

MITRANSFER PATHWAYS

ARTICULATION AGREEMENT

MECHANICAL ENGINEERING

TO: MiTransfer Pathway Mechanical Engineering Participating Institutions

FROM: Michigan Community College Association, Michigan Association of State Universities, Michigan Independent Colleges and Universities

SUBJECT: MiTransfer Join/Modify Summary

The MiTransfer Pathways agreement, signed on August 3, 2020 provides for institutions to modify worksheets and equivalencies or join the MiTransfer Pathways agreement. The MCCA, MASU, and MICU worked with institutions to make the following adjustments to the Mechanical Engineering Pathway:

CYCLE	INSTITUTION	JOINING/ MODIFYING	APPENDIX A COMMUNITY COLLEGE WORKSHEET CHANGE	APPENDIX B UNIVERSITY WORKSHEET CHANGE	APPENDIX C EQUIVALENCY CHANGE	APPENDIX D EXCEPTION CHANGE
Fall 2020	Andrews University	Modifying				X
Fall 2020	Gogebic Community College	Modifying			X	X
Fall 2020	Kellogg Community College	Modifying	X			
Fall 2020	North Central Community College	Modifying	X			
Fall 2020	Saginaw Valley State University	Modifying		X		X
Spr 2021	Washtenaw Community College	Joining	X		X	X
Spr 2021	Western Michigan University	Joining		X	X	X
Fall 2021	Kellogg Community College	Modifying	X			
Fall 2021	North Central Michigan College	Modifying	X			
Fall 2021	Saginaw Valley State University	Modifying				X
Fall 2021	Spring Arbor University	Joining		X	X	X
Fall 2021	Wayne State University	Joining		X	X	X
Spr 2022	Jackson College	Modifying	X			
Fall 2022	Kellogg Community College	Modifying	X			
Fall 2022	Oakland Community College	Modifying	X		X	X
Fall 2022	Washtenaw Community College	Modifying	X			
Spr 2023	Lake Superior State University	Joining		X	X	X
Spr 2023	University of Detroit Mercy	Modifying		X		
Fall 2023	Lake Superior State University	Modifying				X
Fall 2023	North Central Michigan College	Modifying	X			
Spr 2025	Glen Oaks Community College	Modifying	X		X	X
Fall 2025	Jackson Community College	Modifying	X			
Fall 2025	Saginaw Valley State University	Modifying		X		

# MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

## OVERVIEW

In Fall 2017, the Michigan Community College Association (MCCA) and the Michigan Association of State Universities (MASU) received a one-time appropriation from the state of Michigan to support the development of multi-institutional associate to bachelor's degree transfer pathways. MCCA and MASU in partnership with the Michigan Independent Colleges and Universities (MICU) and the Michigan Association of Collegiate Registrars and Admissions Officers (MACRAO) convened the Transfer Steering Committee with more than 30 representatives from colleges and universities from across the state to develop the MiTransfer Pathways project. The MiTransfer Pathways project plan selected 12 programs with high enrollment and/or high labor market demand. The goal of the project was to build multi-institutional transfer pathways so students can enroll at any participating community college, complete an associate degree, transfer, and complete a bachelor's degree in the identified program of study.

In fall 2018 and spring of 2019, mechanical engineering faculty from community colleges, public universities, and independent colleges and universities in Michigan met to identify courses that are required, recommended, optional or appropriate in the first and second year of the bachelor's degree programs at all participating universities. We refer to these commonly required courses as "MiTransfer Pathways courses." The MiTransfer Pathways courses in mechanical engineering are:

- Calculus I
- Calculus II
- Calculus III
- Chemistry I (w/lab)
- Differential Equations (minimum 4 credits, must cover linear algebra)
- Dynamics
- Mechanics of Solids/Strength of Materials (no lab required)
- Physics I (Calculus-based, w/lab)
- Physics II (Calculus-based, 1/lab)
- Statics

These courses have been reviewed by receiving institutions and will be accepted for transfer and applied to the mechanical engineering program at all participating institutions (unless otherwise indicated in this agreement). The participating institutions agreed to establish direct equivalencies between these courses. Direct equivalencies are established when a course at the sending institution transfers as a direct equivalent to the course at the receiving institution and the credit is transcribed as a department and number (i.e. MTH 105) instead of department and no number (i.e. MTH GEN or MTH 100X). Direct

# MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

equivalency is preferred because students can see how the transferred course applies to the degree program.

In addition to identifying MiTransfer Pathways courses as described above, the faculty also identified Remaining Degree Requirements. The Remaining Degree Requirements identified by receiving institutions (universities) include courses that students can transfer from the community college but were not identified as MiTransfer Pathways courses because they were not accepted at every participating receiving institution. The Remaining Degree Requirements identified by sending institutions (community colleges) included courses or requirements that meet community college degree requirements but will not necessarily transfer to participating universities. Participating institutions submitted program worksheets (see Appendices A and B) that outlined these courses. Participating institutions will use these worksheets to communicate requirements to students.

## TERMS OF THE AGREEMENT

1. This agreement is effective on August 3, 2020.
2. Participating institutions agree that all courses must be completed with a grade of C (2.0) or better unless otherwise indicated by the receiving institution.
3. Participating institutions agree that to use this agreement, students must apply and be admitted to the participating institution and to the program if the program requires secondary admission. Receiving institutions agree to communicate the application process for institution and program admissions for transfer students on a publicly available website and through advising.
4. Participating institutions agree to accept the Michigan Transfer Agreement (MTA) in accordance with the institutions' MTA policy.
5. Participating institutions agree to award equivalent credit for MiTransfer Pathways courses (see Course Equivalency Matrices in Appendix C) and apply courses to the bachelor's degree requirements unless otherwise noted in the Course Equivalency Exceptions documented in Appendix D. If no direct equivalent exists because the course is not offered or required at the receiving institution, then the receiving institution agrees to accept the course and apply the course toward the Mechanical Engineering degree program. If the community college does not offer the course, the community college should communicate this information to students on a publicly available website and/or the Michigan Transfer Network at [mitransfer.org](http://mitransfer.org) and help students find an equivalent

## MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

course at other institutions.

6. Participating institutions agree to upload course equivalencies for MiTransfer Pathways courses to the Michigan Transfer Network at [mitransfer.org](http://mitransfer.org).
7. Receiving institutions agree to accept the Remaining Degree Requirements as outlined in the receiving institutions' Program Worksheet included in Appendix B. Participating institutions agree to work toward awarding direct equivalency for Remaining Degree Requirements, apply courses to the bachelor's degree requirements, and add course equivalencies to the Michigan Transfer Network.
8. Sending institutions agree that Remaining Degree Requirements identified by community colleges that are not required by the receiving institution may not transfer or may not apply to bachelor's degree requirements at the receiving institution.
9. Alternative credit awarded by the sending institution through AP, CLEP, IB, credit earned through credit for prior learning, or other means may be accepted and applied to the degree program at the discretion of the university. Sending institutions may apply alternative credit to the associate degree, but students should confirm whether or not credit is acceptable at receiving institutions.
10. Students may earn credit from multiple institutions as long as the course was completed at a sending institution that is participating in the agreement. There is no assurance that credits earned from institutions not participating in the agreement will apply.
11. Participating institutions agree to maintain up-to-date course equivalencies and information about their participation with this agreement. This information will be made publicly available through their own systems and on the [mitransfer.org](http://mitransfer.org) website.
12. In the performance of their respective duties and obligations under this Agreement, each Party is an independent contractor, and neither is the agent, employee, or servant of the other. Each is responsible only for its own conduct.

# MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

## MAINTENANCE AND REVIEW

### *Modifications to Worksheets and Equivalencies*

Colleges and universities will use the worksheets in Appendix A and B as the basis to advise transfer students. Any changes to program worksheets in Appendix A and B should be communicated to participating institutions as soon as possible to avoid students completing courses that will not transfer.

Changes may include:

- Adding programs in the pathway (e.g., add Environmental Studies to the Biology pathway);
- Modifying, removing, or adding MiTransfer Pathways courses;
- Modifying, removing, or adding courses to the Remaining Degree Requirements;
- Materially modifying the educational experience or content of the MiTransfer Pathways courses.

If any of the aforementioned changes occur, participating institutions are expected to communicate with their sector representative from the Michigan Association of State Universities (MASU), Michigan Community College Association (MCCA), or Michigan Independent Colleges and Universities (MICU). These changes will be vetted among participating institutions, including reviewing and establishing equivalencies where needed. Changes to the worksheets and equivalencies will be documented and available at [mitransfer.org](http://mitransfer.org) website.

### *Joining the Agreement*

Institutions can join the agreement at any time and should contact their sector representative at the Michigan Association of State Universities, the Michigan Community College Association, or the Michigan Independent Colleges and Universities. Institutions that join the agreement will be required to comply with the terms of the agreement.

### *Renewing the Agreement*

This agreement will be up for renewal on June 30, 2022. The Michigan Community College Association, the Michigan Association of State Universities, and the Michigan Independent Colleges and Universities agree to coordinate renewal of this agreement during the 2021-2022 academic year. Participating institutions may choose to leave the agreement at that time.

# MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

## SIGNATURES

By signing this agreement, institutions agree to the terms of the agreement and maintenance and review.

### MICHIGAN COMMUNITY COLLEGE ASSOCIATION

SIGNATURE	NAME	TITLE	INSTITUTION
<i>Deborah Bayer</i>	Deborah Bayer	Vice President of Instruction	Alpena Community College
<i>Dr. Don MacMaster</i>	Dr. Don MacMaster	President	Alpena Community College
<i>James Berles</i>	James Berles	Faculty	Alpena Community College
<i>Jeremy Belanger</i>	Jeremy Belanger	Executive Director of Transfer & Advising	Bay College
<i>Jean Goodnow, Ph.D.</i>	Jean Goodnow, Ph.D.	President	Delta College
<i>Reva Curry, Ph.D.</i>	Reva Curry, Ph.D.	Vice President of Instruction/Learning Services	Delta College
<i>David H. Devier, Ph.D.</i>	David H. Devier, Ph.D.	President	Glen Oaks Community College
<i>Michael M. Goldin, Ph.D.</i>	Michael M. Goldin, Ph.D.	Vice President of Academics	Glen Oaks Community College
<i>David Darrow</i>	David Darrow	Vice President of Academic Services	Gogebic Community College
<i>George McNulty</i>	George McNulty	President	Gogebic Community College
<i>Bill Pink</i>	Bill Pink	President	Grand Rapids Community College

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<i>Brian Knetl</i>	Brian Knetl	Provost	Grand Rapids Community College
<i>Michael A. Nealon</i>	Michael A. Nealon	Vice President of Academic Affairs	Henry Ford College
<i>Daniel J. Phelan</i>	Daniel J. Phelan	President	Jackson College
<i>Kate Thirolf</i>	Kate Thirolf	Vice President	Jackson College
<i>Todd Butler</i>	Todd Butler	Dean, Arts & Sciences	Jackson College
<i>Adrien Bennings</i>	Adrien Bennings	President	Kellogg Community College
<i>Carole J. Davis</i>	Carole J. Davis	Chair, Math and Science	Kellogg Community College
<i>Paul R Watson II</i>	Paul R Watson II	Vice President for Instruction	Kellogg Community College
<i>Tonya P. Forbes</i>	Tonya P. Forbes	Dean, Arts and Sciences	Kellogg Community College
<i>Dr. Leslie Kellogg</i>	Dr. Leslie Kellogg	Provost and Vice President of Academic Affairs	Lake Michigan College
<i>Dr. Steve Robinson</i>	Dr. Steve Robinson	President	Lansing Community College
<i>Donald Ritzenhein</i>	Donald Ritzenhein	Provost & VP for the Learning Unit	Macomb Community College
<i>Jennifer Fager, PhD</i>	Jennifer Fager, PhD	Vice President of Academic Affairs	Mid Michigan College
<i>Richard Smith, EdD</i>	Richard Smith, EdD	Associate Dean of Academic Outreach, Transfer Liaison	Mid Michigan College
<i>Kojo Quartey</i>	Kojo Quartey	President	Monroe County Community College

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<i>Grace Yackey</i>	Grace Yackey	Vice President of Instruction	Monroe County Community College
<i>Parmeshwar Coomar</i>	Parmeshwar Coomar	Dean of Applied Science and Engineering Technology Division	Monroe County Community College
<i>Dale Nesbary, Ph.D.</i>	Dale Nesbary, Ph.D.	President	Muskegon Community College
<i>Kelley Conrad</i>	Kelley Conrad	Vice President	Muskegon Community College
<i>David Roland Finley, Ph.D.</i>	David Roland Finley, Ph.D.	President	North Central Michigan College
<i>Peter Olson, Ph.D.</i>	Peter Olson, Ph.D.	Vice President of Academic Affairs and Student Success	North Central Michigan College
<i>Joseph Balinski</i>	Joseph Balinski	Director of Enrollment Services/ Registrar	North Central Michigan College
<i>Debra Pharo</i>	Debra Pharo	Science and Maths Academic Chair	Northwestern Michigan College
<i>Gerald Dobek</i>	Gerald Dobek	Science Department Head	Northwestern Michigan College
<i>Nick Nissley</i>	Nick Nissley	President	Northwestern Michigan College
<i>Stephen Siciliano</i>	Stephen Siciliano	Vice President for Educational Services	Northwestern Michigan College
<i>Peter M. Provenzano Jr.</i>	Peter M. Provenzano Jr.	Chancellor	Oakland Community College
<i>Cheryl Hawkins, PhD</i>	Cheryl Hawkins, PhD	Vice President and Chief Academic Officer	Schoolcraft College
<i>Conway Jeffress, PhD</i>	Conway Jeffress, PhD	President	Schoolcraft College
<i>Michele Kelly, PhD</i>	Michele Kelly, PhD	Dean Liberal Arts and Science	Schoolcraft College

## MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

<i>Robert Leadley, PhD</i>	Robert Leadley, PhD	Dean Occupational Programs and Economic Development	Schoolcraft College
<i>David W Fleming</i>	David W Fleming	Vice President of Instruction	Southwestern Michigan College
<i>Tamara Kenny</i>	Tamara Kenny	Chief Academic Officer - Occupational Studies and Health Sciences	St. Clair County Community College
<i>Kimberly Hurns, DM</i>	Kimberly Hurns, DM	Executive Vice President for Instruction and Academic Affairs	Washtenaw Community College
<i>Patrick J. McNally</i>	Patrick J. McNally	Vice Chancellor, Curriculum and Distance Learning	Wayne County Community College District

### MICHIGAN ASSOCIATION OF STATE UNIVERSITIES

SIGNATURE	NAME	TITLE	INSTITUTION
<i>Jane M. Davison</i>	Jane M. Davison	Interim Dean, College of Science and Engineering	Central Michigan University
<i>Mary C. Schutten</i>	Mary C. Schutten	Provost	Central Michigan University
<i>Robert O. Davies</i>	Robert O. Davies	President	Central Michigan University
<i>James Smith</i>	James Smith	President	Eastern Michigan University
<i>Mohamad Qatu</i>	Mohamad Qatu	Dean, College of Engineering and Technology	Eastern Michigan University
<i>Rhonda Longworth</i>	Rhonda Longworth	Provost and Executive Vice President	Eastern Michigan University
<i>Dr. David Eisler</i>	Dr. David Eisler	President	Ferris State University

## MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

<i>Dr. Kimberly Muller</i>	Dr. Kimberly Muller	Dean, College of Innovation and Solutions	Lake Superior State University
<i>Dr. Lynn Gillette</i>	Dr. Lynn Gillette	Provost and Vice President for Academic Affairs	Lake Superior State University
<i>Jacqueline Huntoon</i>	Jacqueline Huntoon	Provost and Senior Vice President for Academic Affairs	Michigan Technological University
<i>Janet Callahan</i>	Janet Callahan	Dean, College of Engineering	Michigan Technological University
<i>Richard Koubek</i>	Richard Koubek	President	Michigan Technological University
<i>William Predebon</i>	William Predebon	Department Chair, Mechanical Engineering -- Engineering Mechanics	Michigan Technological University
<i>Kerri Schuiling</i>	Kerri Schuiling	Provost and Vice President for Academic Affairs	Northern Michigan University
<i>Michael Rudisill</i>	Michael Rudisill	Department Head-Engineering Technology	Northern Michigan University
<i>C. Michelle Piskulich</i>	C. Michelle Piskulich	Interim Provost	Oakland University
<i>Deborah Huntley</i>	Deborah Huntley	Provost and Vice President for Academic Affairs	Saginaw Valley State University
<i>Susan E. Alcock</i>	Susan E. Alcock	Provost and Executive Vice Chancellor for Academic Affairs	University of Michigan-Dearborn
<i>James Alsup</i>	James Alsup	Chair, Department of Computer Science, Engineering, Physics	University of Michigan-Flint
<i>Shelby Newport</i>	Shelby Newport	Associate Provost & Dean of Undergraduate Studies	University of Michigan-Flint
<i>Susan Gano-Phillips</i>	Susan Gano-Phillips	Dean, College of Arts and Sciences	University of Michigan-Flint

## MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

<i>Dr. Nabil Chalhoub</i>	Dr. Nabil Chalhoub	Department Chair, Mechanical Engineering	Wayne State University
<i>Dr. Farshad Fotouhi</i>	Dr. Farshad Fotouhi	Dean, College of Engineering	Wayne State University
<i>Jennifer Bott</i>	Jennifer Bott	Provost and Vice President for Academic Affairs	Western Michigan University
<i>Edward Montgomery, Ph.D.</i>	Edward Montgomery, Ph.D.	President	Western Michigan University

### MICHIGAN INDEPENDENT COLLEGES AND UNIVERSITIES

SIGNATURE	NAME	TITLE	INSTITUTION
<i>Amy Rebok Rosenthal</i>	Amy Rebok Rosenthal	Dean, Undergraduate Education	Andrews University
<i>Christon Arthur</i>	Christon Arthur	Provost	Andrews University
<i>James Z. Zhang</i>	James Z. Zhang	Sr. VP for Academic Affairs and Provost	Kettering University
<i>Dr. Chris Riedel</i>	Dr. Chris Riedel	Assistant Department Chair in Mechanical Engineering	Lawrence Technological University
<i>Jim Jolly</i>	Jim Jolly	Assistant Provost	Lawrence Technological University
<i>Carol Green</i>	Carol Green	VP of Academic Affairs	Spring Arbor University
<i>Sherri Hendrix</i>	Sherri Hendrix	University Registrar	Spring Arbor University
<i>Ron DeLap</i>	Ron DeLap	Dean, School of Engineering	Spring Arbor University
<i>Antoine M. Garibaldi, Ph.D.</i>	Antoine M. Garibaldi, Ph.D.	President	University of Detroit Mercy

## MITRANSFER PATHWAYS ARTICULATION AGREEMENT: MECHANICAL ENGINEERING

<i>Katherine E. Snyder, Ph.D.</i>	Katherine E. Snyder, Ph.D.	Dean, College of Engineering & Science	University of Detroit Mercy
<i>Pamela A. Zarkowski, J.D., M.P.H.</i>	Pamela A. Zarkowski, J.D., M.P.H.	Provost and Vice President for Academic Affairs	University of Detroit Mercy

APPENDIX A:  
Participating Community College MiTransfer Mechanical Engineering Pathway  
Worksheets



**ASSOCIATE DEGREE PROGRAM INFORMATION**

Institution	<b>Alpena Community College</b>
Degree/Program	<b>Associate of Science/Pre-Engineering</b>
Credits Required	<b>60</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

<b>Pathway Course</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Calculus I	MTH 131	Analytical Geometry and Calculus I	<b>MTA Math</b>
Calculus II	MTH 132	Analytical Geometry and Calculus 2	5
Calculus III	MTH 231	Analytical Geometry and Calculus 3	5
Differential Equations*	MTH 232	Differential Equations (with linear algebra)	4
Physics I (Calculus-based, w/lab)	PHY 221, PHY221R, AND PHY221L	Physics	<b>MTA Natural Science</b>
Physics II (Calculus-based, w/lab)	PHY 222, PHY222R, AND PHY222L	Physics	5
Chemistry 1 (w/lab)	CEM 121 and CEM 121L	General and Inorganic Chemistry	<b>MTA Natural Science</b>
Statics	EGR 221	Statics	3
Dynamics	not offered		
Mechanics of Solids/Strength of Materials (no lab required)	not offered		
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

<b>General Education or Program Requirement</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Electives-selected based on transfer institution requirements			0
Additional Humanities/Fine Arts/Social Science credits (minimum 10 credits of Humanities/Fine Arts or Social Science from more than one discipline)	Students can select from the list of ACC Humanities/Fine Arts/Social Science -eligible courses		<b>MTA Social Science/ Humanities</b>
American Government requirement	PLS 221 or 222; or HST 221 and 222	American Government and Politics or State and Local Government; US History I and US History II	<b>MTA Social Science</b>
English Composition II	ENG 112	English Composition II	<b>MTA 2<sup>nd</sup> writing</b>
		Remaining hours	0



## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Bay de Noc Community College</b>
Degree/Program	<b>Associate in Science-Pre-Engineering</b>
Credits Required	<b>63</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 141	Analytical Geometry & Calc I	5
Calculus II	MATH 142	Analytical Geometry & Calc II	5
Calculus III	MATH 243	Analytical Geometry & Calc III	5
Differential Equations*	MATH 244	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHYS 205	Engineering Physics I	5
Physics II (Calculus-based, w/lab)	PHYS 206	Engineering Physics II	5
Chemistry 1 (w/lab)	CHEM 110	General Chemistry I	5
Statics	PHYS 260	Statics	3
Dynamics	PHYS 261	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)			

*\*Minimum 4 credits, linear algebra must be covered*

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Linear Algebra (Program Req)	MATH 250	Linear Algebra	3
CS or Engineering Elective (Program Req)	CSCI 121 or CADD 120	C++ Programming, or AutoCAD	3
		Remaining hours	18



**ASSOCIATE DEGREE PROGRAM INFORMATION**

Institution	<b>Delta College</b>
Degree/Program	<b>Associate in Science</b>
Credits Required	<b>62</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH 161	Analytic Geom. and Calculus I	4 (MTA)
Calculus II	MTH 162	Analytic Geom. and Calculus I	4
Calculus III	MTH 261	Analytic Geom. and Calculus I	4
Differential Equations*	MTH 264	Intro. to Ordinary Differential Equations	3
Physics I (Calculus-based, w/lab)	PHY 211	Physics I	5 (MTA)
Physics II (Calculus-based, w/lab)	PHY 212	Physics II	5
Chemistry 1 (w/lab)	CHM 111	General Chemistry I	5 (MTA)
Statics	EGR 215	Engineering Mechanics, Statics	3
Dynamics	EGR 216	Engineering Mechanics, Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	EGR 320	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Lifelong Wellness	LW 221 or LW & Any LWA	Fitness & Wellness or Lifelong Wellness and 1-LWA Activity	2
		Remaining hours	

## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Glen Oaks Community College</b>
Degree/Program	<b>Associate of General Studies</b>
Credits Required	<b>60</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 161	Calculus I	4
Calculus II	MATH 162	Calculus II & Geometry	4
Calculus III	MATH 261 – Fall 2025	Calculus III & Analytical Geometry	4
Differential Equations*	No Course		
Physics I (Calculus-based, w/lab)	PHYS 251	Physics I	5
Physics II (Calculus-based, w/lab)	PHYS 253	Physics II	5
Chemistry 1 (w/lab)	CHEM 133	General Chemistry I	4
Statics	No Course		
Dynamics	No Course		
Mechanics of Solids/Strength of Materials (no lab required)	No Course		

*\*Minimum 4 credits, linear algebra must be covered*

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
		Remaining hours	11



**ASSOCIATE DEGREE PROGRAM INFORMATION**

Institution	<b>Gogebic Community College</b>
Degree/Program	<b>Associate of Science</b>
Credits Required	<b>66</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

<b>Pathway Course</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Calculus I	MTH150	Calculus & Analytical Geo I	5
Calculus II	MTH151	Calculus & Analytical Geo II	4
Calculus III	MTH152	Calculus III	4
Differential Equations*	MTH220	Ord Diff Equations w/Lin Alg	4
Physics I (Calculus-based, w/lab)	PHY251	General Physics I	5
Physics II (Calculus-based, w/lab)	PHY252	General Physics II	5
Chemistry 1 (w/lab)	CHM151	Gen & Ord Chemistry I	5
Statics	PHY261	Statics	3
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)	PHY263	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

<b>General Education or Program Requirement</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Program Requirement	PHY110	Intro to Engineering	3
Program Requirement	DWG106	Advanced CAD	3
Program Requirement	COL101	College & Transfer Readiness	1
		Remaining hours	12



## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Grand Rapids Community College</b>
Degree/Program	<b>Associate of Arts/Associate of Science</b>
Credits Required	<b>60</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MA 133	Calculus with Analytic Geometry I	5
Calculus II	MA 134	Calculus with Analytic Geometry II	5
Calculus III	MA 255	Calculus with Analytic Geometry III	4
Differential Equations*	MA 259 or MA 257 [based on transfer requirements]	Differential Equations Differential Equations and Linear Algebra	4
Physics I (Calculus-based, w/lab)	PH 245	Calculus Physics I	5
Physics II (Calculus-based, w/lab)	PH 246	Calculus Physics II	5
Chemistry 1 (w/lab)	CHM 130	General Chemistry I	4
	CHM 131	General Chemistry I Lab	1
Statics	N/A	N/A	-
Dynamics	N/A	N/A	-
Mechanics of Solids/Strength of Materials (no lab required)	N/A	N/A	-
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
With advising, students may select an A.A. degree program from the GRCC <a href="#">Catalog</a> , and select the above Mechanical Engineering Pathway Courses. GRCC has a specific Pre-Engineering, A.A. program that may have additional coursework outlined based on transfer institution requirements. However, besides MTA/General Education requirements, GRCC does not have any additional degree requirements (govt., wellness, etc.) for an A.A. degree.			
Above MTA/Gen. Ed. and Open Electives to reach at least 60 credits.			21 [Approximately]



## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Henry Ford College</b>
Degree/Program	<b>AAS Pre-Engineering: Mechanical/Industrial</b>
Credits Required	<b>78</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH-180	Calculus I	5
Calculus II	MATH-183	Calculus II	5
Calculus III	MATH-280	Calculus III	5
Differential Equations*	MATH-288	Differential Equations	5
Physics I (Calculus-based, w/lab)	PHYS-231	Engineering Physics I	5
Physics II (Calculus-based, w/lab)	PHYS-232	Engineering Physics II	5
Chemistry 1 (w/lab)	CHEM-141	Principles of General and Inorganic Chemistry I	5
Statics	ENGR-232	Statics	3
Dynamics	ENGR-233	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ENGR-235	Mechanics of Materials	2
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Intro to Engineering	ENGR-130	Introduction to Engineering	3
Introduction to Material Science	ENGR-201	Science of Materials	3
Design and Drafting	ENGR-121	Engineering Design and 3D Printing	3
Computer Technology	ENGR-125	Introduction to Computation for Engineers	3
Second Chemistry	CHEM-142	General Chemistry II	5
		Remaining hours	16



## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Henry Ford College</b>
Degree/Program	<b>AS Pre-Engineering: Mechanical/Industrial</b>
Credits Required	<b>60</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH-180	Calculus I	5
Calculus II	MATH-183	Calculus II	5
Calculus III	MATH-280	Calculus III	5
Differential Equations*	MATH-288	Differential Equations	5
Physics I (Calculus-based, w/lab)	PHYS-231	Engineering Physics I	5
Physics II (Calculus-based, w/lab)	PHYS-232	Engineering Physics II	5
Chemistry 1 (w/lab)	CHEM-141	Principles of General and Inorganic Chemistry I	5
Statics			
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)			
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Intro to Engineering	ENGR-130	Introduction to Engineering	3
Computer Technology	ENGR-125	Introduction to Computation for Engineers	3
General electives	Any course	Elective	1

Institution	<b>Jackson College</b>
Degree/Program	<b>Associate in Science</b>
Credits Required	<b>60</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MITRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 151	Calculus I	4 (MTA)
Calculus II	MAT 154	Calculus II	5
Calculus III	MAT 251	Calculus III	4
Differential Equations*	MAT 254	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHY 251	Modern University Physics I	5 (MTA)
Physics II (Calculus-based, w/lab)	PHY 252	Modern University Physics II	5
Chemistry 1 (w/lab)	CEM 141	General Chemistry I	5 (MTA)
Statics			
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)			
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
GEO 2 Recognize the importance of effective communication in a dynamic and changing society	Selection from GEO 2 list	Some MTA Courses meet this requirement	3
<b>Remaining hours (transfer electives)</b>			5

## ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.

Click or tap here to enter text.



**ASSOCIATE DEGREE PROGRAM INFORMATION**

Institution	<b>Kellogg Community College</b>
Degree/Program	<b>Associate in Science – Mechanical Engineering</b>
Credits Required	<b>60</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions’ course designations and consider whether any recommended MiTransfer Pathways major-specific courses will “double count” to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 141	Calculus I	5
Calculus II	MATH 142	Calculus II	5
Calculus III	MATH 241	Calculus III	4
Differential Equations*	MATH 242	Differential Equations with Linear Algebra	4
Physics I (Calculus-based, w/lab)	PHYS 221	Physics for Engineers and Scientists I	5
Physics II (Calculus-based, w/lab)	PHYS 222	Physics for Engineers and Scientists II	5
Chemistry 1 (w/lab)	CHEM 110	General Chemistry I	4
Statics	ENGR 256	Statics	3
Dynamics	ENGR 258	Dynamics	4
Mechanics of Solids/Strength of Materials (no lab required)	KCC does not offer this course		0
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	FYS 101	First Year Seminar	1
Program Requirement	ENGL 151 or ENGL 151H	Freshman Composition or Freshman Comp Honors	3
Program Requirement	COMM/ENGL options	Many Options	3
Program Requirement	Fine Arts/Personal & Cultural Engagement	Many Options – 2 different disciplines	6

Program Requirement	Social Science/Personal & Cultural Engagement	Many Options – 2 different disciplines	6
Program Requirement	Elective	Many options	0-3
	Service Learning Endorsement (SERV 100 or SERV 200 or completed in another course)	Service Learning	0-3
<b>Remaining hours (transfer electives)</b>			0

## ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.

Students should seek an appointment with an Academic Advisor to determine courses which best meet individual academic goals to discuss transfer options including verification of courses towards the completion of the Michigan Transfer Agreement (MTA). Students must complete a minimum of 60 credits in approved courses to earn a degree at Kellogg Community College with a minimum cumulative grade point average of 2.0 or higher. Contact Academic Advising at [kellogg.edu/advising](http://kellogg.edu/advising) or call 269-965-4124.

