The engineering majors prepare students to help solve many exciting and demanding problems including important global issues related to energy and the environment, as well as the development of new devices, products and materials. Students work with advanced computer simulations and modern, well-equipped laboratories that provide exciting and valuable hands-on experience.

### Delta College | Credits | Central Michigan University Equivalent
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**General Education Requirements – Competencies** (Require a grade of “C” or higher)
- ENG 111 College Composition I | 3 | ENG 101 Freshman Composition
- ENG 112 College Composition II | 3 | ENG 201 Intermediate Composition
- Oral English | | Satisfied by COM 112 (see below)
- Mathematics | | Satisfied by MTH 161 (see below)
- Quantitative Reasoning | | Satisfied by PHY 211 (see below)
- Writing Intensive | | Six credits waived if MTA or MACRAO is satisfied. The remaining 6 must be completed at CMU

### General Education – University Program Requirements
All MTA and MACRAO applicable courses require a grade of “C” or higher at Delta College

**Group I Humanities (6 – 8) from at least 2 subjects**
- MACRAO: Requires 8 hours – MTA: Requires 2 courses
- COM 112 Fundamentals of Oral Communication | 3 | COM 101 Introduction to Communication
Select additional semester hours from: ART 151W, 152W, 251W, 255W; ASL (except 116); COM; EMB 140, 175W, 211W; 229; ENG (except 090 – 108, 111 (all), 112 (all), 211, 230, 290 – 299); FR (except 290 – 299); HIS 111W, 112W; IHU (except 110, 267 – 269, 290 – 293, 295 – 299); MUS 100, 103, 110, 111, 112, 118, 119W, 120W, 126, 127; PHL (except 290 – 299); PSY 232; SPA (except 109, 290 – 299); SSI 110W, 232W, 232W, 234W

**Group II Natural Sciences (4 – 8) from at least 2 subjects**
- MACRAO: Requires 8 hours (Math + Natural Science)-MTA: Requires 2 courses
- At least one course must be a lab science
- CHM 111 General & Inorganic Chemistry I | 5 | CHM 131 General Chemistry I
- PHY 211 Physics I | 5 | PHY 145QR University Physics I & 175 Physics Lab

**Group III Social Sciences (6 – 8) from at least 2 subjects**
- MACRAO: Requires 8 hours – MTA: Requires 2 courses
Select one of the following:
- POL 104 American Politics w/ Project | 4 | PSC 105 Introduction to American Government and Politics
- HIS 237 History of Michigan w/ Project | 3 | History Credit
Select additional semester hours from: BIO 230W; ECN; GEO (except 103, 111, 261, 267); HIS (except 290 – 299); IHU 110W; POL (except 290 – 299); PSY (except 290 – 299); SOC (except 158, 159, 161 & 162); SSI (except 110, 269, 290, 291; TTI 110W

**Group IV Studies in Culture and Diversity**
- MACRAO: Requires 8 hours (Math + Natural Science) - MTA: Requires 1 course
- MTH 161 Analytic Geometry & Calculus I | 4 | Waived if MTA/MACRAO is satisfied
- Mathematics (3 – 4):
  - Waived if MTA/MACRAO is satisfied

**Major or Degree Related Transferable Courses**
- CST 183 Principles of Computer Programming | 4 | CPS 180 Principles of Computer Programming
- EGR 165 or 166 Introduction to/Engineering Graphics | 4 | IET 154 Engineering Design Graphics
- EGR 215 Engineering Mechanics: Statics | 3 | EGR 251 Engineering Statics
- EGR 216 Engineering Mechanics: Dynamics | 3 | EGR 253 Engineering Dynamics (Elective Option)
- EGR 221 Engineering Materials | 3 | EGR 355 Engineering Materials (Elective Option)
- EGR 235 Circuit Analysis | 4 | EGR 290 Circuit Analysis I
- EGR 320 Mechanics of Materials | 3 | EGR 255 Strength of Materials (Elective Option)
Select one of the following options:
- Option 1. LW 220 Lifelong Wellness + LWA Activity Course | 1 + 1 | PED Activity + PED Activity
- **Option 2.** Any 2 credit LW Course | 2 | PED Activity
- MGT 251 Business Law I | 3 | BLR 202 Legal Environment of Business
- MTH 162 Analytic Geometry & Calculus II | 4 | MTH 133 Calculus II
- MTH 261 Analytic Geometry & Calculus III | 4 | MTH 233 Calculus III
- PHY 212 Physics II | 5 | PHY 146 University Physics II & 176 Physics Lab

