Transfer Credit Guide

This guide is subject to change and should be used in consultation with an academic advisor.

**MACRAO TRANSFER AGREEMENT**

This distribution of courses fulfills the MACRAO Transfer Agreement and will satisfy the University Program portion of the CMU bachelors’ degree for students who started following the MACRAO Transfer Agreement at their Michigan community college prior to Fall 2014. Please see your community college Registrar and request to have your transcript reviewed and designated as “MACRAO Satisfied”. Students may elect to follow the MTA.

**English Composition: 6 Semester Credits**
Two Written Communication courses

**Science/Math: 8 Semester Credits**
One Science course with a lab
Intermediate and/or College Algebra, and/or Geometry

**Humanities: 8 Semester Credits**
A minimum of 8 hours from at least two different disciplines

**Social Sciences: 8 Semester Credits**
A minimum of 8 hours from at least two different disciplines

Minimum hours required to complete MACRAO Agreement: 30

An official transcript that is designated as being “MACRAO Satisfied” will have satisfied the University Program portion of the General Education Requirements. A portion or all of the Competency Requirements may also be satisfied by an official transcript designating “MACRAO Satisfied” or “MTA Satisfied”.

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MTA replaces the MACRAO Agreement effective Fall 2014 and beyond.

This distribution of courses fulfills the MTA and will satisfy the University Program portion of the CMU bachelors’ degree at CMU for students who begin attending a Michigan community college beginning Fall 2014. Please see your community college Registrar and request to have your transcript reviewed and designated as “MTA Satisfied”. Only courses with a grade of “C” or better may be applied to the MTA requirements.

**Communication: 2 Courses**
One Written Communication course
One Written or Oral Communication course

**Natural Sciences: 2 Courses**
Two natural science courses from two different disciplines. One course must be a lab science course.

**Humanities and Fine Arts: 2 Courses**
Two humanities courses from two different disciplines (excluding studio and performance classes)

**Social Sciences: 2 Courses**
Two social science courses from two different disciplines

**Mathematics: 1 Course**
One entry-level college course as defined by the three pathways.

Minimum hours required to meet MTA: 30

Central Michigan Writing Intensive & Quantitative Reasoning Requirements

Effective Fall 2014, CMU has implemented a Writing Intensive (12 semester hours) and Quantitative Reasoning requirement (3 semester hours). Please note that these requirements are for both transfer and incoming Freshman students.

Any Michigan community college student transferring to CMU with their transcript designated as “MACRAO Satisfied” or “MTA Satisfied” will be given six (6) semester hours of Writing Intensive course work. The remaining six (6) semester hours must be completed at CMU. The Quantitative Reasoning requirement may be satisfied through transfer credit.

**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.

Central Michigan Writing Intensive & Quantitative Reasoning Requirements

Effective Fall 2014, CMU has implemented a Writing Intensive (12 semester hours) and Quantitative Reasoning requirement (3 semester hours). Please note that these requirements are for both transfer and incoming Freshman students.

Any Michigan community college student transferring to CMU with their transcript designated as “MACRAO Satisfied” or “MTA Satisfied” will be given six (6) semester hours of Writing Intensive course work. The remaining six (6) semester hours must be completed at CMU. The Quantitative Reasoning requirement may be satisfied through transfer credit.

**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.
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- 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.
Transfer Credit Guide
This guide is subject to change and should be used in consultation with an academic advisor.

Lansing Community College

GENERAL EDUCATION REQUIREMENTS (30 – 32)
Composition (8)
***WRIT 121 Composition I (4)
Select one of the following courses:
***WRIT 122 Composition II (4)
***ENGL 122 Writing About Literature & Ideas (4)

Group I Humanities: (6 – 8)
Select courses from the following: ARTS 102, 130, 211, 212; CHIN 121, 122; ENGL 201, 202, 203, 208, 211, 212, 220, 240, 245, 255, 256, 260, 266, 267, 270, 290; FASH 230; FREN – GRMN – JAPN – SPAN 121, 122, 201, 202; HIST 150, 211, 212, 214, 220, 230, 240, 250, 260, 271; HUMS 125, 140, 160, 213, 214, 215; MUSE 199, 240, 241; PHIL 151, 152, 153, 211, 212; RELG 150, 211, 212, 241, 242, 250; SIGN 160; THEA 110, 210

MACRAO requires at least 8 credits from two subjects
MTA requires two courses from two subjects**

Group II Social Sciences: (6 – 8)
Select courses from: ANTH 270, 271, 275, 276; CHDV 101; CJUS 101, 102, 106, 255; EDUC 204, 220; GEOG 120, 120, 200, 202; GERO 100; MGMT 234; POLS 120, 121, 201, 202, 270; PSYC 200, 202, 203, 205, 221, 222, 250; SOCL 120, 254, 255, 260; SOWK 101; SPCH 280