Service-Learning endorsement is required! Additional required degree criteria is listed in the KCC Academic Catalog under degree and certificate requirements.

Students should work with an academic advisor to determine the best elective courses based on individual academic and transfer goals.

The availability of ENGR 258 varied depending upon need. It is typically offered in summer sessions. Please contact the Math and Science Department for more information.

Engineering students are advised to contact the Math and Science Department to discuss the availability of ENGR 258.



### ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	Lake Michigan College
Degree/Program	Associate in Science (AS) – Pre-Engineering
Credits Required	60

### MICHIGAN TRANSFER AGREEMENT (MTA)

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

### MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 151	Calculus I	5
Calculus II	MATH 201	Calculus II	5
Calculus III	MATH 202	Calculus III	5
Differential Equations*	MATH 252	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHYS 201	Engineering Physics I (Mechanics)	4
Physics II (Calculus-based, w/lab)	PHYS 202	Engineering Physics I (Electricity & Magnetism)	4
Chemistry 1 (w/lab)	CHEM 111	General Chemistry I	4
Statics			
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)			
<i>*Minimum 4 credits, linear algebra must be covered</i>			

### REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Req	CIS 164	C++ Programming	3
Program Req	CHEM 112	General Chemistry II	4
		Remaining hours (Additional Credits to Fulfill Associate in Science)	7



### ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Lansing Community College</b>
Degree/Program	<b>Engineering/Physics A.S.</b>
Credits Required	<b>60</b>

### MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

### MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH151	Calculus I	4
Calculus II	MATH152	Calculus II	4
Calculus III	MATH253	Calculus III	4
Differential Equations*	MATH254 + MATH250	Intro to Differential Equation + Linear Algebra	4 + 4
Physics I (Calculus-based, w/lab)	PHYS251	Physics I with Calculus	5
Physics II (Calculus-based, w/lab)	PHYS252	Physics II with Calculus	5
Chemistry 1 (w/lab)	CHEM151 + CHEM161	General Chemistry I Lecture + General Chemistry I Lab	4 + 1
Statics	PHYS260	Statics for Engineers	3
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)			
<i>*Minimum 4 credits, linear algebra must be covered</i>			

### REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement - Electives	BIOL 127; CPSC 131; CPSC 230; STAT 215	Cell Biology; Numerical Methods and Math Lab; Algorithms and Computing with C+; 4 / 4; Introduction to Probability and Statistics	4 / 6; 3 / 4; 4 / 4
		Remaining hours	3-8



### ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Macomb Community College</b>
Degree/Program	<b>Associate of Science / Pre-Engineering</b>
Credits Required	<b>62</b>

### MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

### MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 1760	Analytical Geometry and Calculus I	4
Calculus II	MATH 1770	Analytical Geometry and Calculus 2	4
Calculus III	MATH 2760	Analytical Geometry and Calculus 3	4
Differential Equations*	MATH 2770	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHYS 2220	Analytical Physics 1	5
Physics II (Calculus-based, w/lab)	PHYS 2230	Analytical Physics 2	5
Chemistry 1 (w/lab)	CHEM 1170	General Chemistry 1	4
Statics	n/a	n/a	n/a
Dynamics	n/a	n/a	n/a
Mechanics of Solids/Strength of Materials (no lab required)	n/a	n/a	n/a
<i>*Minimum 4 credits, linear algebra must be covered</i>			

### REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program	ENGR 1000	Introduction to Engineering	3
Program	PHYS 1180	College Physics 1	4
Program	CHEM 1180	General Chemistry 2	4
Program	MATH 2000	Introduction to Linear Algebra	3
General Education	ECON 1160	Principles of Economics 1	3
		Remaining hours	17



## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	Mid Michigan College
Degree/Program	Associate in Science/Math/Science Transfer
Credits Required	62

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 126	Calculus I	5
Calculus II	MAT 225	Calculus II	4
Calculus III	MAT 226	Calculus III	4
Differential Equations*			
Physics I (Calculus-based, w/lab)	PHY 211	University Physics I	5
Physics II (Calculus-based, w/lab)	PHY 212	University Physics II	5
Chemistry 1 (w/lab)	CHM 111	General College Chemistry I	5
Statics			
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)			

*\*Minimum 4 credits, linear algebra must be covered*

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
		Remaining hours - Elective credits to reach degree minimum of 62. These remaining credits should be chosen in consultation with an advisor.	7



### ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Monroe County Community College</b>
Degree/Program	<b>Associate of Science</b>
Credits Required	<b>60</b>

### MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

### MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH/171	Calculus I	4
Calculus II	MATH/172	Calculus II	4
Calculus III	MATH/271	Calculus III	4
Differential Equations*	MATH/273	Introduction to Differential Equations	3
	MATH/251	Linear Algebra	3
Physics I (Calculus-based, w/lab)	PHY/151	General Physics I	4
Physics II (Calculus-based, w/lab)	PHY/152	General Physics II	4
Chemistry 1 (w/lab)	CHEM/151	General College Chemistry I	4
Statics	METC/220	Statics & Strength of Materials	4
Dynamics	Not offered		
Mechanics of Solids/Strength of Materials (no lab required)	Not offered		
<i>*Minimum 4 credits, linear algebra must be covered</i>			

### REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
General Education	MDTC/160	Mechanical Drafting & CAD I	4
Degree Requirement	Additional Social Sciences Course		3
		Remaining hours	0



ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Muskegon Community College</b>
Degree/Program	<b>AS Engineering</b>
Credits Required	<b>62</b>

MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 161	Calculus I	4
Calculus II	MATH 162A	Calculus II	4
Calculus III	MATH 283	Calculus III	4
Differential Equations*	MATH 295	Differential Equations with Linear Algebra	4
Physics I (Calculus-based, w/lab)	PHYS 203L&L	Engineering Physics	5
Physics II (Calculus-based, w/lab)	PHYS 204L&L	Engineering Physics	5
Chemistry 1 (w/lab)	CHEM 101LEC & CHEM 101A	General & Inorganic Chemistry Lecture & Lab	5
Statics	ENGR 202	Engineering Statics	3
Dynamics	ENGR 204	Engineering Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	Not offered		
<i>*Minimum 4 credits, linear algebra must be covered</i>			

REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
		Remaining hours	

No



ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>North Central Michigan College</b>
Degree/Program	<b>Associate of Science with a Concentration in Mechanical Engineering</b>
Credits Required	<b>60</b>

MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 150	Analytic Geometry & Calc. I	5
Calculus II	MATH 210	Analytic Geometry & Calc. II	5
Calculus III	MATH 215	Analytic Geometry & Calc. III	4
Differential Equations*	MATH 225	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHY 230	Physics for Scientists & Engineers I	5
Physics II (Calculus-based, w/lab)	PHY 231	Physics for Scientists & Engineers II	5
Chemistry 1 (w/lab)	CEM 121	Principles of Chemistry	5
Statics	ENGR 237	Statics	3
Dynamics	ENGR 238	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ENGR 247	Mechanics of Materials	3

*\*Minimum 4 credits, linear algebra must be covered*

REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
General Education	ENG 112	English Composition II	3
General Education	COM 111 or COM 170	Public Speaking or Interpersonal Communications	3
<b>Remaining hours (transfer electives)</b>			0

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## ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.

-MATH 130-College Algebra or higher satisfies the Associate of Science math requirement and can be used in the additional Science and Math electives section of the A.S. degree.

-A minimum of 60 earned credits required to complete degree.



**ASSOCIATE DEGREE PROGRAM INFORMATION**

Institution	<b>Northwestern Michigan College</b>
Degree/Program	<b>Engineering, ASA + Engineering Certificate</b>
Credits Required	<b>70-80 (program dependent)</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH141	Calculus I	5
Calculus II	MTH142	Calculus II	5
Calculus III	MTH241	Calculus III	5
Differential Equations*	MTH251	Linear Algebra & Diff. Eqns	4
Physics I (Calculus-based, w/lab)	PHY221	Prob/princ of Physics I	5
Physics II (Calculus-based, w/lab)	PHY222	Prob/Princ of Physics II	5
Chemistry 1 (w/lab)	CHM150	General Chemistry I	5
Statics	EGR201	Statics	3
Dynamics	EGR203	Dynamics	4
Mechanics of Solids/Strength of Materials (no lab required)	EGR202	Mechanics of Materials	3

*\*Minimum 4 credits, linear algebra must be covered*

**REMAINING DEGREE REQUIREMENTS**

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	EGR101	Intro to Engineering	1
Program Requirement	EGR232	Introductory Thermodynamics	3
Program Requirement	EGR221	Material Science	3
		Remaining hours to equal 60	



**ASSOCIATE DEGREE PROGRAM INFORMATION**

Institution	<b>Oakland Community College</b>
Degree/Program	<b>Associate in Applied Science – Pre-Engineering</b>
Credits Required	<b>65-67</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions’ course designations and consider whether any recommended MiTransfer Pathways major-specific courses will “double count” to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 1730	Calculus I	4 (MTA)
Calculus II	MAT 1740	Calculus II	4
Calculus III	MAT 2740	Calculus III	4
Differential Equations*	MAT 2810	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHY 2400	Engineering Physics I	5 (MTA)
Physics II (Calculus-based, w/lab)	PHY 2500	Engineering Physics II	5
Chemistry 1 (w/lab)	CHE 1510	General Chemistry I	4 (MTA)
Statics	EGR 2100	Statics	3
Dynamics	EGR 2500	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	EGR 2200	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	EGR 2010	Engineering Programming	4
Program Requirement – <b>Mechanical/Civil Focus Area</b>	CAD 1201 EGR	Intro to Engineering Graphics	4
<b>Remaining hours (transfer electives)</b>			0

**ADVISING NOTES**

Please indicate any advising notes for students following this transfer pathway at your institution.

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# MECHANICAL ENGINEERING MiTRANSFER PATHWAY

## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Oakland Community College</b>
Degree/Program	<b>Associate in Science</b>
Credits Required	<b>60</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 1730	Calculus I	4 (MTA)
Calculus II	MAT 1740	Calculus II	4
Calculus III	MAT 2740	Calculus III	4
Differential Equations*	MAT 2810	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHY 2400	Engineering Physics I	5 (MTA)
Physics II (Calculus-based, w/lab)	PHY 2500	Engineering Physics II	5
Chemistry 1 (w/lab)	CHE 1510	General Chemistry I	4 (MTA)
Statics	EGR 2100	Statics	3
Dynamics	EGR 2500	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	EGR 2200	Mechanics of Materials	3

*\*Minimum 4 credits, linear algebra must be covered*

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
<b>Remaining hours (transfer electives)</b>			

## ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.



ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	Schoolcraft College
Degree/Program	Associate in Science or Associate in General Studies or Associate in Arts
Credits Required	60

MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 150	Calculus with Analytical Geometry 1	5
Calculus II	MATH 151	Calculus with Analytical Geometry 2	5
Calculus III	MATH 240	Calculus with Analytical Geometry 3	5
Differential Equations*	MATH 252	Differential Equations	5
Physics I (Calculus-based, w/lab)	PHYS 211	Physics for Scientists/ Eng 1	5
Physics II (Calculus-based, w/lab)	PHYS 212	Physics for Scientists/ Eng 2	5
Chemistry 1 (w/lab)	CHEM 111	General Chemistry 1	4
Statics	ENGR 201	Statics	3
Dynamics	ENGR 203	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ENGR 202	Mechanics of Materials	3

*\*Minimum 4 credits, linear algebra must be covered*

REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
		Remaining hours	11

## ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Southwestern Michigan College</b>
Degree/Program	<b>AS – Science, Engineering, and Math Professional</b>
Credits Required	<b>63</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 141	Analytical Geometry & Calc I	5
Calculus II	MATH 142	Analytical Geometry & Calc II	5
Calculus III	MATH 201	Calculus III	5
Differential Equations*	MATH 205	Differential Equations & Linear Algebra	4
Physics I (Calculus-based, w/lab)	PHYS 201	General Physics I	5
Physics II (Calculus-based, w/lab)	PHYS 202	General Physics II	5
Chemistry 1 (w/lab)	CHEM 101	General Chemistry I	5
Statics	N/A		
Dynamics	N/A		
Mechanics of Solids/Strength of Materials (no lab required)	N/A		

*\*Minimum 4 credits, linear algebra must be covered*

## REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program	CHEM 102	General Chemistry II	5
General Education	EDUC 120	Educational Exploration	1
		Remaining hours	6



### ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>St. Clair County Community College</b>
Degree/Program	<b>Associates in Science Transfer</b>
Credits Required	<b>60</b>

### MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

### MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH 114	Calculus I	4
Calculus II	MTH 215	Calculus II	4
Calculus III	MTH 216	Calculus III	4
Linear Algebra	MTH 210	Linear Algebra	3
Differential Equations*	MTH 217	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHY 221	Mechanics, Heat, and Sound	5
Physics II (Calculus-based, w/lab)	PHY 222	Electricity, Light, and Modern Physics	5
Chemistry 1 (w/lab)	CHM 101	Intro to Inorganic Chemistry	4
Statics	PHY 231	Statics	3
Dynamics			
Mechanics of Solids/Strength of Materials (no lab required)			
<i>*Minimum 4 credits, linear algebra must be covered</i>			

### REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
		Remaining hours	



ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Washtenaw Community College</b>
Degree/Program	<b>Associate in Science, Pre-Engineering Science Transfer</b>
Credits Required	<b>61</b>

MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH 191	Calculus I	5
Calculus II	MTH 192	Calculus II	4
Calculus III	MTH 293	Calculus III	4
Differential Equations*	MTH 295	Differential Equations	4
Physics I (Calculus-based, w/lab)	PHY 211	Analytical Physics I	5
Physics II (Calculus-based, w/lab)	PHY 222	Analytical Physics II	5
Chemistry 1 (w/lab)	CEM 111	General Chemistry I	4
Statics	n/a	n/a	n/a
Dynamics	n/a	n/a	n/a
Mechanics of Solids/Strength of Materials (no lab required)	n/a	n/a	n/a

*\*Minimum 4 credits, linear algebra must be covered*

REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Computer Science	CPS 141 or CPS 171	Introduction to Programming Using Python or Introduction to Programming with C++	4
<b>Remaining hours (transfer electives)</b>			

ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.