**IMPORTANT NOTES**
- It is strongly recommended that transfer students contact CMU early in their college career to ensure proper course sequencing for their major, optimizing course scheduling, and timely degree completion at CMU. CMU Engineering and Technology (E&T) 989.774.3033 or eTdept@cmich.edu
- Students interested in signing an Engineering Major are required to meet with a CMU Engineering and Technology (E&T) advisor during their first semester of attendance at CMU.
- Engineering majors are required to meet with their engineering advisor each semester for appropriate class selection.
- Pre-requisites are strictly enforced.

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**Central Michigan University**

Admissions: Warriner Hall 102 | Mount Pleasant, MI 48859 | 1-888.292.5366 Toll Free
cmudmit@cmich.edu | http://admissions.cmich.edu

CMU is an AA/EO institution, providing equal opportunity to all persons, including minorities, females, veterans and individuals with disabilities. (see cmich.edu/aadq)UCcomm 9063
Major or Degree Related Courses to be Completed at CMU

DEGREE REQUIRED COURSES (33 - 36)
Business Component – Required (3 hours)
BLR 202 may be satisfied at Delta with MGT 251

Mathematics & Science Requirements I (24 hours)
MTH 132 may be satisfied at Delta with MTH 161
MTH 133 may be satisfied at Delta with MTH 162
MTH 233 may be satisfied at Delta with MTH 261
PHY 145QR may be satisfied at Delta with PHY 211
PHY 146 may be satisfied at Delta with PHY 212
PHY 175 may be satisfied at Delta with PHY 211
STA 392 Probability and Statistics for Engineers (3)

Mathematics & Science Requirements II (3 – 6 hours)
Select one of the following options:
Option A (3 hours)
MTH 223 Linear Algebra and Differential Equations (3)
Option B (6 hours)
MTH 223 Linear Algebra and Matrix Theory (3)
MTH 334 Differential Equations (3)

Mathematics & Science Requirements III (4 – 5 hours)
Select one of the following:
CHM 131 may be satisfied at Delta with CHM 111
CHM 161 Principles of Chemistry (5)

SPECIALIZED STUDIES - MAJOR REQUIRED COURSES
Required Courses I (57 hours)
EGR 120 Introduction to Engineering (3)
EGR 190QR Digital Circuits (3)
EGR 251 may be satisfied at Delta with EGR 215
EGR 290 may be satisfied at Delta with EGR 235
EGR 292 Circuit Analysis II (3)

Electives (12 hours)
Select at least 12 hours from the following:
EGR 253 may be satisfied at Delta with EGR 216, EGR 255 may be satisfied at Delta with EGR 221, EGR 356 may be satisfied at Delta with EGR 221, EGR 356, EGR 358, EGR 371, EGR 397, EGR 437, EGR 480, EGR 481, EGR 482, EGR 484, EGR 487, EGR 490, EGR 591, EGR 594

Notes:
- Not more than three credits of EGR 437 will count
- You may only count ONE of EGR 480 OR 481 OR 484

General Notes
- A grade of C- or better is required for a course to transfer.
- A bachelor’s degree requires a minimum of 124 semester hours of credit. CMU will accept community college transfer credits beyond the recommended 64 semester hours; however, students will need to complete a minimum of 60 semester hours from an accredited 4-year-degree granting institution. A minimum of 40 hours must be completed at the 300 level or above. A minimum of 30 semester hours of credit must be earned from CMU.
- The University Program Requirements and competencies may be fulfilled by students who satisfy the MACRAO Agreement or the MTA
- Students are required to meet CMU Competency Requirements prior to reaching 56 credit hours. Competency requirements consist of: two Written English (composition) courses, one Oral English (communication) course, and one Mathematics course be completed with a grade of “C” or above.

Any remaining required and elective courses for a bachelor’s degree will be selected in consultation with an academic advisor to ensure that CMU degree requirements are being met.

Contact Undergraduate Admissions at cmuadmit@cmich.edu for major related course information and or explore http://cmich.edu/transfer, CMU’s Transfer Equivalency Tool and the CMU’s Transfer Simulation Tool.

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