

Offering exceptional opportunities in engineering, mathematics, science and technology...

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Explore our academic offerings...

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CMU engineering and technology students Joseph Koenigter, left, Quinlan Henry, and Derek Beebe designed and built an off-road vehicle that held its own in the Society of Automotive Engineers' Mini Baja Midwest Competition.

Undergraduate Programs

Central Michigan University's College of Science and Technology (CST) offers many programs of study leading to a bachelor's degree.

We offer undergraduate programs in areas related to mathematics, chemistry, physics, biology, geology, geography, computers, and industrial and technical applications.

All academic program requirements are listed in [CMU's online bulletins](#).

Whether you are interested in technology, one of the sciences, computers and their applications, or intend to pursue an advanced professional degree, CST has a program that will help you meet your needs.

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Major and minor fields of study:

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- ▶ Biology, including
 - Biomedical Sciences
 - Natural Resources
 - Microscopy
- ▶ Chemistry, including
 - Biochemistry
- ▶ Construction Management
- ▶ Computer Science, including
 - Information Technology
- ▶ Engineering, including
 - Electrical Engineering
 - Mechanical Engineering
- ▶ Engineering Technology, including
 - Mechanical Engineering Technology
 - Manufacturing Engineering Technology
- ▶ Geography, including
 - Geographic Information Science
 - Environmental and Land Use Planning
- ▶ Geology, including
 - Hydrogeology
- ▶ Industrial Technology Management, including
 - Mechanical Design Technology
 - Manufacturing Technology
- ▶ Mathematics, including
 - Actuarial Science
 - Statistics
- ▶ Meteorology
- ▶ Physics, including
 - Astronomy

Secondary teaching majors:

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- ▶ Biology
- ▶ Chemistry
- ▶ Earth Science
- ▶ Geography
- ▶ Industrial Education
- ▶ Mathematics
- ▶ Physics

Math Assistance Center

Providing tutoring in math and statistics



Center Director: Reggie Becker

Phone: (989) 774-2290

E-mail: mathac@cmich.edu

Web site: [Math Assistance Center](#)

Location: 002 Troutman
(Towers basement, center)

Hours:
Monday-Thursday: 9:00 AM - 9:00 PM
Friday: Closed
Saturday: Closed
Sunday: 5:00 PM - 9:00 PM

The Mathematics Assistance Center is a new effort on the part of the College of Science and Technology and the Department of Mathematics to create a permanent, convenient site where students can obtain tutoring in mathematics and statistics.

The goal of the Math Center is to give students additional help and explanations for math concepts being taught in their courses.

Elementary teaching majors:

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- ▶ Integrated Science
- ▶ Mathematics

Pre-Professional Programs

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To succeed, professionals such as doctors, dentists and architects need advanced skills in the science and technology fields. The college offers a full range of curricula that prepare students for entry into such professional programs.

Pre-professional programs:

- ▶ Pre-Dentistry
 - ▶ Pre-Medicine & Osteopathy
 - ▶ Pre-Optometry
 - ▶ Pre-Pharmacy
 - ▶ Pre-Physical Therapy
 - ▶ Pre-Physician Assistant
 - ▶ Pre-Veterinary Medicine
- ▶ [Click here to learn more about pre-professional programs.](#)

Interdisciplinary and Interdepartmental Programs

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The merging and blending of multiple disciplines creates programs that reflect broad new fields of academic interest. For example, the environmental studies program combines elements of biology, chemistry, geology, economics, law and political science. Actuarial science, which deals with future uncertainties, blends aspects of mathematics, statistics, accounting, finance, business law and computer science. Neuroscience integrates biology, chemistry, health promotion and rehabilitation, and psychology.

Interdisciplinary fields of study:

- ▶ Actuarial Science
- ▶ Computer Technology
- ▶ Computer Integrated Manufacturing
- ▶ Computer Science - Mathematics
- ▶ Earth Science Education
- ▶ [Environmental Studies](#)
- ▶ [Integrated Science Education](#)
- ▶ Neuroscience
- ▶ Museum Studies minor
- ▶ Industrial Safety minor

Student Organizations

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In addition to university-wide extracurricular activities and honors organizations, the college supports many student chapters of professional organizations, honor societies, and service clubs. Throughout the year, each group sponsors a variety of extra- and co-curricular activities and service projects. Participation will help you prepare for a career and become better acquainted with other students, faculty, and working professionals.