ASSOCIATE DEGREE PROGRAM INFORMATION

Institution	<b>Wayne County Community College District</b>
Degree/Program	<b>AS - Pre Engineering</b>
Credits Required	<b>64</b>

MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 171	Calculus I	4
Calculus II	MAT 172	Calculus II	4
Calculus III	MAT 271	Analytical Geometry and Calculus III	4
Differential Equations*	MAT 273	Differential Equation	4
	MAT 272	Linear Algebra	4
Physics I (Calculus-based, w/lab)	PHY 265	Physics for Science and Engineer I	4
Physics II (Calculus-based, w/lab)	PHY 275	Physics for Science and Engineer II	4
Chemistry 1 (w/lab)	CHM 136	General Chemistry I	4
Statics	Not offered		
Dynamics	Not offered		
Mechanics of Solids/Strength of Materials (no lab required)	Not offered		
<i>*Minimum 4 credits, linear algebra must be covered</i>			

REMAINING DEGREE REQUIREMENTS

These are additional associate degree requirements that are not MTA or MiTransfer Pathways courses. They might not be accepted for transfer by universities participating in the agreement.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
		Remaining hours	28

APPENDIX B:

Participating Four-Year College and University MiTransfer Mechanical Engineering Pathway  
Worksheets



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Andrews University</b>
Degree/Program	<b>BSE Engineering, Mechanical Engineering Concentration</b>
Credits Required	<b>135 for bachelor's; 63 in major</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 191	Calculus I	4
Calculus II	MATH 192	Calculus II	4
Calculus III	MATH 240	Calculus III	4
Differential Equations*	MATH 286	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHYS 241, 271 (lab)	Physics for Scientists & Engineers I & Lab	5
Physics II (Calculus-based, w/lab)	PHYS 242, 272 (lab)	Physics for Scientists & Engineers II & Lab	5
Chemistry 1 (w/lab)	CHEM 131	General Chemistry	4
Statics	ENGR 185	Engineering Statics	3
Dynamics	ENGR 285	Engineering Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ENGR 340	Mechanics of Materials	3

*\*Minimum 4 credits, linear algebra must be covered (See below, MATH 215)*

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Cognate	CPTR 151	Computer Science	3
Program Cognate	MATH 215	Intro to Linear Algebra	3
Program Cognate	STAT 340	Probability & Statistics	3
GE Writing Course	ENGL 220	Technical Writing	3

## BACHELOR'S DEGREE PROGRAM INFORMATION

Institution	<b>Central Michigan University</b>
Degree/Program	<b>Mechanical Engineering - BSME</b>
Credits Required	<b>130 – 134</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH 132	Calculus I	4
Calculus II	MTH 133	Calculus II	4
Calculus III	MTH 233	Calculus III	4
Differential Equations*	MTH 232	Linear Algebra & Differential Equations	3
Physics I (Calculus-based, w/lab)	PHY 145	University Physics I	4
	PHY 175	University Physics I Laboratory	1
Physics II (Calculus-based, w/lab)	PHY 146	University Physics II	4
	PHY 176	University Physics II Laboratory	1
Chemistry 1 (w/lab)	CHM 131	Introduction to Chemistry I	4
Statics	EGR 251	Statics	3
Dynamics	EGR 253	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	EGR 255	Strength of Materials	3
Computer Programming	EGR 200	Computer Aided Problem Solving for Engineers	3
Intro CAD/Graphics	IET 154	Engineering Design Graphics	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			
<b>TOTAL CREDITS</b>			<b>43</b>

## REMAINING DEGREE REQUIREMENTS

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
General Education	ENG 201	Intermediate Comp	3
Program Requirement	EGR 120	Introduction to Engineering	3
Program Requirement	EGR 190	Digital Circuits	3
<b>TOTAL CREDITS</b>			<b>9</b>



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Eastern Michigan University</b>
Degree/Program	<b>Mechanical Engineering, Bachelor of Science</b>
Credits Required	<b>124 Credit Hours</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 120	Calculus I	4
Calculus II	MATH 121	Calculus II	4
Calculus III	MATH 223	Multivariable Calculus	4
Differential Equations*	MATH 325	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHY 223	Mechanics and Sound	5
Physics II (Calculus-based, w/lab)	PHY 224	Electricity and Light	5
Chemistry 1 (w/lab)	CHEM 121/122	General Chemistry I & Lab	3/1
Statics	ME 211	Statics	3
Dynamics	ME 312	Dynamics	3
	or PHY 230	Engineering Dynamics	
Mechanics of Solids/Strength of Materials (no lab required)	ME 313	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	MATH 122	Elementary Linear Algebra	3
Program Requirement	ME 100	Introduction to Engineering	3
General Education Requirement	<i>Perspectives on a Diverse World</i> - Demonstrate the application of learning in either Global Awareness or U.S. Diversity by completing one course, which may be transferred in as a part of the MTA. See EMU Undergraduate Catalog for a list of approved courses.		3



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Ferris State University</b>
Degree/Program	<b>B.S. Mechanical Engineering Technology</b>
Credits Required	<b>132-133</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 220	Analytical Geometry–Calculus I	4
Calculus II	MATH 230	Analytical Geometry–Calculus 2	4
Calculus III	MATH 320	Analytical Geometry–Calculus 3	4
Differential Equations*	MATH 330	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHYS 211	Introductory Physics 1	4
Physics II (Calculus-based, w/lab)	PHYS 212	Introductory Physics 2	4
Chemistry 1 (w/lab)	CHEM 121	General Chemistry 1	4
Statics	<b>NO COURSE</b>		
Dynamics	MECH 360	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	<b>NO COURSE</b>		

*\*Minimum 4 credits, linear algebra must be covered*

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
General Education	CHEM 103	Preparatory Chemistry	3
General Education	MATH 126 or MATH 130	Varies	4
General Education	MATH 216 or MATH 220	Varies	4
General Education	MATH 226 or MATH 230	Varies	4
Program	MECH 111	MET Seminar	1
Program	MECH 122	Computer Apps 1 for Tech	2
Program	MECH 211	Fluid Mechanics	4
Program	MECH 222	Kinematics of Mechanisms	2
Program	MECH 223	Thermodynamics	3



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Kettering University</b>
Degree/Program	<b>Mechanical Engineering</b>
Credits Required	<b>161</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

<b>Pathway Course</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Calculus I	MATH-101	Calculus I	4
Calculus II	MATH-102	Calculus II	4
Calculus III	MATH-203	Calculus III	4
Differential Equations*	MATH-204	Differential Equations*	4
Physics I (Calculus-based, w/lab)	PHYS-114/115	Newtonian Mechanics (Calc-based w/lab)	3+1=4
Physics II (Calculus-based, w/lab)	PHYS 224/225	Electricity and Magnetism (Calc-based, w/lab)	3+1=4
Chemistry 1 (w/lab)	CHEM-135/136	Principles of Chemistry (w/lab)	3+1=4
Statics	MECH-210	Statics	4
Dynamics	MECH-310	Dynamics	4
Mechanics of Solids/Strength of Materials (no lab required)	MECH-212	Mechanics of Materials	4
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

<b>General Education or Program Requirement</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Degree Requirement	MECH-100	Engineering Graphical Communications	4
Degree Requirement	IME-100	Interdisciplinary Design & Manufacturing	4
Degree Requirement	EE-212/MECH-231L	Applied Electrical Circuits & Signals lab	4
Degree Requirement	MATH-307	Matrix Algebra	4


**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Lake Superior State University</b>
Degree/Program	<b>Mechanical Engineering (BSME)</b>
Credits Required	<b>129</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH151	Calculus I	4
Calculus II	MATH152	Calculus II	4
Calculus III	MATH251	Calculus III	3
Differential Equations*	MATH310	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHYS231	Appl. Physics for Eng. and Sci. I	4
Physics II (Calculus-based, w/lab)	PHYS232	Appl. Physics for Eng. and Sci. II	4
Chemistry 1 (w/lab)	CHEM115	General Chemistry I	5
Statics	EGEM220	Statics	3
Dynamics	EGEM320	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	EGME225	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			
<b>TOTAL CREDITS</b>			<b>36</b>

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	EGME275	Engineering Materials	3
Program Requirement	EGME276	Strength of Materials Lab	1
Program Requirement	EGNR265	"C" Programming	3
Program Requirement	EGME110	Manufacturing Processes I	3
Program Requirement	EGNR140	Lin Alg & Num Applns for Engrs	2
Program Requirement	EGME141	Solid Modeling	3
<b>TOTAL CREDITS</b>			<b>15</b>



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Lawrence Technological University</b>
Degree/Program	<b>Bachelor of Science in Mechanical Engineering</b>
Credits Required	<b>132</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MCS 1414	Calculus 1	4
Calculus II	MCS 1424	Calculus 2	4
Calculus III	MCS 2414	Calculus 3	4
Differential Equations*	MCS 2423	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHY 2413+PHY 2421	University Physics I + Lab	4
Physics II (Calculus-based, w/lab)	PHY 2423+PHY 2431	University Physics II + Lab	4
Chemistry 1 (w/lab)	CHM 1213+CHM1221	University Chemistry I + Lab	4
Statics	EGE 2013	Statics	3
Dynamics	EME 3043	Dynamics	3
Mechanics of Solids/Strength of Materials	EME 3013	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			
<b>TOTAL CREDITS</b>			<b>36</b>

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	EME 1011	Foundations of Mechanical Engr	1
Program Requirement	EGE 1001	Fundamentals of Eng. Design Projects	1
Program Requirement	EGE 1102	Engr. Computer Applications Lab	2
Program Requirement	EME 2012	ME Graphics	
<b>TOTAL CREDITS</b>			<b>2</b>



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Michigan Technological University</b>
Degree/Program	<b>Mechanical Engineering</b>
Credits Required	<b>128</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MA1160 or MA1161	Calculus with Technology I or Calculus Plus with Technology I	4 or 5
Calculus II	MA2160	Calculus with Technology II	4
Calculus III	MA3160	Multivariable Calculus with Technology	4
Differential Equations <i>Minimum 4 credits, linear algebra must be covered</i>	MA2320 or MA2330 AND MA3520 or MA3530	Elementary Linear Algebra or Introduction to Linear Algebra AND Elementary Differential Equations or Introduction to Differential Equations	2 or 3 AND 2 or 3
Physics I (Calculus-based, w/lab)	PH1100 PH2100	Physics by Inquiry I (Lab) University Physics I-Mechanics	1 3
Physics II (Calculus-based, w/lab)	PH1200 PH2200	Physics by Inquiry II (Lab) Univ. Physics II-Electricity & Magnetism	1 3
General Chemistry I (w/lab)	CH1150 CH1151	University Chemistry I University Chemistry Lab I	3 1
Statics	MEEM2110	Statics	3
Dynamics	MEEM2700	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	MEEM2150	Mechanics of Materials	3

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	ENG1101	Engineering Analysis & Problem Solving	3
Program Requirement	ENG1102	Engineering Modeling and Design	3
Program Requirement	MSE2100	Intro to Materials Science & Engineering	3
Program Requirement	MEEM2201	Introductory Thermodynamics	3
Program Requirement	MEEM2901	Mechanical Engineering Practice I	2
Program Requirement	MEEM2911	Mechanical Engineering Practice II	3



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Northern Michigan University</b>
Degree/Program	<b>BS Mechanical Engineering Technology</b>
Credits Required	<b>126</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MA 161	Calculus I	4
Calculus II	MA 163	Calculus II	4
Calculus III	MA 265	Calculus III	4
Differential Equations*	MA 361	Differential Equations	3
Physics I (Calculus-based, w/lab)	PH201 or, PH220	College Physics I or, Introductory Physics I	5
Physics II (Calculus-based, w/lab)	PH 202 or PH 221	College Physics II or, Introductory Physics II	5
Chemistry 1 (w/lab)	CH 105 or CH 111	Chemical Principles or, General Chemistry I	4 or, 5
Statics	MET 211	Statics	4
Dynamics	MET 310	Dynamics	4
Mechanics of Solids/Strength of Materials (no lab required)	MET 311	Strength of Materials	4
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement (rec'd)	MET 213	Material Science I	3
Program Requirement (rec'd)	MA 211	Linear Algebra	3



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Oakland University</b>
Degree/Program	<b>Mechanical Engineering, B.S.E.</b>
Credits Required	<b>128</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH 1554	Calculus I	4
Calculus II	MTH 1555	Calculus II	4
Calculus III	MTH 2554	Multivariable Calculus	4
Differential Equations	APM 2559 or  APM 2555	Intro to Differential Equations with Matrix Alg or Intro to Differential Equations	4
Physics I (Calculus-based, w/lab)	PHY 1510/1100	Introductory Physics lec/lab	5
Physics II (Calculus-based, w/lab)	PHY 1520/1110	Introductory Physics lec/lab	5
Chemistry 1 (w/lab)	CHM 1440/1470	General Chemistry lec/lab	5
Statics	N/A		-
*Dynamics	ME 3200	Engineering Mechanics	4
*Mechanics of Solids/Strength of Materials (no lab required)	ME 3250	Mechanics of Materials	4
Computer Programming	EGR 1400	Computer Problem Solving in Engineering & Computer Science	4
Intro CAD/Graphics	EGR 1200	Engineering Graphics & CAD	1
<b>TOTAL CREDITS</b>			<b>44</b>
*Requires an additional one credit lab course at OU			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
General Education	ECN 2000 or 2010	Macroeconomics or Microeconomics	4
General Education	Approved Math/Science Elective	Varies	4-5

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Program Requirement	MTH 2775	Linear Algebra	4
TOTAL CREDITS			12-13

## BACHELOR'S DEGREE PROGRAM INFORMATION

Institution	<b>Saginaw Valley State University</b>
Degree/Program	<b>Mechanical Engineering (B.S.M.E.)</b>
Credits Required	<b>120 credits (34 required foundation credits – 9 engineering core credits – 47 major required credits – 6 advanced ME credits – 9 elective credits)</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH*161	Calculus I	4 credits
Calculus II	MATH*162	Calculus II	4 credits
Calculus III	MATH*261	Calculus III	4 credits
Differential Equations*	MATH*262	Differential Equations	4 credits
Physics I (Calculus-based, w/lab)	PHYS*211 PHYS*211L	Analytical Physics I Intro Physics I Lab	4 credits 1 credit
Physics II (Calculus-based, w/lab)	PHYS*212 PHYS*212L	Analytical Physics II Intro Physics II Lab	4 credits 1 credit
Chemistry 1 (w/lab)	CHEM*111 CHEM*111L	General Chemistry I Lecture General Chemistry I Lab	4 credits 1 credit
Statics	ME*251	Engineering Statics	3 credits
Dynamics	ME*252	Engineering Dynamics	3 credits
Mechanics of Solids/Strength of Materials (no lab required)	ME*250/ME*353	Principles of Engineering Materials/Solid Mechanics	4 credits/ 4 credits
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	ME*101 <b>OR</b> ECE*101	Engineering Careers & Concepts	2 credits
General Education Category 10 and Program Requirement	PHIL*210B	Appl Ethics – Engineering & Computer Tech	3 credits

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## ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.

Interdisciplinary major; no minor required.

### BSME program admission as follows:

Students admitted to SVSU may declare a Pre-Mechanical Engineering major. Admission to the Mechanical Engineering program requires a cumulative GPA of 2.50 or higher in the following courses:

1. ME 101 Engineering Careers and Concepts
2. CHEM 111 General Chemistry I Lecture
3. CHEM 111L General Chemistry I Lab
4. MATH 161 Calculus I
5. ME 202 Engineering Data Analysis

Grades of a C (2.00) or higher must be achieved in each of the above courses; AP scores of three or higher satisfy this requirement. Students may then declare a Mechanical Engineering major and continue in the program.

Transfers of the equivalent of these above five courses from other institutions must meet the same cumulative and individual course GPA requirements listed above. Students with two or more course repeats (i. e., three or more total attempts) of any of the above five courses without achieving the minimum grade (C) are ineligible for admission to the Mechanical Engineering program. This course repeat requirement includes transfers of the above five courses.

