKILLS USA.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Architect
- Engineer
- Construction Manager
- Draftsperson
- Construction Contractor
- CAD (Revit, Inventor) certified user







# MACHINE TOOL TECHNOLOGY

Machine Tool Technology provides students with the basic fundamentals in the areas of metals and machine processes. Related occupations include: Welders, grinders, engineers, drafters, millers, and other manufacturing skilled trades and metal workers.

Students will demonstrate knowledge and skills in:

- Shop Safety
- Metal Working Theory
- Advanced Milling/Turning
- Benchwork
- Saws, Drills, Powertools
- Print Reading, GD & T Inspection
- Employment Skills/Work Habits
- Lathe 1
- Mill 1
- Grinding
- Machine Tool Set-up
- CNC Mill & Lathe
- CNC Programming

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Welders
- Grinders
- Engineers
- Drafters
- Millers
- Other manufacturing skilled trades and metal workers







# AUTOMOTIVE

The ever-changing automotive industry is in desperate need of quality Automotive Technicians. The future for Automotive Technicians is very promising. According to the Department of Labor, there is a need for over 67,000 technicians nationwide. Related occupational opportunities include Mechanical Engineer, Small Engine Technician, Parts or Sales Manager, Automotive Insurance Adjuster and Automotive Service Advisor. The Sault Area Career Center Automotive program is ASE accredited and covers all eight of the ASE vehicle repair categories over two years. The categories are Engine Repair, Automatic Transmissions, Manual Transmissions, Steering and Suspension, Brakes, Electrical Systems, Heating and AC, and Engine Performance. This course develops knowledge and skills used in the automotive repair industry. Students will learn how to properly diagnose a vehicle, look up the repair information and perform the repair. The course is designed to utilize a 50/50 split between classroom lecture and hands on shop work. The shop has different vehicles and state-of-the-art equipment for demonstration and repair practices. The repairs performed are in line with the ASE required tasks. ASE requires that each category is covered in detail so that by the end of the course a student can perform repairs proficiently. A student that completes the two-year course will earn a career center certificate and may be eligible to receive college credits from several post-secondary institutions. In addition to the ASE categories covered in this course, students will take part in projects the program is participating in. This may include engine performance modifications, suspension modifications, lighting, and body modifications. The Sault Area Career Center Automotive Program provides knowledge and skills to succeed in the automotive industry.

## LOCATIONS

Sault Area Career Center

## RELATED OCCUPATIONS

- Automotive Mechanic
- Brake Technician
- Auto Shop Manager
- Tune-up Specialist



# EMERGENCY MEDICAL TECHNICIAN

The EMT course is a study of the topics and skills necessary to make lifesaving interventions and stabilize patients during transport to a medical facility. The course involves lectures and practical skills labs and introduces the clinical component of EMT education. (\*minimum level of training to work on a transporting ambulance) Students will complete clinical hours with local ambulance and healthcare agencies. Upon successful completion of this course, students are eligible to sit for the national Registry Basic EMT licensing examination.

## LOCATIONS

Rudyard High School

## RELATED OCCUPATIONS

- EMT First Responder
- Ambulance Driver
- Medical Service Technician









# ARTICULATION

Articulation Agreements provide high school students an opportunity to earn college credit for work completed in CTE programs.

Several of the Career Technical Education classes in the EUP have articulation agreements with specific colleges and universities. The articulation agreement is a formal agreement between the high school and a specific college or university. The agreement will specify how much college credit is granted and the terms of the credit to be awarded at that particular college. Articulation agreements are valid for a specific amount of time or until one or both parties choose to dissolve the partnership.

