

**IT IS IMPORTANT TO SEE AN M.C.C. COUNSELOR EACH SEMESTER FOR ACADEMIC ADVISING. TO SCHEDULE AN APPOINTMENT CALL (231) 777-0362.**

**Muskegon Community College Curriculum Guide**

**Curriculum: ENGINEERING – CENTRAL MICHIGAN UNIVERSITY**

**Curriculum Code: C06**

The following courses will fulfill requirements for the Associate in Science and Arts Degree. It is designed for students who plan to transfer to C.M.U. and major in Electrical or Mechanical Engineering after completing the A.S.A. degree at M.C.C.

<b>REQUIRED FOUNDATIONAL SKILLS – You must demonstrate a minimum level of achievement, either by successful testing or satisfactory course completion (a grade of “C” or better) in four areas:</b>	
1. Writing	English 085, 089, 091 or 114
2. Reading	Reading 040A or 040C
3. Math	Mathematics 50 or 107 (or complete higher level course)
4. Computers	CIS 100 or any other CIS course (Consult a counselor regarding transferability. CIS 110 or 120A is strongly recommended.)

English, Reading and Mathematics Placement Tests may be required and are available in Testing Services, located in Room 134 – 777-0394. English and Reading placement tests may be waived if you show documentation of a proficiency level 1 or 2 on the high school MEAP or MME writing and reading tests or if you have an ACT composite score of 22 or greater. The Mathematics placement test may be waived if you show documentation of a score of 28 or above on the ACT Math test.

**MINIMUM CREDITS**

**GENERAL EDUCATION**

**COMMUNICATION**

English 101 and 102 English Composition 6

**SCIENCE/MATH**

Mathematics 161 Calculus I 4  
 Physics 203 Engineering Physics 5

**THE HUMAN EXPERIENCE**

**AESTHETIC VALUES**

Art 101, 104, 105B (was 105), 107, 108, 109, 204B (was 204), 205, 207, 208, 209, 211 3  
 Dance 100, 101, 102, 106, 200, 201, 213, 218  
 English 208 (or Communications 203), 223  
 Music – any 100 level or above course  
 Theater 101, 102, 108, 120, 141, 142, 144, 145, 147, 148, 160, 201, 202, 203, 210, 212, 217, 260

**ETHICS AND LOGIC**

Philosophy 101, 102, 104, 202, 204, 205, 207 3

**SOCIAL RELATIONSHIPS**

Economics 101, 102, 130 3  
 Psychology 102, 201, 202, 203, 210 (same course as Sociology 210)  
 Sociology 101, 102, 202, 203, 206, 210 (same course as Psychology 210)  
 Women’s Studies 101

**HUMAN CULTURES**

**WESTERN WORLD**

Art 198, 199, 202 3  
 English 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228  
 History 101, 102, 204

**MINIMUM CREDITS**

Humanities 195  
 Music 103  
 Political Science 203  
 Theater 201

**AMERICAN**

History 201, 202, 207, 211, 220  
 Political Science 111, 205, 220

3

**INTERNATIONAL**

If the credit hours from AMERICAN CULTURES and SOCIAL RELATIONSHIPS total less than 8 credits, the choices are:

Anthropology 103, 110  
 Geography 104 (was 102A, 102C), 105  
 History 195  
 Political Science 202, 210, 211

3

If the credit hours from AMERICAN CULTURES and SOCIAL RELATIONSHIPS total 8 credits or more, then other options are:

English 207, 211, 218  
 French 101, 102, 201, 202  
 German 101, 102, 201, 202  
 History 210  
 Philosophy 203, 210  
 Spanish 101, 102, 201, 202

**PHYSICAL EDUCATION**

Choose one from PEA 101A, 103, 104A, 118, or 201 **and** one PEA or DNC credit hour of choice.

2

**CHOOSE FROM THE FOLLOWING FOR A TOTAL OF 62 - 70 CREDITS**

(M.C.C. requires 62 credit hours for the A.S.A. degree; however this major at C.M.U. can transfer up to 70 credit hours from M.C.C.)

**C.M.U. COMPETENCY REQUIREMENT**

Communications 101 Oral Communications

3

or

Communications 201 Public Speaking

3

or

Communications 210 Introduction to Debate (if available)

3

**MAJOR RELATED COURSES**

Mathematics 162 Calculus II

3

Mathematics 274 Linear Algebra and Matrices (other option is available at C.M.U.)

2

Mathematics 283 Calculus III

4

Mathematics 295 Differential Equations with Linear Algebra (other option is available at C.M.U.)

4

Physics 204 Engineering Physics

5

Chemistry 101Lec & 101A General and Inorganic Chemistry, Lec & Lab

5

(prerequisite: Chemistry 100Lec & 100A or testing proficiency) (other option is available at C.M.U.)

Business 123 Business Law

3

Choose two courses from (both Economics cannot be taken):

8

Business 101; Economics 101, 102 (other options are available at C.M.U.)

TOTAL 62-70

**NOTE:**

In order to satisfy the University Program General Education Requirements area at C.M.U., your final community college transcript must be stamped MACRAO Agreement Satisfied.

A second part of C.M.U.'s General Education Requirements includes three basic competencies which can be satisfied at M.C.C. before transferring to C.M.U. by passing the following courses with a grade of "C" or better: English 101 and 102, Communications 101 or 201 or 210, and Mathematics 50 or above (except Mathematics 105). C.M.U. requires these competencies to be fulfilled within the first 56 credit hours.

Transfer students should normally have a minimum G.P.A. of 2.5 prior to transferring to C.M.U. For further information contact the Admissions Office at C.M.U.

Students should check the M.C.C. catalog for course prerequisites.

It is recommended that Engineering majors become familiar with the Engineering and Technology section in the C.M.U. Bulletin found at <https://bulletins.cmich.edu>.