



The jobs of today require highly skilled technicians. Gain the knowledge and hands-on experience that will make you employable in these rewarding careers.

Welding Technology

GENESEE COUNTY



EARLY MIDDLE COLLEGE

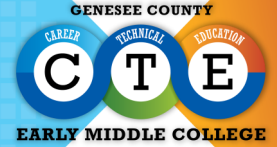
The Welding program at Mott Community College prepares students for both the Associate of Applied Science Degree and Certificate of Achievement.

Welding Technology A.A.S. is a program that covers all the welding content to prepare students to become American Welding Society (AWS) Level I (Flat) and Level II (Pipe) certified welders. The courses will provide classroom and lab instruction, with hands-on practice in Metal Preparation, Metallurgy, Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Gas Metal Arc Welding and Flux-Cored Arc Welding for both flat and pipe welding. Students will learn to weld on steel plate and pipe, aluminum, and stainless steel. Students passing qualification tests can earn AWS certification in addition to the A.A.S. degree.



WELDING TECHNOLOGY

A Genesee County Career and Technical Education Early Middle College Partnership



ESSENTIAL ELEMENTS

In addition to the 5-year plan of study, these POS Essential Elements are integral to the student's educational development.

Career and Technical Student Organization (CTSO)

Community Service

Educational Development Plan (EDP)

Work-Based Learning (WBL)

What is an Early Middle College?

The Genesee County Career and Technical Education Early Middle College (GC CTE EMC) is a unique opportunity for students to explore and earn an associate's degree, credential or transferable credit in a CTE Career Pathway while in high school.

Students will begin blending their high school course work with college level coursework in 11th grade, adding additional college courses in 12th grade and complete a full schedule of college coursework in a 13th year.

What is the MEMCA Certificate?

Michigan Early Middle College Association (MEMCA) Certificate recognizes early middle college students who successfully complete a minimum of 15 college credit hours and 100 hours of verified community service, a minimum of 40 hours of work-based learning or a combination of both that equals a minimum of 70 hours.

SEQUENCE OF COURSES The grades 9-13 sequence of courses includes the Michigan Merit Curriculum Requirements and the required college course work for the listed credentials. See Sequence of Course legend below.

¹Students must place into these courses through a placement test. If a student does not place into these classes, the sequence of courses will be modified for the student's individual plan of study.

*Michigan Merit Curriculum: These requirements can be met by successfully completing the first course in the same box. This option will vary by district; please discuss with your local counselor.

**Students will enroll in this college course.

***Students receive free college credit for this course by successfully completing the first course listed in the box.

9TH GRADE SEQUENCE OF COURSES		10TH GRADE SEQUENCE OF COURSES	
1st Semester	2nd Semester	1st Semester	2nd Semester
English 9	English 9	English 10	English 10
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Social Studies
Foreign Language	Foreign Language	Physical Education	Health
Band/Choir/Fine Arts/VPAA	Band/Choir/Fine Arts/VPAA	Band/Choir/Fine Arts	Band/Choir/Fine Arts

11TH GRADE SEQUENCE OF COURSES

1st Semester	2nd Semester
GCI Welding 2 nd Year Foreign Language, 3 rd Year Science & VPAA, Algebra II*	GCI Welding WELD 143 Welding Processes*** 2 nd Year Foreign Language, 3 rd Year Science & VPAA, Algebra II*
ENGL 101 English Composition I ** English 11 ¹	COMM 140 Principles of Interpersonal Communication **
MATH 120 Intermediate Algebra ** Algebra II ¹	CADD 100 Mechanical Blueprint Reading w CADD or Welding Elective **
Government	Elective
Band/Choir/Fine Arts or Elective	Band/Choir/Fine Arts or Elective

12TH GRADE SEQUENCE OF COURSES

1st Semester	2nd Semester
GCI Welding Advanced Studies WELD 166 Shielded Metal Arc Welding I *** 2 nd Year Foreign Language, 3 rd Year Science & VPAA, Algebra II*	GCI Welding Advanced Studies WELD 164 Base Metal Preparation*** 2 nd Year Foreign Language, 3 rd Year Science & VPAA, Algebra II*
ENGL 102 English Composition II **	WELD 170 Gas Metal Arc Welding **
WELD 174 Flux Cored Arc Welding (summer term) **	WELD 168 Gas Tungsten Arc Welding I **
Elective	
Band/Choir/Fine Arts or Elective	Band/Choir/Fine Arts or Elective