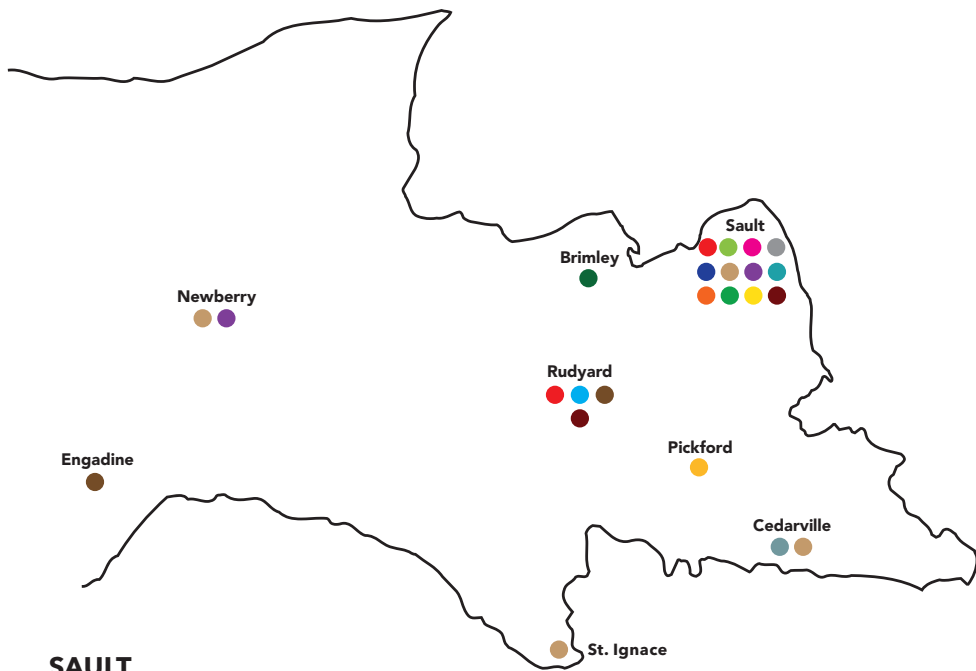
Statewide articulation agreements are also available at several colleges and universities in Michigan. Students must check with the college to see if CTE credit is available, and how to apply for the college credit.

High School articulated credit may not transfer to other colleges or universities. If a student applies to a different college, the student will need to verify if the credit will transfer.

A list of Michigan Statewide Postsecondary Credit Agreements can be found at the following site:



# CAREER & TECHNICAL EDUCATION PROGRAM LOCATIONS



## SAULT

- Accounting/Finance
- Digital Business
- Financial Marketing
- Welding Technology
- Construction Technology
- Health Science
- Law Enforcement
- Automotive
- Machine Tool Technology
- Drafting
- Business Administration
- Early Childhood Education

## NEWBERRY

- Construction Technology
- Health Sciences

## PICKFORD

- Cybersecurity

## ENGADINE

- Woodworking - Cabinetry & Furniture

## RUDYARD

- Early Childhood Education
- Emergency Medical Technician
- Mechatronics & Robotics
- Woodworking - Cabinetry & Furniture

## CEDARVILLE

- Small Engine Repair - Marine
- Construction Technology

## ST. IGNACE

- Construction Technology

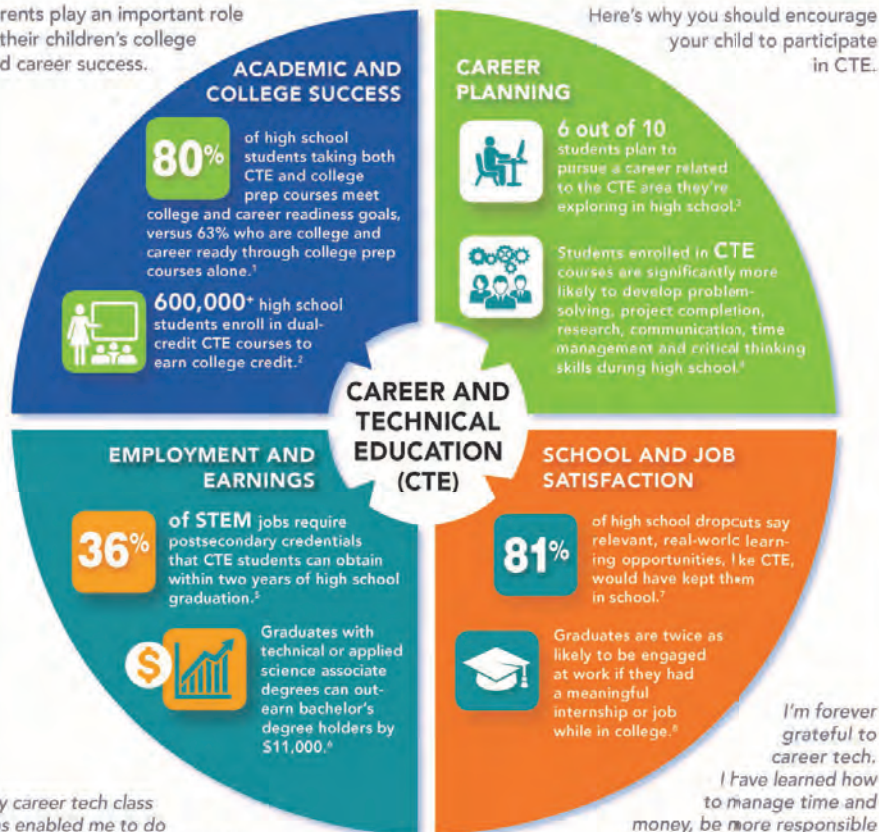
## BRIMLEY

- Natural Resources & Conservation

## Career and Technical Education Improves Student Achievement in High School, College and Career

Parents play an important role in their children's college and career success.