### **Mechanical Engineering Program Course Repeat Policy**

Each Mechanical Engineering course can only be repeated twice, three attempts in total. Students who do not pass the course with a grade of C (2.00) or higher upon their second repeat (third attempt) will be dismissed from the Mechanical Engineering program. Students who are dropped from the program may petition for reinstatement by submitting a Reinstatement Form to the Mechanical Engineering Department with a written reinstatement rationale within the first two weeks of the academic term prior to the term being requested for reinstatement.

Engineering courses are to be taken with careful attention paid to prerequisites. A student who receives a grade lower than a "C" in a Foundation, Engineering Core, or Mechanical Engineering course may not use that course to satisfy a prerequisite for another Mechanical Engineering course. The waiver of requirements, transfer credit, and/or fulfillment of requirements by subsequent courses are to be submitted by the student for departmental approval by filling out a course petition form available from the chairperson.

For more information about Transfer Pathways, please visit: <https://www.svsu.edu/transfer/transferguides/>



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Spring Arbor University</b>
Degree/Program	<b>Mechanical Engineering (BS)</b>
Credits Required	<b>133</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 201	Calculus I	4
Calculus II	MAT 202	Calculus II	4
Calculus III	MAT 302	Vector Calculus	3
Differential Equations*	MAT 311	Differential Equations	3
Physics I (Calculus-based, w/lab)	PHY 211	Modern University Physics I	4
Physics II (Calculus-based, w/lab)	PHY 212	Modern University Physics II	4
Chemistry 1 (w/lab)	CHE 111	General Chemistry I	4
Statics	EGR 206	Statics	3
Dynamics	EGR 216	Dynamics w/ Lab	4
Mechanics of Solids/Strength of Materials (no lab required)	EGR 331	Mechanics of Materials	3

*\*Minimum 4 credits, linear algebra must be covered*

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Gen Ed	ENG 104	College Writing	3
Program Requirement	MAT 351	Statistics	3
Program Requirement	CPS 201	Coding I	4
Program Requirement	EGR 203	Electric Circuits	4
Program Requirement	EGR100	Intro to Engineering I	3

**ADVISING NOTES**

Please indicate any advising notes for students following this transfer pathway at your institution.


**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>University of Detroit Mercy</b>
Degree/Program	<b>BME/Mechanical Engineering</b>
Credits Required	<b>139</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MTH 1410	Analytic Geometry & Calculus I	4
Calculus II	MTH 1420	Analytic Geometry & Calculus II	4
Calculus III	MTH 2410	Analytic Geometry & Calculus III	4
Differential Equations*	MTH 3720	Differential Equations with Linear Algebra	4
Physics I (Calculus-based, w/lab)	PHY 1600 + PHY 1610	General Physics I + Physics Lab I	4
Physics II (Calculus-based, w/lab)	PHY 1620 + PHY 1630	General Physics II + Physics Lab II	4
Chemistry 1 (w/lab)	CHM 1070 + CHM 1100	General Chemistry I + Chemistry Lab 1	4
Statics	ENGR 3120	Statics	3
Dynamics	ENGR 3130	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ENGR 3260	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	ENGR 1000	Engineering Ethics	2
Program Requirement	ENGR 1080	Fundamentals of Eng. Design	2
Course meeting IT4 "Human Difference" Core Curriculum Requirement	Varies	Varies	3



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>University of Michigan-Dearborn</b>
Degree/Program	<b>BSE/ME</b>
Credits Required	<b>128</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

<b>Pathway Course</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Calculus I	MATH 115	Calculus I	4
Calculus II	MATH 116	Calculus II	4
Calculus III	MATH 215	Calculus III	4
Differential Equations*	MATH 216 <i>or</i> MATH 228	Intro to Diff Equations <i>or</i> Differential Equations w/Linear Algebra	4
Physics I (Calculus-based, w/lab)	PHYS 150/150L	General Physics I lec/lab	4
Physics II (Calculus-based, w/lab)	PHY 151/151L	General Physics II lec/lab	4
Chemistry 1 (w/lab)	CHEM 134/134L	General Chemistry IB lec/lab	4
Statics	ME 260 is both our Statics & Mechanics of Solids/Strengths course	Design Stress Analysis	4
Dynamics	The Dynamics course is a junior/senior required level course so this can not be brought in from the CC. Students will earn ME general credit to apply to the bachelor's degree.		-
Mechanics of Solids/Strength of Materials (no lab required)*	ME 260 is both our Statics & Mechanics of Solids/Strengths course	Design Stress Analysis	-
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

<b>General Education or Program Requirement</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
General Education	ECON 201 or 202 (can be taken as part of MTA)	Macroeconomics or Microeconomics	4

General Education	Comp 270 (can be taken as part of MTA)	Technical Writing	3
Program Requirement	ENGR 250	Principles of Engineering Materials	3
Program Requirement	ENGR 100/100L	Introduction to Engineering	2



**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>University of Michigan-Flint</b>
Degree/Program	<b>BSE</b>
Credits Required	<b>128</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

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The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

<b>Pathway Course</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Calculus I	MTH 121	Calculus I	4
Calculus II	MTH 122	Calculus II	4
Calculus III	MTH 222	Multi-variate Calculus	4
Differential Equations*	MTH 303	Introduction to Differential Eqns	4
Physics I (Calculus-based, w/lab)	PHY 243	Principles of Physics I	5
Physics II (Calculus-based, w/lab)	PHY 245	Principles of Physics II	5
Chemistry 1 (w/lab)	CHM 260	Principles of Chemistry I	4
Statics	EGR 230	Statics	3
Dynamics	EGR 370	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	EGR 260	Mechanics of Deformable Solids	3

*\*Minimum 4 credits, linear algebra must be covered*

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

<b>General Education or Program Requirement</b>	<b>Subject/ Course Number</b>	<b>Course Title</b>	<b>Credit Hrs</b>
Program Requirement	EGR 102	Introduction to Engineering	3


**BACHELOR'S DEGREE PROGRAM INFORMATION**

Institution	<b>Wayne State University</b>
Degree/Program	<b>Bachelor of Science – Mechanical Engineering</b>
Credits Required	<b>123</b>

**MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mittransfer.org](http://www.mittransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

**MiTRANSFER PATHWAYS COURSES**

These courses are commonly agreed upon for transfer in this program among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MAT 2010	Calculus I	4
Calculus II	MAT 2020	Calculus II	4
Calculus III	MAT 2030	Calculus III	4
Differential Equations*	MAT 2150 or MAT 2250 and MAT 2350	Diff. Equations/Matrix Algebra Linear Algebra + Diff. Equations	4 or 6
Physics I (Calculus-based, w/lab)	PHY 2170 or PHY 2175	University Physics I Physics for Engineers I	4 or 4
Physics II (Calculus-based, w/lab)	PHY 2180 or PHY 2185	University Physics II Physics for Engineers II	4 or 4
Chemistry 1 (w/lab)	CHM 1070 or CHM 1220 or CHM 1100	<i>See Advising Notes</i> General Chemistry I	4 or 4
Statics	ME 2410	Statics	3
Dynamics	ME 3400	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ME 2420	Elementary Mechanics of Material	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

**REMAINING DEGREE REQUIREMENTS**

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Add additional lines as necessary.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program Requirement	BE 1500	Intro to Programming Computation for Engineers	3
Program Requirement	BE 1200	Basic Engineering: Design in Engineering	3
Program Requirement	PHI 1120	Professional Ethics	3
Program Requirement	ENG 3060	Technical Communications II	3

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## ADVISING NOTES

Please indicate any advising notes for students following this transfer pathway at your institution.

Starting in the Fall 2021 term, the Department of Chemistry will move to a new curriculum that includes a traditional two-semester general chemistry sequence completed prior to organic chemistry. This will put Wayne State in line with the general chemistry and organic chemistry sequence taught at most colleges and universities across the country.

The new general chemistry courses will be offered under the course numbers CHM 1100/1130 (General Chemistry I, lecture and laboratory) and CHM 1140/1150 (General Chemistry II, lecture and laboratory).

The older chemistry courses (CHM 1070 or 1220) will continue to satisfy the Chemistry I (w/lab) requirement for mechanical engineering.



## BACHELOR'S DEGREE PROGRAM INFORMATION

Institution	<b>Western Michigan University</b>
Degree/Program	<b>Mechanical Engineering</b>
Credits Required	<b>128 -131</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MiTRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Calculus I	MATH 1220	Calculus I	4
Calculus II	MATH 1230	Calculus II	4
Calculus III	MATH 2720	Calculus III	4
Differential Equations*	MATH 3740	Differential Equation	4
Physics I (Calculus-based, w/lab)	PHYS 2050/2060	Physics I	4+1
Physics II (Calculus-based, w/lab)	PHYS 2070/2080	Physics II	4+1
Chemistry 1 (w/lab)	CHEM 1100/1110	Chemistry I	3+1
Statics	ME 2560	Statics	3
Dynamics	ME 2580	Dynamics	3
Mechanics of Solids/Strength of Materials (no lab required)	ME 2570	Mechanics of Materials	3
<i>*Minimum 4 credits, linear algebra must be covered</i>			

## REMAINING DEGREE REQUIREMENTS

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Computer Programming	CS 1200	Programming in C for Engineers	3
Intro CAD/Graphics	EDMM 1420	Engineering Graphics	3

## APPENDIX C:

### MiTransfer Mechanical Engineering Pathway Course Equivalencies

Find live versions of each of these reports in the secure user area at [www.mittransfer.org](http://www.mittransfer.org).

MECHANICAL ENGINEERING MITransfer Pathway Calculus I By Receiving Institution	Central Michigan University	Eastern Michigan University	Ferris State University	Lake Superior State University	Michigan Technological University	Michigan Technological University	Northern Michigan University	Oakland University	Saginaw Valley State University	University of Michigan-DeARBorn	University of Michigan-FRint	Wayne State University	Western Michigan University	Andrews University	Kettering University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy
	MTH 132	MATH 120	MATH 220	MATH 151	MA 1160	MA 1161	MA 161	MTH 1554	MATH 161	MATH 115	MTH 121	MAT 2010	MATH 1220	MATH 191	MATH 101	MCS 1414	MAT 201	MTH 1410
Community College <sup>1</sup>	MA 1160 OR MA 1161																	
Alpena Community College	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131		MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131	MTH 131
Bay de Noc Community College	MATH 141	MATH 141	MA 141 MATH 141	MATH 141 MATH 225	MATH 141		MA 141 MATH 141	MA 141 MATH 141	MATH 141	MA 141	MATH 141 MA 142	MA 141 MATH 141	MA 141 MATH 141	MATH 141	MA 141	MATH 141	MATH 141	MATH 141
Delta College	MTH 161	MTH 161	MTH 161	MTH 161 MTH 211	MTH 161		MTH 161	MTH 161	MTH 161	MTH 161	MTH 161	MTH 161	MTH 161	MTH 161	MTH 161	MATH 170 MTH 161	MTH 161	MTH 161
Glen Oaks Community College	MATH 161	MATH 161	MATH 161 NSM 161	MATH 115 MATH 161	MATH 161		MATH 161	MATH 161 NSM 161	MATH 161	MATH 161 NSM 161	NSM 161 MATH 161	MATH 161 NSM 161	MATH 161 NSM 161	MATH 161	MATH 161 NSM 161	MATH 161	MATH 161	MATH 161 NSM 161
Gogebic Community College	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150		MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150	MTH 150
Grand Rapids Community College	MA 133	MA 133	MA 133	MA 133	MA 133		MA 133	MA 133	MA 133	MA 133	MA 133	MA 133	MA 133	MA 133	MA 133	MA 133	MA 133	MA 133
Henry Ford College	MATH 180	MATH 180	MATH 180	MATH 180		MATH 180	MATH 180	MATH 180	MATH 180	MATH 180 MATH 42	MATH 180 MATH 42	MATH 180 MATH 42 MAT 180	MATH 180	MATH 180	MATH 180	MATH 180	MATH 180	MATH 180
Jackson College	MAT 151	MAT 151	MAT 151 MTH 151	MAT 151 MTH 151	MAT 151		MAT 151 MTH 151	MAT 151	MAT 151	MAT 151 MTH 151	MAT 151 MTH 151	MAT 151 MTH 151	MAT 151 MTH 151	MAT 151	MTH 151	MTH 151	MAT 151	MAT 151
Kellogg Community College	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141		MATH 141	MATH 141	MATH 141	MATH 141 MATH 141A	MATH 141	MATH 141	MATH 141 MATH 141A	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141
Lake Michigan College	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151		HONR 150 MATH 151	MATH 151	MATH 151	MATH 151	MATH 151 HONR 150	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151
Lansing Community College	MATH 151	MATH 151	MATH 151 MATH 161 MTH 214	MATH 151 MATH 161	MATH 161 MATH 151		MATH 151 MATH 161	MATH 151 MATH 161	MATH 161	MATH 161	MTH 214 MATH 161	MTH 213 MATH 161	MATH 161	MATH 151	MATH 161	MATH 151	MATH 161	MATH 151 MATH 161
Macomb Community College	MATH 1760	MATH 1760	MATH 1760 MTH 176	MATH 1760	MATH 1760		MATH 1760 MTH 176	MATH 1760 MTH 155 MTH 166 MTH 176	MATH 1760	MATH 1760 MTH 155 MTH 166 MTH 176 MTH 1760	MATH 1760 MTH 176	MATH 1760 MTH 155 MTH 166 MTH 176	MATH 1760 MTH 176	MATH 1760	MATH 1760	MATH 1760	MATH 1760	MATH 1760 MTH 176
Mid Michigan College	MAT 126	MAT 126	MAT 126	MAT 126		MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126	MAT 126
Monroe County Community College	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171		MATH 171	MATH 171 MATH 250	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171	MATH 171
Muskegon Community College	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161		MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161	MATH 161
North Central Michigan College	MATH 150	MATH 150	MATH 150 MTH 122	MATH 150	MATH 150		MATH 150 MTH 122	MATH 150	MATH 150	MATH 150 MTH 122	MATH 150 MTH 122	MATH 150 MTH 122	MATH 150 MTH 122	MATH 150	MTH 122	MATH 150	MATH 150	MATH 150 MTH 122
Northwestern Michigan College	MTH 141	MTH 141	MTH 141 SMMA 143	MTH 141	MTH 141		MTH 141	MTH 141	MTH 141	MTH 141 SMMA 142	MTH 141	MTH 141 SMMA 142	MTH 141	MTH 141	MTH 141	MTH 141	MTH 141	MTH 141
Oakland Community College	MAT 1730	MAT 1730	MAT 1710 MAT 1714 MAT 172 MAT 1730	MAT 1730	MAT 1730		MAT 1730	MAT 171 MAT 1710 MAT 1730	MAT 1730	MAT 171 MAT 1710 MAT 173 MAT 1730	MAT 1730 MAT 1710 MAT 173 MAT 1730	MAT 1710 MAT 1710 MAT 173 MAT 1730	MAT 1710 MAT 1730	MAT 1730	MAT 1730	MAT 1730	MAT 1730	MAT 1730 MAT 1710 MAT 1730
Schoolcraft College	MATH 150	MATH 150	MATH 150	MATH 150 MATH 133 MATH 134		MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150	MATH 150
Southwestern Michigan College	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141		MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141	MATH 141
St. Clair County Community College	MTH 114	MTH 114	MTH 114	MTH 114	MTH 114		MTH 114	MTH 114	MTH 114	MTH 114	MTH 114	MTH 114 MTH 214	MTH 114	MTH 114	MTH 114	MTH 114	MTH 114	MTH 114
Washtenaw Community College	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191		MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191	MTH 191
Wayne County Community College District	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171		MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171	MAT 171

<sup>1</sup> Kalamazoo Valley Community College, Kirtland Community College, Montcalm Community College, Mott Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.