13TH GRADE SEQUENCE OF COURSES

1st Semester	2nd Semester
WELD 272 Advanced Welding Process **	PSCN 170 American Government ** Civics ¹
ELEC 170 Modern Industrial Robotics **	WELD 262 Adv.Shielded Metal Arc Welding for Pipe**
TECH 102 Industrial & Construction	WELD 251 Welding Metallurgy **
COMG 153 Computers, A Practical Approach **	WELD 276 Welding Fabrication or Welding Elective **
WELD 260 Shielded Metal Arc Welding	

The student will need to successfully complete additional coursework upon completion of the 13th grade to receive the Associate Degree in Welding Technology. Students may have the opportunity to apply for the Genesee Opportunity stipend to help offset these costs. Check www.geneseego.org for more information. This Program of Study is a guide; an individual sequence of courses will be developed for each student and is subject to change by student interest, readiness, course availability and local school district policy.

HOW TO ENROLL

See your high school counselor to apply to the Genesee County Career Technical Education Early Middle College. The application, along with additional information about the program, is also available at www.gccteemc.org.



DEGREE/ CERTIFICATION

Welding Technology, A.A.S.

Mott Community College Certificate of Achievement in Welding Technology.

INDUSTRY CREDENTIALS

American Welding Society

FACILITY CREDENTIALS

American Welding Society Testing Site

WAGES AND EMPLOYMENT TRENDS

Median National Wages 2022
\$22.86 hourly, \$47,540 annual

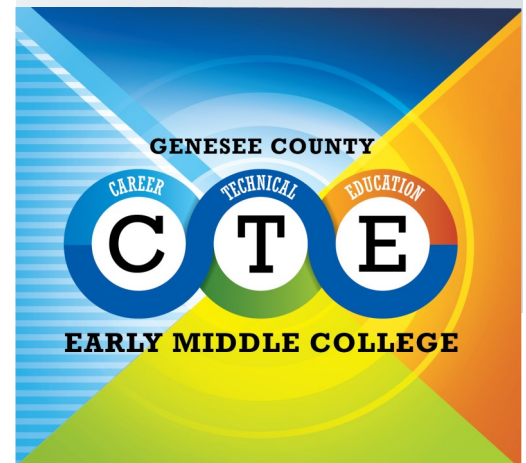
Median State Wages 2022
\$20.31 hourly, \$42,230 annual

National Employment 2022
431,800 employees

Projected National Growth 2022-2032—Little or no change

Projected National Openings 2022-2032 42,600 employees

Source: Bureau of Labor Statistics.



PARTICIPATING DISTRICTS

Beecher • Bendle • Carman-Ainsworth • Clio • Davison • Fenton • Flushing
Genesee • GISD • Goodrich • Grand Blanc • Kearsley • Lake Fenton • LakeVille
Linden • Montrose • Mt. Morris • Swartz Creek • Westwood Heights

The Genesee County Career Technical Education Early Middle College is available to Genesee County high school students through a partnership of Genesee County public school districts and the Genesee Intermediate School District (GISD).



Students accepted into the Genesee County Career Technical Education Early Middle College program will remain students of their high school and may attend courses at Baker College, Genesee Career Institute, University of Michigan Flint, Ferris State University, and Mott Community College to complete requirements in their Program of Study.



**For more information contact:
Genesee County Career Technical Education
Early Middle College Coordinator**

**Phone: (810) 591-3288
Email: gc-cte-emc@geneseeisd.org
Website: www.gccteemc.org**

The Genesee Intermediate School District (GISD) does not discriminate on the basis of race, color, religion, national origin, sex, disability, age, height, weight, marital status, genetic information, or any other legally protected characteristic, in its programs and activities, including hiring, promotion and retention. The person designated to handle inquiries regarding the nondiscrimination policies of GISD or to address any complaint of discrimination is Jeffrey Adams, Executive Director of Human Resources and Title IX Coordinator, Human Resources and Operations, 2413 West Maple Avenue, Flint, Michigan 48507-3493.