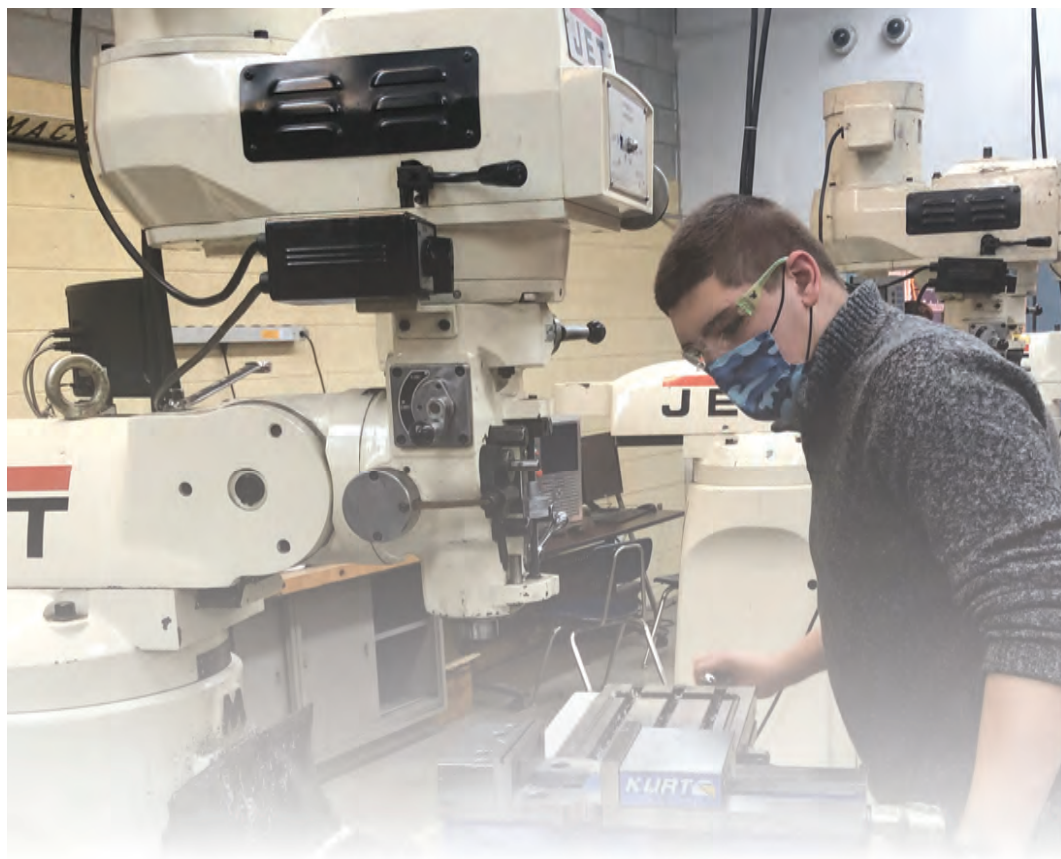
Here's why you should encourage your child to participate in CTE.



*My career tech class has enabled me to do something I love and opened my eyes to possibilities that are ahead.* –Kelsey McClure<sup>9</sup>

*I'm forever grateful to career tech. I have learned how to manage time and money, be more responsible and support myself while being reliable to other people.* –Zachary Zigler<sup>10</sup>

<sup>1</sup> Southern Regional Education Board, "Thomas et al. 2013, National Center for Education Statistics," NECCUA® and ACTE 2016, <sup>2</sup> Laine et al. 2007, National Research Center for CTE, <sup>3</sup> Rothwell 2013, Brookings Institution, <sup>4</sup> Schneider 2013, College Measures, <sup>5</sup> Bridgeland et al. 2006, Civic Enterprises, <sup>6</sup> Gallup-Purdum index report, <sup>7</sup> Ohio Department of Education Career-Technical Education Success Stories, <sup>8</sup> Ibid.



## EASTERN UPPER PENINSULA INTERMEDIATE SCHOOL DISTRICT

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It is the policy of the Eastern Upper Peninsula Intermediate School District not to discriminate on the basis of race, color, national origin, sex (including sexual orientation and gender identity), disability, age, religion, height, weight, marital or family status, military status, ancestry, genetic information, or any other legally protected category, (collectively, "Protected Classes"), in its programs and activities, including employment opportunities