<b>MECHANICAL ENGINEERING MiTransfer Pathway Calculus II</b>	Central Michigan University	Eastern Michigan University	Ferris State University	Lake Superior State University	Michigan Technological University	Northern Michigan University	Oakland University	Saginaw Valley State University	University of Michigan-Dearborn	University of Michigan-Flint	Wayne State University	Western Michigan University	Andrews University	Kettering University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy	
By Receiving Institution	MTH 133	MATH 121	MATH 230	MATH 152	MA 2160	MA 163	MTH 1555	MATH 162	MATH 116	MTH 122	MAI 2020	MATH 1230	MATH 192	MATH 102	MCS 1424	MAI 202	MTH 1420	
Community College <sup>1</sup>	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	
Alpena Community College	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	MTH 132	
Bay de Noc Community College	MATH 142	MATH 142	MA 142 MATH 142	MATH 142	MATH 142	MA 142 MATH 142	MA 142 MATH 142	MATH 142	MA 142 MATH 142	MATH 142	MA 142 MATH 142	MA 142 MATH 142	MATH 142	MA 142	MATH 142	MATH 142	MATH 142	
Delta College	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MTH 162	MATH 180 MTH 162	MTH 162	MTH 162	
Glen Oaks Community College	MATH 162	MATH 162	MATH 162 NSM 162	MATH 116 MATH 162	MATH 162	MATH 162	MATH 162	MATH 162	MATH 162 NSM 162	NSM 162 MATH 162	NSM 162 MATH 162	NSM 162 MATH 162	MATH 162	MATH 162 NSM 162	MATH 162	MATH 162	MATH 162 NSM 162	
Gogebic Community College	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	MTH 151	
Grand Rapids Community College	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	MA 134	
Henry Ford College	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183 MATH 48	MATH 183	MATH 183 MATH 48	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183	MATH 183	
Jackson College	MAT 154	MAT 154	MAT 154 MIH 154	MAT 154	MAT 154	MAT 154 MIH 154	MAT 154	MAT 154	MAT 154 MIH 154	MAT 154 MAI 154	MAT 154 MIH 154	MAT 154 MIH 154	MAT 154 MIH 154	MTH 154	MAT 154	MAT 154	MAT 154 MIH 154	
Kellogg Community College	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142 MATH 142	MATH 142	MATH 142	MATH 142	MATH 162	MATH 142	MATH 142	MATH 142	MATH 142	
Lake Michigan College	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	
Lansing Community College	MATH 152	MATH 152	MATH 152 MATH 162 MTH 215	MATH 152 MATH 162	MATH 162 MATH 152	MATH 152 MATH 162	MATH 152 MATH 162	MATH 162 MATH 152	MATH 152 MATH 162	MATH 152 MATH 162 MTH 215	MATH 152 MATH 162 MTH 214	MATH 152 MATH 162	MATH 152	MATH 152 MATH 162	MATH 152	MATH 152 MATH 162	MATH 152 MATH 162	
Macomb Community College	MATH 1770	MATH 1770	MATH 1770 MTH 177	MATH 1770	MATH 1770	MATH 1770 MTH 177	MATH 1770	MATH 1770	MATH 1770 MTH 156 MIH 167 MIH 177	MTH 177 MATH 1770	MATH 1770 MTH 156 MIH 167 MIH 177	MTH 177 MATH 1770	MATH 1770	MATH 1770	MATH 1770	MATH 1770	MATH 1770 MTH 177	
Mid Michigan College	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	MAT 225	
Monroe County Community College	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	MATH 172	
Muskegon Community College	MATH 162A	MATH 162A	MATH 162 MATH 162A	MATH 162A MATH 162 MATH 272	MATH 162A	MATH 162 MATH 162A	MATH 162 MATH 162A MATH 272	MATH 162	MATH 162	MATH 162	MATH 162 MATH 272	MATH 162A MATH 272	MATH 162A MATH 272	MATH 162	MATH 162	MATH 162	MATH 162A	MATH 162
North Central Michigan College	MATH 210	MATH 210	MATH 210 MTH 211	MATH 210	MATH 210	MATH 210 MTH 211	MATH 210	MATH 210	MTH 210 MATH 210	MTH 210	MTH 210 MTH 211	MTH 210	MATH 210	MATH 210 MTH 211	MATH 210	MATH 210	MATH 210 MTH 211	
Northwestern Michigan College	MTH 142	MTH 142	MTH 211 SMMA 242	MTH 142	MTH 142	MTH 142	MTH 142	MTH 142	SMMA 143	MTH 142	MTH 142	MTH 142	MTH 142	MTH 142	MTH 142	MTH 142	MTH 142	
Oakland Community College	MAT 1740	MAT 1740	MAT 1720 MAT 2710 MAT 1740 MAT 271	MAT 1740	MAT 1740	MAT 1740	MAT 1740	MAT 1740	MAT 1720 MAT 1720 MAT 174 MAT 1740	MAT 1740 MAT 1720	MAT 1720 MAT 1720 MAT 174 MAT 1740	MAT 1740	MAT 1740	MAT 1740	MAT 1740	MAT 1740	MAT 1740	
Schoolcraft College	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 134 MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	MATH 151	
Southwestern Michigan College	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	MATH 142	
St. Clair County Community College	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	MTH 215	
Washtenaw Community College	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	MTH 192	
Wayne County Community College District	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	MAT 172	

<sup>1</sup> Kalamazoo Valley Community College, Kirtland Community College, Montcalm Community College, Mott Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.

<b>MECHANICAL ENGINEERING MiTransfer Pathway Calculus III</b>	Central Michigan University	Eastern Michigan University	Ferris State University	Lake Superior State University	Michigan Technological University	Northern Michigan University	Oakland University	Saginaw Valley State University	University of Michigan-Dearborn	University of Michigan-Flint	Wayne State University	Western Michigan University	Andrews University	Kettering University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy
By Receiving Institution	MTH 233	MATH 223	MATH 320	MATH 251	MA 3160	MA 265	MTH 2554	MATH 261	MATH 215	MTH 222	MAT 2030	MATH 2720	MATH 240	MATH 203	MCS 2414	MAT 302	MTH 2410
<b>Community College<sup>1, 2</sup></b>																	
Alpena Community College	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231	MTH 231
Bay de Noc Community College	MATH 243	MATH 243	MA 243 MATH 243	MATH 243	MATH 243	MA 243 MATH 243	MA 243 MATH 243	MATH 243	MA 243	MATH 243	MA 243 MA 243	MA 243 MA 243	MATH 243	MA 243 MATH 243	MATH 243	MATH 243	MATH 243
Delta College	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MTH 261	MATH 250 MTH 261	MTH 261	MTH 261
Glen Oaks Community College	See Appendix D	See Appendix D	MATH 261 NSM 261	MATH 215 NSM 261	See Appendix D	See Appendix D	MATH 261	See Appendix D	NSM 261	MATH 261 NSM 261	MATH 261 NSM 261	MATH 261 NSM 261	See Appendix D	NSM 261	MATH 261	See Appendix D	MATH 261 NSM 261
Gogebic Community College	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152 MTH 152 MTH 151	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152	MTH 152
Grand Rapids Community College	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255	MA 255
Henry Ford College	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280 MATH 53 MATH 54	See Appendix D	MATH 280 MATH 53 MATH 54	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280	MATH 280
Jackson College	MAT 251	MAT 251	MAT 251 MTH 251	MAT 251 MTH 251	MAT 251	MAT 251 MTH 251	MAT 251	MAT 251	MAT 251 MTH 251	See Appendix D	MAT 251 MTH 251	MAT 251 MTH 251	MAT 251	MTH 251	MAT 251	MAT 251	MAT 251 MTH 251
Kellogg Community College	MATH 241	MATH 241	MATH 241	MATH 241	MATH 241	MATH 241	MATH 241	MATH 241	MATH 241A	MATH 241	MATH 241	MATH 241A MATH 241A	MATH 241 MATH 241A	MATH 241	MATH 241	MATH 241	MATH 241
Lake Michigan College	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202	MATH 202 MATH 202	MATH 202	MATH 202	MATH 202	MATH 202
Lansing Community College	MATH 253	MATH 253	MATH 253 MTH 216	MATH 153 MATH 253	MATH 253	MATH 253	MATH 253	MATH 253	MATH 253	MATH 253 MTH 216	MATH 253 MTH 216	MATH 253	MATH 253	MATH 253	MATH 253	MATH 253	MATH 253
Macomb Community College	MATH 2760	MATH 2760	MATH 2760 MTH 276	MATH 2760	MATH 2760	MATH 2760 MTH 276	MATH 2760 MTH 266 MTH 276	MATH 2760	MATH 2760 MTH 276 MTH 266 MTH 267	MATH 2760	MATH 2760 MTH 276 MTH 266 MTH 267	MATH 2760 MTH 276	MATH 2760 MTH 276	MATH 2760	MATH 2760	MATH 2760	MATH 2760
Mid Michigan College	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	See Appendix D	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226	MAT 226
Monroe County Community College	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 252 MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271	MATH 271
Muskegon Community College	MATH 283	MATH 283	MATH 283	MATH 283	MATH 283	MATH 283	MATH 283	MATH 283	MATH 283	See Appendix D	MATH 283	MATH 283	See Appendix D	MATH 283	MATH 283	MATH 283	MATH 283
North Central Michigan College	MATH 215	MATH 215	MATH 215 MTH 212	MATH 215 MTH 212	MATH 215	MATH 215 MTH 212	MATH 215	MATH 215	MTH 212 MTH 215	MATH 215	MTH 212 MTH 215	MTH 212 MTH 215	MATH 215	MATH 215	MATH 215	MATH 215	MATH 215
Northwestern Michigan College	MTH 241	MTH 241	MTH 241 SMMA 243	MTH 241	MTH 241	MTH 241	MTH 241	MTH 241	MTH 241 MTH 241B	MTH 241	MTH 241	MTH 241 SMMA 243	MTH 241	MTH 241	MTH 241	MTH 241	MTH 241
Oakland Community College	MAT 2740	MAT 2740	MAT 2710 MAT 2730 MAT 273 MAT 2740	MAT 2740	MAT 2740	MAT 2740	MAT 2740 MAT 2740 MAT 271 MAT 172 MAT 271 MAT 273	MAT 2740	MAT 2740 MAT 2740 MAT 271 MAT 273 MAT 2710 MAT 2730	MAT 2740	MAT 2740 MAT 2740	MAT 2740	MAT 2740 MAT 271	MAT 2740	MAT 2740	MAT 2740	MAT 2740
Schoolcraft College	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 233 MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240	MATH 240
Southwestern Michigan College	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201 MATH 201	See Appendix D	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201	MATH 201
St. Clair County Community College	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216	MTH 216
Washtenaw Community College	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293	MTH 293
Wayne County Community College District	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	MAT 271	See Appendix D	MAT 271	MAT 271	MAT 271	MAT 271

1. Kalamazoo Valley Community College, Kirtland Community College, Montcalm Community College, Mott Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.  
2. Glen Oaks Community College is participating in the Mechanical Engineering Pathway, but does not offer a Calculus III course.

MECHANICAL ENGINEERING MITransfer Pathway Chemistry I	By Receiving Institution																						
	Central Michigan University	Eastern University	Eastern Michigan University	Ferris State University	Lake Superior University	Michigan Technological University	Michigan Technological University	Northern University	Oakland University	Oakland University	Signaw Valley State University	University of Dearborn	University of Michigan-Ft. Dearborn	Wayne State University	Wayne State University	Wayne State University	Western Michigan University	Western Michigan University	Western Michigan University	Western Michigan University			
Community College*	CHEM 1070 OR CHM 1100 OR CHM 1220													CHEM 130	CHEM 1110	CHEM 131	CHEM 135	CHEM 135	CHM 1213	CHM 1221	CHE 111	CHM 1070	CHM 1100
Alpena Community College	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121			
Bay de Noc Community College	CEM 110	CEM 110	CEM 110	CH 105 CHEM 110	CHEM 108 CHEM 110	CHEM 108 CHEM 110	CHEM 108 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110	CH 105 CHEM 110			
Delta College	CHM 111	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111	CHM 111	CHM 111	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H	CHM 111 CHM 111H			
Glen Oaks Community College	CHEM 133	CHEM 133	CHEM 133	CHEM 133 NSC 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133	CHEM 133			
Gogebic Community College	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151	CHM 151			
Grand Rapids Community College	CHM 130 CHM 131	CHM 130	CHM 131	CHM 125 CHM 130 CHM 131 CHM 150 CHM 151 CHM 152	CM 113 CM103	CHM 130	CHM 131	CHM 130	CHM 131	CHM 130	CHM 131	CHM 130	CHM 131	CHM 130	CHM 131	CHM 130	CHM 131	CHM 130	CHM 131	CHM 130			
Henry Ford College	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141	CHEM 141			
Jackson College	CEM 141	CEM 141	CEM 141	CEM 141 CEM 151	CEM 141 CEM 151	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141	CEM 141			
Kellogg Community College	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110	CHEM 110			
Lake Michigan College	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111			
Lansing Community College	CHEM 151 CHEM 161	CHEM 151	CHEM 161	CHEM 110 CEM 101 CEM 151 LNC 101 LNC 151	CHEM 151 CHEM 161	CHEM 151	CHEM 161	CHEM 151	CHEM 161	CHEM 151	CHEM 161	CHEM 151	CHEM 161	CHEM 151	CHEM 161	CHEM 151	CHEM 161	CHEM 151	CHEM 161	CHEM 151			
Macomb Community College	CHEM 1170	CHEM 1170	CHEM 1170	CHEM 1170 CHM 117	CHEM 1170	CHEM 1170	CHEM 1170	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117	CHEM 1170 CHM 117			
Mid Michigan College	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111			
Morose County Community College	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151	CHEM 151			
Muskegon Community College	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B	CHEM 101A CHEM 101B			
North Central Michigan College	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121	CEM 121			
Northwestern Michigan College	CHM 150 CHM 150L	CHM 150	CHM 150L	SMCH 101 SMCH 102 SMCH 103 SMCH 104	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150	CHM 150			
Oakland Community College	CHE 1510	CHE 1510	CHE 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510	CHE 1510 LNC 1510			
Schoolcraft College	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111	CHEM 111			
Southwestern Michigan College	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101	CHEM 101			
St. Clair County Community College	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111	CHM 111			
Washtenaw Community College	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111	LEM 111			
Wayne County Community College District	CHM 136	CHM 136	CHM 136	CHM 130 CHM 131 CHM 136 CHM 151	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136	CHM 136			

\* Kalamazoo Valley Community College, Kirtland Community College, Muskegon Community College, Mid Michigan Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.