- ▶ [Click here to browse the list of student organizations at CMU.](#)

Opportunities beyond the classroom

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Undergraduate Research

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Central Michigan University students develop a passion for discovery and invention through undergraduate research. CMU encourages undergraduate students from all disciplines to engage in active, useful scholarship, research and self-directed study on a wide range of relevant topics. Science and technology students form an exciting community of researchers linked by their enthusiasm for learning.

The university provides many resources and opportunities for research experiences. Undergraduate students collaborate on community, faculty and independent projects. Interacting with other students, professors and professionals stimulates intellectual growth and provides valuable insight into potential careers.

CMU science and technology students showcase their research projects at the annual Posters at the Capitol event held in the state Capitol Rotunda in Lansing. State legislators take time throughout the day to meet with students and review their work.

Mentored by CMU faculty, students have gained national recognition for

undergraduate research in areas such as Mars and Earth rock formations, the fate of double-crested cormorants, the plight of farmers dealing with an increasing wolf population, the geophysical and chemical analysis of contaminants, the structure of bone, microbes in bogs on Beaver Island, badgers in Michigan, carbon nanotubes, glacial melting in Alaska, computer security and dinosaurs in Montana.

Programs that Support Student Research

There are a number of programs that help Central Michigan University students conduct their research projects:

The Summer Research Scholars Program. This program provides a stipend of at least \$3,000 to support undergraduate students who conduct research with CMU faculty members. The program encourages collaboration and close mentoring relationships between faculty and students.

Undergraduate Student Research Grants. Students can receive up to \$500 to offset costs associated with research projects. Grants may be used for equipment, chemicals, supplies, software, or research-related travel.

College and Departmental Support for Student Research. Departments and interdisciplinary programs in the College of Science and Technology encourage and support undergraduate student research. All departments offer courses such as Independent Study, Undergraduate Research, or Senior Thesis in which students undertake an independent research project working closely with a faculty member. Students also have opportunities to work in teams on collaborative research projects in some classes.

Other Funding Sources. Funding also is available from departments and the Dean's Office. Faculty members often have research grants that support participation of students as laboratory or field assistants. Faculty members sometimes obtain funding for special undergraduate research programs from organizations such as the National Science Foundation or the Council on Undergraduate Research.

Opportunities to Communicate Research Results

CMU's Student Research and Creative Endeavors Exhibition (SRCEE). In April of each year, the university hosts the Student Research and Creative Endeavors Exhibition, a festival of creative and scholarly work by CMU students. This event showcases the outstanding student research that takes place in all academic disciplines at CMU. During the exhibition, students teach and learn from other young scholars. Many of the university's science and technology students make the exhibition the highlight of their academic year.

College of Science and Technology Posters at the Capitol. Each spring, science and technology students have the opportunity to show off their research activities during the "Posters at the Capitol" event at Michigan's State Capitol Building in Lansing. State legislators take time throughout the day to meet students and review their work.

Professional Meetings and Publications. Many CMU undergraduates present their work at regional, national, or international scientific and technical meetings. Students regularly participate in the annual meeting of the Michigan Academy of Sciences, Arts, and Letters. Several students have submitted scientific papers describing their results for publication in professional journals.

Field Study

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Students undertake biological, ecological and environmental studies at CMU's three field sites:

- ▶ Veit's Woods: just west of campus
- ▶ Neithercut Woodland: about a 30 minute drive north
- ▶ CMU Biological Station: located on Beaver Island in northern Lake Michigan

Students regularly go on geological field trips including day trips to nearby locations, weekend trips to Michigan's upper peninsula, and longer trips to distant locations such as the Sierra Nevada or Big Bend National Park.

Internships and Capstone Projects

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Many CMU students spend a month or more working full-time for a business or agency in a position related to their majors and career goals. These work-learning programs are designed to enrich your academic experience and provide real practical experience in a professional setting. Most major programs offer capstone projects and experiences that allow you to integrate and apply the knowledge and skills gained through class work.

