



Information Technology Application Developer

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

GENESEE COUNTY



EARLY MIDDLE COLLEGE

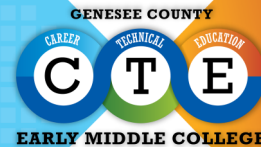
The Information Technology program at Mott Community College prepares students for both the Associate of Applied Science Degree and Certificate of Achievement.

Information Technology-Applications Developer is a CompTIA accredited degree and certificate program based on industry demands, local business input, and the experience of our faculty. The Computer Security Certificate of Achievement prepares students to quickly gain a high quality skill set to pursue entry-level positions within information technology with a focus on applications development. Students will customize their program of study to prepare for one or more of the industry assessments including Comp TIA A+.



Information Technology Applications Developer

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 Computer Hardware Technician COMC 115 A+ Core Hardware Components*** 2 nd Year Foreign Language, 3 rd Year Science & VPAA*	GCI Computer Hardware Technician COMC 125 A+ Operating System Technologies*** 2 nd Year Foreign Language, 3 rd Year Science & VPAA*
MATH 120 Intermediate Algebra ** Algebra II ¹	COMG-153 Computers - A Practical Approach **
ENGL 101 English Composition I ** English 11 ¹	COMN 120 Network Essentials **
Government	Elective
Band/Choir/Fine Arts or Elective	Band/Choir/Fine Arts or Elective

12TH GRADE SEQUENCE OF COURSES

1st Semester	2nd Semester
GCI Game Programming COMS 170 Intro to Programming*** 2 nd Year Foreign Language, 3 rd Year Science & VPAA*	GCI Game Programming COMW 100 Intro to Web Page Creation*** 2 nd Year Foreign Language, 3 rd Year Science & VPAA*
ENGL 102 English Composition II ** English 12 ¹	COMM 140 Principles of Interpersonal Communication **
COMN 184 Information Security in a Digital Age **	LDDV 101 Leadership Development **
COMG 162 Introduction to Operating Systems**	Elective
Band/Choir/Fine Arts or Elective	Band/Choir/Fine Arts or Elective

13TH GRADE SEQUENCE OF COURSES

1st Semester	2nd Semester
COMS 176 Intro to .NET Programming ** Final Year Math/4th Math Related	PSCN 170 American Government or ECON 221 Principles of Economics (Macro) ** Civics/Economics ¹
COMI 160 Introduction to Computer info Systems **	COMS 276 Advanced .NET Programming**
COMS 171 Introduction to C++ **	COMS 280 Advanced Programming in C++**
COMI 261 Database Concepts **	COMI 169 Supporting End Users **

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 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

Information Technology-
Applications Developer, A.A.S.

INDUSTRY CREDENTIALS

CompTIA A+

MTA Software Development
Fundamentals

WAGES AND EMPLOYMENT TRENDS

Median National Wages 2022
\$47.47 hourly, \$98,740 annual

Median State Wages 2022
\$40.91 hourly, \$85,090 annual

National Employment 2022
449,400 employees

**Projected National Growth
2022-2032** 9% or higher

**Projected National Openings
2022-2032** 33,500 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.