MECHANICAL ENGINEERING MiTransfer Pathway Dynamics	Central Michigan University	Eastern Michigan University	Eastern Michigan University	Ferris State University	Lake Superior State University	Michigan Technological University	Northern Michigan University	Oakland University	Saginaw Valley State University	University of Michigan-Dearborn	University of Michigan-Flint	Wayne State University	Western Michigan University	Andrews University	Kettering University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy
				By Receiving Institution	MECH 360	EGEM 320	MEEM 2700	MET 310	ME 3200	ME 252	ME 345	EGR 370	ME 3400	ME 2580	ENGR 285	MECH 310	EME 3043	EGR 216
	EGR 253	ME 312	PHY 230															
		ME 312 OR PHY 230																
<b>Community College<sup>1, 2</sup></b>																		
Bay de Noc Community College	PHYS 261		PHYS 261	PHYS 261	PHYS 261	PHYS 261	PH 261 PHYS 261	PHYS 261	PHYS 261	See Appendix D	PHYS 261	PHYS 261	PH 261 PHYS 261	See Appendix D	See Appendix D	PHYS 261	PHYS 261	PHYS 261
Delta College	EGR 216	EGR 216		EGR 216	EGR 216	EGR 216	EGR 216	EGR 216	EGR 216	See Appendix D	EGR 216	EGR 216	EGR 216	EGR 216	EGR 216	EGR 216	EGR 216	EGR 216
Henry Ford College	ENGR 233	ENGR 232 ENGR 233 PHYS 231		ENGR 233	EMCH 54	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233	ENGR 233
Kellogg Community College	ENGR 258	ENGR 258		See Appendix D	ENGR 258	PHYS 243 ENGR 258	ENGR 258	ENGR 258	ENGR 258	See Appendix D	ENGR 258	ENGR 258	ENGR 258 PHYS 242 PHYS 243	See Appendix D	ENGR 258	ENGR 258	ENGR 258	ENGR 258
Muskegon Community College	ENGR 204	ENGR 204		ENGR 204	ENGR 204	ENGR 204	ENGR 204	ENGR 204	ENGR 204	See Appendix D	ENGR 204	ENGR 204	ENGR 204	ENGR 204	ENGR 204	ENGR 204	ENGR 204	ENGR 204
Oakland Community College	EGR 2500	See Appendix D	See Appendix D	EGR 2500	EGR 202	See Appendix D	EGR 2020 EGR 2500	See Appendix D	EGR 2500	EGR 202 EGR 2020	EGR 2020	EGR 2500 EGR 202 EGR 2020	EGR 2020	See Appendix D	EGR 2020	EGR 2500	EGR 2500	EGR 2500
Northwestern Michigan College	EGR 203	EGR 201 EGR 203 PHY 221 PHY 221L		EGR 203	EGR 203	EGR 203	EGR 203	EGR 203	EGR 203	See Appendix D	EGR 203	EGR 203	EGR 203 SMEN 203	EGR 203	EGR 203	EGR 203	EGR 203	EGR 203
Schoolcraft College	ENGR 203	ENGR 203		ENGR 203	ENGR 203	ENGR 203	ENGR 203	ENGR 203	ENGR 203	See Appendix D	ENGR 203	ENGR 203	ENGR 203	See Appendix D	ENGR 203	ENGR 203	ENGR 203	ENGR 203

1. Kalamazoo Valley Community College, Kirtland Community College, Montcalm Community College, Mott Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.

2. Alpena Community College, Glen Oaks Community College, Gogebic Community College, Grand Rapids Community College, Jackson College, Lake Michigan College, Lansing Community College, Macomb Community College, Mid Michigan College, Monroe County Community College, North Central Michigan College, Southwestern Michigan College, St. Clair County Community College, Washtenaw Community College, and Wayne County Community College District, are participating in the Mechanical Engineering Pathway, but do not offer a Dynamics course.



MECHANICAL ENGINEERING MITransfer Pathway Physics II (Calc-based, w/lab)	By Receiving Institution																										
	Central Michigan University	Central Michigan University	Eastern Michigan University	Ferris State University	Lake Superior State University	Michigan Technological University	Michigan Technological University	Northern Michigan University	Oakland University	Oakland University	Spring Valley State University	Spring Valley State University	University of Michigan-Dearborn	Wayne State University	University of Michigan-East	Western Michigan University	Western Michigan University	Andrews University	Andrews University	Eastern Michigan University	Kalamazoo University	Lawrence Technological University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy	University of Detroit Mercy	
<b>Community College*</b>	PHY 146	PHY 176	PHY 224	PHYS 212	PHYS 232	PH 1200	PH 2200	PHY 221	PHY 1110	PHY 1520	PHYS 212	PHYS 212L	PHYS 151	PHY 2180	PHY 243	PHYS 201U	PHYS 208L	PHYS 242	PHYS 272	PHYS 224	PHYS 225	PHY 242S	PHY 2431	PHY 212	PHY 1620	PHY 1630	
Alpena Community College	PHY 222	PHY 222	PHY 222	PHY 122	PHY 222	PHY 122	PHY 222	PHY 222	PHY 122	PHY 222	PHY 222	PHY 222	PHYS 206	PHYS 206	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222
Bay de Noc Community College	PHYS 206	PHYS 206	PHYS 206	PHY 202	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206	PHYS 206
Delta College	PHY 212	PHY 212	PHY 212	PHY 112	PHY 212	PHY 112	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	
Glen Oaks Community College	PHYS 253	PHYS 253	PHYS 253	NSP 153	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242	NSP 242
Gogebic Community College	PHY 252	PHY 252	PHY 252	PHY 202	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	
Grand Rapids Community College	PH 246	PH 246	PH 246	PH 126	PH 246	PH 126	PH 246	PH 246	PH 126	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	PH 246	
Henry Ford College	PHYS 232	PHYS 232	PHYS 232	PHYS 132	PHYS 232	PHYS 132	PHYS 232	PHYS 232	PHYS 132	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232	PHYS 232
Jackson College	PHY 252	PHY 252	PHY 252	PHY 232	PHY 252	PHY 252	PHY 252	PHY 252	PHY 232	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	
Kellogg Community College	PHYS 222	PHYS 222	PHYS 222	PHYS 112	PHYS 222	PHYS 112	PHYS 222	PHYS 222	PHYS 112	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	PHYS 222	
Lake Michigan College	PHYS 202	PHYS 202	PHYS 202	PHYS 102	PHYS 202	PHYS 102	PHYS 202	PHYS 202	PHYS 102	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	
Lansing Community College	PHYS 252	PHYS 252	PHYS 252	PHY 201	PHYS 217	PHYS 217	PHYS 252	PHYS 252	PHYS 201	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	PHYS 252	
Macomb Community College	PHYS 2230	PHYS 2230	PHYS 2230	PHY 117	PHYS 2230	PHYS 117	PHYS 2230	PHYS 2230	PHY 117	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	PHYS 2230	
Mid Michigan College	PHY 212	PHY 212	PHY 212	PHY 106	PHY 212	PHY 106	PHY 212	PHY 212	PHY 106	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	PHY 212	
Monroe County Community College	PHY 252	PHY 252	PHY 252	PHY 152	PHY 252	PHY 152	PHY 252	PHY 252	PHY 152	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	PHY 252	
Muskegon Community College	PHYS 204L8L	PHYS 204L8L	PHYS 204L8L	PHYS 202	PHYS 204	PHYS 202	PHYS 204	PHYS 204	PHYS 202	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	PHYS 204	
North Central Michigan College	PHY 231	PHY 231	PHY 231	PHY 211	PHY 242	PHY 211	PHY 231	PHY 231	PHY 211	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	
Northwestern Michigan College	PHY 222	PHY 222	PHY 222	PHY 122	SMPS 225	PHY 122	PHY 222	PHY 222	PHY 122	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	
Oakland Community College	PHY 2500	PHY 2500	PHY 2500	PHY 162	PHY 252	PHY 162	PHY 2500	PHY 2500	PHY 162	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	PHY 2500	
Schoolcraft College	PHYS 212	PHYS 212	PHYS 212	PHYS 182	PHYS 212	PHYS 182	PHYS 212	PHYS 212	PHYS 182	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	PHYS 212	
Southwestern Michigan College	PHYS 202	PHYS 202	PHYS 202	PHYS 102	PHYS 202	PHYS 102	PHYS 202	PHYS 202	PHYS 102	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	PHYS 202	
St. Clair County Community College	PHY 222	PHY 222	PHY 222	PHY 122	PHY 222	PHY 122	PHY 222	PHY 222	PHY 122	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	
Washtenaw Community College	PHY 222	PHY 222	PHY 222	PHY 122	PHY 222	PHY 122	PHY 222	PHY 222	PHY 122	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	PHY 222	
Wayne County Community College District	PHY 275	PHY 275	PHY 275	PHY 240	PHY 275	PHY 240	PHY 275	PHY 275	PHY 240	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	PHY 275	

\* Kalamazoo Valley Community College, National Community College, Northern Michigan Community College, Mid Community College, and West Shore Community College are not participating in this Mechanical Engineering Pathway.

<b>MECHANICAL ENGINEERING MiTransfer Pathway Mechanics of Solids/Strengths of Materials</b>	Central Michigan University	Eastern Michigan University	Ferris State University	Lake Superior State University	Michigan Technological University	Northern Michigan University	Oakland University	Saginaw Valley State University	University of Michigan- Dearborn	University of Michigan- Flint	Wayne State University	Western Michigan University	Andrews University	Kettering University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy	
By Receiving Institution	EGR 255	ME 313	NO COURSE	EGME 225	MEEM 2150	MET 311	ME 3250	ME 250	ME 260	EGR 260	ME 2420	ME 2570	ENGR 340	MECH 212	EME 3013	EGR 331	ENGR 3260	
<b>Community College<sup>1, 2</sup></b>																		
Delta College	EGR 320	EGR 320	NO COURSE See Appendix D	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320	EGR 320
Gogebic Community College	PHY 263	PHY 263	NO COURSE See Appendix D	PHY 263	PHY 263	DWG 200 PHY 263	PHY 263	See Appendix D	See Appendix D	PHY 263	PHY 263	PHY 263	See Appendix D	See Appendix D	PHY 263	PHY 263	See Appendix D	
Henry Ford College	ENGR 235	ENGR 235	NO COURSE See Appendix D	See Appendix D	ENGR 235	ENGR 235	ENGR 235	ENGR 201	ENGR 232 ENGR 235	ENGR 201 ENGR 235	ENGR 235	See Appendix D	ENGR 235	ENGR 201 ENGR 235	ENGR 235	ENGR 235	ENGR 235	
Oakland Community College	EGR 2200	See Appendix D	NO COURSE See Appendix D	EGR 182	See Appendix D	EGR 2030 EGR 2200	See Appendix D	See Appendix D	EGR 2000 EGR 2030	EGR 2030	EGR 2200	EGR 2030	See Appendix D	EGR 2030	EGR 2200	EGR 2200	EGR 2200	
Northwestern Michigan College	EGR 202	EGR 202	NO COURSE See Appendix D	EGR 202	EGR 202	EGR 202	EGR 202	EGR 202	EGR 201 EGR 202	EGR 202	EGR 202	EGR 202	SMEN 202	EGR 202	EGR 202	EGR 202	EGR 202	
Schoolcraft College	ENGR 202	ENGR 202	NO COURSE See Appendix D	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202 ENGR 201	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	

1. Kalamazoo Valley Community College, Kirtland Community College, Montcalm Community College, Mott Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.

2. Alpena Community College, Bay College, Glen Oaks Community College, Grand Rapids Community College, Jackson College, Kellogg Community College, Lake Michigan College, Lansing Community College, Macomb Community College, Mid Michigan College, Monroe County Community College, Muskegon Community College, North Central Community College, Southwestern Michigan College, St. Clair County Community College, Washtenaw Community College, and Wayne County Community College District are participating in the Mechanical Engineering Pathway, but do not offer a Solids/Strengths of Materials course.

<b>MECHANICAL ENGINEERING MITransfer Pathway Statics</b>	Central Michigan University	Eastern Michigan University	Francis State University	Lake Superior State University	Michigan Technological University	Northern Michigan University	Oakland University	Saginaw Valley State University	University of Michigan-Dearborn	University of Michigan-Flint	Wayne State University	Western Michigan University	Andrews University	Kettering University	Lawrence Technological University	Spring Arbor University	University of Detroit Mercy
By Receiving Institution	EGR 251	ME 211	NO COURSE	EGEM 220	MEEM 2110	MET 211	NO COURSE	ME 251	ME 260	EGR 230	ME 2410	ME 2560	ENGR 185	MECH 210	EGE 2013	EGR 206	ENGR 3120
Community College <sup>1, 2</sup>																	
Alpena Community College	EGR 221	EGR 221	NO COURSE See Appendix D	EGR 221	EGR 221	EGR 221	NO COURSE See Appendix D	EGR 221	See Appendix D	EGR 221	EGR 221	EGR 221	EGR 221	EGR 221	EGR 221	EGR 221	EGR 221
Bay de Noc Community College	PHYS 260	PHYS 260	NO COURSE See Appendix D	PHYS 260	PHYS 260	PHYS 260	NO COURSE See Appendix D	PHYS 260	See Appendix D	PHYS 260	PHYS 260	PHYS 260	PHYS 260	PH 260	PHY 260	PHYS 206	PHYS 260
Delta College	EGR 215	EGR 215	NO COURSE See Appendix D	EGR 215	EGR 215	ARC 211 EGR 215	NO COURSE See Appendix D	EGR 215	EGR 320 EGR 215	EGR 215	EGR 215	EGR 215	EGR 215	EGR 215	EGR 215	EGR 215	EGR 215
Gogebic Community College	PHY 261	PHY 261	NO COURSE See Appendix D	PHY 261	PHY 261	PHY 261	NO COURSE See Appendix D	PHY 261	See Appendix D	PHY 261	PHY 261	PHY 261	PHY 261	See Appendix D	PHY 261	PHY 261	PHY 261
Henry Ford College	ENGR 232	ENGR 232 ENGR 233 PHYS 231 ENGR 232 PHYS 241	NO COURSE See Appendix D	ENGR 232	ENGR 232	ENGR 232	NO COURSE See Appendix D	ENGR 232	ENGR 232 ENGR 235 ENGR 232	ENGR 232	ENGR 232	ENGR 232	ENGR 232	ENGR 232	ENGR 232	ENGR 232	ENGR 232
Kellogg Community College	ENGR 256	ENGR 256	NO COURSE See Appendix D	ENGR 256	ENGR 256	ENGR 256	NO COURSE See Appendix D	ENGR 256	See Appendix D	ENTE 220	ENGR 256	ENGR 256	ENGR 256	ENGR 256	ENGR 256	ENGR 256	PHYS 241 ENGR 256 PHYS 241
Lansing Community College	PHYS 260	PHYS 260	NO COURSE See Appendix D	PHYS 260	PHYS 260	PHYS 260	NO COURSE See Appendix D	PHYS 260	See Appendix D	PHYS 260	PHYS 260	See Appendix D	PHYS 260	PHYS 260	PHYS 260	PHYS 260	PHYS 260
Monroe County Community College	METC 220	METC 220 PHY 251	NO COURSE See Appendix D	See Appendix D	See Appendix D	METC 180 METC 220	NO COURSE See Appendix D	METC 220	See Appendix D	METC 220	METC 220	See Appendix D	See Appendix D	See Appendix D	See Appendix D	enr 251	See Appendix D METC 220
Muskegon Community College	ENGR 202	ENGR 202	NO COURSE See Appendix D	ENGR 202	ENGR 202	ENGR 202	NO COURSE See Appendix D	ENGR 202	See Appendix D	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202	ENGR 202
Northwestern Michigan College	EGR 201	EGR 201 EGR 203 PHY 221 PHY 221L EGR 201 PHY 221 PHY 221L	NO COURSE See Appendix D	EGR 201	EGR 201	EGR 201	NO COURSE See Appendix D	EGR 201	EGR 201 EGR 202	EGR 201	EGR 201	EGR 201	EGR 201	EGR 201	EGR 201	egr 201	EGR 201 EGR 201
Oakland Community College	EGR 2100	See Appendix D	NO COURSE See Appendix D	EGR 2000	See Appendix D	EGR 2100	NO COURSE See Appendix D	EGR 2100	EGR 2000 EGR 2030	EGR 2000	EGR 2100	EGR 2000	See Appendix D	EGR 2000	EGR 2100	EGR 2100	EGR 2000 EGR 2100
Schoolcraft College	ENGR 201	ENGR 201	NO COURSE See Appendix D	ENGR 201	ENGR 201	ENGR 201	NO COURSE See Appendix D	ENGR 201	ENGR 202 ENGR 201	ENGR 201	ENGR 201	ENGR 201	ENGR 201	ENGR 201	ENGR 201	ENGR 201	ENGR 201
St. Clair County Community College	PHY 231	PHY 231	NO COURSE See Appendix D	PHY 231	PHY 231	PHY 231	NO COURSE See Appendix D	PHY 231	See Appendix D	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231	PHY 231

<sup>1</sup> Kalamazoo Valley Community College, Kirtland Community College, Montcalm Community College, Mt. Community College, and West Shore Community College are not participating in the Mechanical Engineering Pathway.