MACRAO requires at least 8 credits from two subjects
MTA requires two courses from two subjects**

Group III Natural Sciences: (4 - 8)
Select additional courses from: ASTR 201; BIOL 120, 121, 125, 127, 128, 145, 201, 202, 204, 210, 229, 260, 265; CHEM 135, 161, 162, 192, 262, 272; GEOG 121, 220; GEOL 221, 222, 230; ISCI 121, 122, 131; METM 190; PHYS 120, 200, 221, 222, 251, 252

MACRAO requires at least one science course
MTA requires two courses from two subjects. One must be a lab science.

Mathematics: (9)
***MATH 126 Accelerated Pre-calculus (5)
STAT 215 Introduction to Probability and Statistics (4)

Additional courses available for Industrial Technology Majors
Select one of the following for CMU Competency:
***SPCH 122 Speech (3)
SPCH 128 Speech (3)
CPSC 230 Algorithms & Computing w/ C++ (4)

Students pursuing an Associate Degree should consult an academic advisor at Lansing Community College to ensure that LCC degree requirements are being met.

CMU Equivalents

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>ENG 201</td>
<td>3</td>
</tr>
<tr>
<td>STA 282QR</td>
<td>3</td>
</tr>
<tr>
<td>COM 101</td>
<td>3</td>
</tr>
<tr>
<td>CPA 180</td>
<td>3</td>
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</tbody>
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Central Michigan University
INDUSTRIAL ENGINEERING TECHNOLOGY MAJOR
Bachelor of Science in Engineering Technology (B.S.E.T.)

REQUIRED COURSES (57 HOURS)
EGR 200 Computer Aided Problem Solving for Engineers (3)
IET 130 Industrial Materials and Testing (3)
IET 154 Engineering Design Graphics (3)
IET 170 Manufacturing Processes I (3)
IET 181QR Alternative Energy Analysis (3)
IET 226 Parametric Design and Modeling (3)
IET 279 Applied Statics (3)
IET 291 Applied Circuits (3)
IET 326 Manufacturing Methods Analysis (3)
IET 327 Industrial Safety (3)
IET 365 Manufacturing Processes II (3)
IET 375 Robotics (3)
IET 377 Computer Numerical Control Programming (3)
IET 426 Plant Layout and Materials Handling (3)
IET 428 Manufacturing Quality (3)
IET 499 Industrial Projects Capstone (3)
IET 500 Production Concepts (3)
IET 501 Application of Industrial Management Principles (3)
STA 282QR - Introduction to Statistics (3)

TECHNICAL ELECTIVES (9 HOURS)
CPS 180 Principles of Computer Programming (3)
EGR 120 Introduction to Engineering (3)
EGR 190QR Digital Circuits (3)
EGR 290 Circuit Analysis I (3)
EGR 300 Engineering Economic Analysis (3)
ENG 303 Technical Writing (3)
IET 223QR Lean Six Sigma for Process Improvement 3(3)
IET 284 Fluid Power Technology (3)
IET 324 Product Design and Development (3)
IET 350 Mechanism Design (3)
IET 379 Mechanics of Materials (3)
IET 425 Industrial Internship (2-8)
IET 450 Mechanical Computer-Aided Engineering (3)
IET 451 Geometric Dimensioning and Tolerancing (3)
IET 458 Surface Modeling (3)
MTH 133 Calculus II (4)

Minimum Totals for Graduation: 124 hours
See page one for additional graduation requirements.

Important Notes: The Engineering and Technology (ET) degree programs consists of extensive laboratory work which involves a close physical relationship with tools, moving machinery and electrical equipment necessitating specific safe practices. Examples include voltage checks, use of safety guards, and continuous observation of associated visual alarms, caution signs and auditory signals.

Students pursuing one of our majors or minor are required to meet with an ET advisor during the first semester of attendance at CMU. Transfer students are encouraged to contact an ET advisor early in their academic career for consistency in course selection. Contact Engineering and Technology at 989.774.3033.

This guide is subject to change and should be used in conjunction with an academic advisor and reflects successful completion of the MACRAO Agreement and the MTA.

*CMU competency course requires a grade of "C" or better to satisfy the requirement.
**Preferred course selection and a required graduation requirement.
***MTA applicable courses require a grade of "C" or better to satisfy the requirement.

6/2015 WD

CENTRAL MICHIGAN UNIVERSITY
Admissions: Warriner Hall 102 | Mount Pleasant, MI 48859 | 1-888.292.5366 Toll Free
cmuadmit@cmich.edu | 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/aaeo) UComm 9063