<sup>2</sup> Glen Oaks Community College, Grand Rapids Community College, Jackson College, Lake Michigan College, Macomb Community College, Mid Michigan College, North Central Michigan College, Washenaw Community College, Southwestern Michigan College, and Wayne County Community College District are participating in the Mechanical Engineering Pathway, but do not offer a Statics course.

APPENDIX D:  
MiTransfer Mechanical Engineering Pathway Course Equivalency Exceptions

Find Excel versions of Appendix D at [www.mittransfer.org](http://www.mittransfer.org).

# MECHANICAL ENGINEERING

Course	College/ University	Community College	Explanation
Calculus III	ANDREWS UNIVERSITY	MUSKEGON COMMUNITY COLLEGE	Cannot confirm the course covers Green's, Stoke's, divergence theorems
Calculus III	ANDREWS UNIVERSITY	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	Cannot confirm the course covers Green's, Stoke's theorems
Calculus III	CENTRAL MICHIGAN UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	EASTERN MICHIGAN UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	MICHIGAN TECHNOLOGICAL UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	NORTHERN MICHIGAN UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	SAGINAW VALLY STATE UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	ANDREWS UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	SPRING ARBOR UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	New course; equivalency evaluation pending.
Calculus III	UNIVERSITY OF MICHIGAN-FLINT	HENRY FORD COLLEGE	Topics missing that are covered in MTH 222 includes all regular Mutivariable Calculus plus the entire chapter in Vector Calculus
Calculus III	UNIVERSITY OF MICHIGAN-FLINT	JACKSON COLLEGE	Topics missing that are covered in MTH 222 includes all regular Mutivariable Calculus plus the entire chapter in Vector Calculus
Calculus III	UNIVERSITY OF MICHIGAN-FLINT	MID MICHIGAN COLLEGE	Topics missing that are covered in MTH 222 includes all regular Mutivariable Calculus plus the entire chapter in Vector Calculus
Calculus III	UNIVERSITY OF MICHIGAN-FLINT	MUSKEGON COMMUNITY COLLEGE	Topics missing that are covered in MTH 222 includes all regular Mutivariable Calculus plus the entire chapter in Vector Calculus
Calculus III	UNIVERSITY OF MICHIGAN-FLINT	SOUTHWESTERN MICHIGAN COLLEGE	Topics missing that are covered in MTH 222 includes all regular Mutivariable Calculus plus the entire chapter in Vector Calculus
Differential Equations	KETTERING UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	No syllabus provided; will be reviewed for the Nov. 1 signing deadline
Differential Equations	N/A	GLEN OAKS COMMUNITY COLLEGE	No Course

Differential Equations	N/A	MID MICHIGAN COLLEGE	No Course
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	ALPENA COMMUNITY COLLEGE	Their content lacks the intense Linear Algebra components that are covered in UM-F's MTH 303 including linear independence and dependence, matrix operations, invertibility, determinants, gaussian elimination, eigen values/vector, using the eigenvalue method to solve/analyze linear systems od ODEs, linearization of non-linear systems, stability of autonomous 2X2 systems
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	BAY COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	DELTA COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	GOGEBIC COMMUNITY COLLEGE	No equivalent course.

Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	GRAND RAPIDS COMMUNITY COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	HENRY FORD COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	JACKSON COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	MACOMB COMMUNITY COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	MONROE COUNTY COMMUNITY COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	NORTH CENTRAL MICHIGAN COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	OAKLAND COMMUNITY COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	SCHOOLCRAFT COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	ST. CLAIR COUNTY COMMUNITY COLLEGE	No equivalent course.
Differential Equations	UNIVERSITY OF MICHIGAN-FLINT	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	No equivalent course.
Differential Equations	WESTERN MICHIGAN UNIVERSITY	BAY COLLEGE	Not equivalent to our course but we grant math credit.
Differential Equations	WESTERN MICHIGAN UNIVERSITY	LANSING COMMUNITY COLLEGE	The course MATH 254 does not align but we do grant math credit.
Differential Equations	WESTERN MICHIGAN UNIVERSITY	NORTH CENTRAL MICHIGAN COLLEGE	MATH 225 is not equivalent but is granted Math credit.
Differential Equations	WESTERN MICHIGAN UNIVERSITY	ST. CLAIR COUNTY COMMUNITY COLLEGE	We can only grant Math credit, this course doesn't meet our course requirements.
Dynamics	ANDREWS UNIVERSITY	BAY COLLEGE	Not adequate, no vibration or 3D being covered
Dynamics	ANDREWS UNIVERSITY	KELLOGG COMMUNITY COLLEGE	Not adequate, no 3D, chapters don't correlate to the book
Dynamics	ANDREWS UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Dynamics	ANDREWS UNIVERSITY	SCHOOLCRAFT COLLEGE	No 3D and no vibrations covered
Dynamics	EASTERN MICHIGAN UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established

Dynamics	FERRIS STATE UNIVERSITY	KELLOGG COMMUNITY COLLEGE	Parts of the syllabus do not align with the text being used; Kinematics topic is covered in a different course at FSU; Vibrations topic lacks detail
Dynamics	KETTERING UNIVERSITY	BAY COLLEGE	Limited coverage of planar rigid Kinematics and Kinetics
Dynamics	MICHIGAN TECHNOLOGICAL UNIVERSITY UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Dynamics	N/A	ALPENA COMMUNITY COLLEGE	No Course
Dynamics	N/A	ALPENA COMMUNITY COLLEGE	No Course
Dynamics	N/A	GLEN OAKS COMMUNITY COLLEGE	No Course
Dynamics	N/A	GOGEBIC COMMUNITY COLLEGE	No Course
Dynamics	N/A	GRAND RAPIDS COMMUNITY COLLEGE	No Course
Dynamics	N/A	JACKSON COLLEGE	No Course
Dynamics	N/A	LAKE MICHIGAN COLLEGE	No Course
Dynamics	N/A	LANSING COMMUNITY COLLEGE	No Course
Dynamics	N/A	MACOMB COMMUNITY COLLEGE	No Course
Dynamics	N/A	MID MICHIGAN COMMUNITY COLLEGE	No Course
Dynamics	N/A	MONROE COUNTY COMMUNITY COLLEGE	No Course
Dynamics	N/A	NORTH CENTRAL MICHIGAN COLLEGE	No Course
Dynamics	N/A	SOUTHWESTERN MICHIGAN COLLEGE	No Course
Dynamics	N/A	ST. CLAIR COUNTY COMMUNITY COLLEGE	No Course
Dynamics	N/A	WASHTENAW COMMUNITY COLLEGE	No Course

Dynamics	N/A	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	No Course
Dynamics	OAKLAND UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Dynamics	UNIVERSITY OF MICHIGAN-DEARBORN	BAY COLLEGE	Junior/Senior class that requires advance standing; course will apply to general elective credit.
Dynamics	UNIVERSITY OF MICHIGAN-DEARBORN	DELTA COLLEGE	Junior/Senior class that requires advance standing; course will apply to general elective credit.
Dynamics	UNIVERSITY OF MICHIGAN-DEARBORN	KELLOGG COMMUNITY COLLEGE	Junior/Senior class that requires advance standing; course will apply to general elective credit.
Dynamics	UNIVERSITY OF MICHIGAN-DEARBORN	MUSKEGON COMMUNITY COLLEGE	Junior/Senior class that requires advance standing; course will apply to general elective credit.
Dynamics	UNIVERSITY OF MICHIGAN-DEARBORN	NORTHWESTERN MICHIGAN COLLEGE	Junior/Senior class that requires advance standing; course will apply to general elective credit.
Dynamics	UNIVERSITY OF MICHIGAN-DEARBORN	SCHOOLCRAFT COLLEGE	Junior/Senior class that requires advance standing; course will apply to general elective credit.
Physics I	ANDREWS UNIVERSITY	HENRY FORD COLLEGE	Course did not include waves or thermal
Physics I	ANDREWS UNIVERSITY	JACKSON COLLEGE	Course did not include thermal; used algebra-based text
Physics I	ANDREWS UNIVERSITY	NORTH CENTRAL MICHIGAN COLLEGE	Course did not include waves or thermal
Physics I	ANDREWS UNIVERSITY	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	Course is algebra-based
Physics II	ANDREWS UNIVERSITY	BAY COLLEGE	Modern Physics topics not covered (basic levels of atomic, quantum physics, relativity)
Physics II	ANDREWS UNIVERSITY	GLEN OAKS COMMUNITY COLLEGE	Modern Physics topics not covered (basic levels of atomic, quantum physics, relativity)
Physics II	ANDREWS UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	Only E&M, limited topics
Physics II	ANDREWS UNIVERSITY	GRAND RAPIDS COMMUNITY COLLEGE	No Modern Physics
Physics II	ANDREWS UNIVERSITY	HENRY FORD COLLEGE	No Modern Physics
Physics II	ANDREWS UNIVERSITY	JACKSON COLLEGE	Algebra based Physics Text
Physics II	ANDREWS UNIVERSITY	KELLOGG COMMUNITY COLLEGE	Only Bohr for Modern

Physics II	ANDREWS UNIVERSITY	LAKE MICHIGAN COLLEGE	Too limited in Modern Physics
Physics II	ANDREWS UNIVERSITY	MACOMB COMMUNITY COLLEGE	Only E&M and Optics
Physics II	ANDREWS UNIVERSITY	MID MICHIGAN COLLEGE	Only E&M
Physics II	ANDREWS UNIVERSITY	NORTH CENTRAL MICHIGAN COLLEGE	No Physical Optics, Algebra based text
Physics II	ANDREWS UNIVERSITY	NORTHWESTERN MICHIGAN COLLEGE	No Modern Physics
Physics II	ANDREWS UNIVERSITY	OAKLAND COMMUNITY COLLEGE	Only E&M and waves. Good for electronics but not for foundational course
Physics II	KETTERING UNIVERSITY	NORTH CENTRAL MICHIGAN COLLEGE	Course is not calculus-based
Physics II	MICHIGAN TECHNOLOGICAL UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	Approved for PH 1200 (lab); unable to approve for PH 2200 (lecture) because content is only a 50% match.
Solids/Strengths	ANDREWS UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	Course does not cover designs of beams or buckling of column
Solids/Strengths	ANDREWS UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Solids/Strengths	EASTERN MICHIGAN UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Solids/Strengths	FERRIS STATE UNIVERSITY	DELTA COLLEGE	Ferris State University - no course
Solids/Strengths	FERRIS STATE UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	Ferris State University - no course
Solids/Strengths	FERRIS STATE UNIVERSITY	HENRY FORD COLLEGE	Ferris State University - no course
Solids/Strengths	FERRIS STATE UNIVERSITY	NORTHWESTERN MICHIGAN COLLEGE	Ferris State University - no course
Solids/Strengths	FERRIS STATE UNIVERSITY	SCHOOLCRAFT COLLEGE	Ferris State University - no course
Solids/Strengths	KETTERING UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	Course omitted from original agreement Appendix C; equivalency or exception still pending
Solids/Strengths	LAKE SUPERIOR STATE UNIVERSITY	HENRY FORD COLLEGE	Only a 2-credit course at Henry Ford College
Solids/Strengths	LAKE SUPERIOR STATE UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	Their course is equivalent to LSSU's EGMT 225

Solids/Strengths	MICHIGAN TECHNOLOGICAL UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Solids/Strengths	N/A	BAY COLLEGE	No course
Solids/Strengths	N/A	GLEN OAKS COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	GRAND RAPIDS COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	JACKSON COLLEGE	No course
Solids/Strengths	N/A	KELLOGG COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	LAKE MICHIGAN COLLEGE	No course
Solids/Strengths	N/A	LANSING COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	MACOMB COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	MID MICHIGAN COLLEGE	No course
Solids/Strengths	N/A	MONROE COUNTY COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	MUSKEGON COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	NORTH CENTRAL MICHIGAN COLLEGE	No course
Solids/Strengths	N/A	SOUTHWESTERN MICHIGAN COLLEGE	No course
Solids/Strengths	N/A	ST. CLAIR COUNTY COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	WASHTENAW COMMUNITY COLLEGE	No course
Solids/Strengths	N/A	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	No course
Solids/Strengths	OAKLAND UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Solids/Strengths	SAGINAW VALLEY STATE UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	Denied for ME*353. Course does not have a lab component. It can transfer as our ETM*352 course.

Solids/Strengths	SAGINAW VALLEY STATE UNIVERSITY	NORTHWESTERN MICHIGAN COLLEGE	Students will earn ME*353 once they complete a 1 cr independent study for the lab portion. Course petition will be necessary once independent study is complete
Solids/Strengths	SAGINAW VALLEY STATE UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Solids/Strengths	UNIVERSITY OF DETROIT MERCY	GOGEBIC COMMUNITY COLLEGE	Course omitted from original agreement Appendix C; equivalency or exception still pending
Solids/Strengths	UNIVERSITY OF MICHIGAN-DEARBORN	GOGEBIC COMMUNITY COLLEGE	Course omitted from original agreement Appendix C; equivalency or exception still pending
Solids/Strengths	WESTERN MICHIGAN UNIVERSITY	HENRY FORD COLLEGE	Course is not equivalent to our ME 2570 as it is only 2 credits.
Statics	ANDREWS UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	Not enough Statics covered
Statics	ANDREWS UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Statics	EASTERN MICHIGAN UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Statics	KETTERING UNIVERSITY	GOGEBIC COMMUNITY COLLEGE	No syllabus provided; will be reviewed for the Nov. 1 signing deadline
Statics	KETTERING UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	Course blends statics and solids; not enough course time dedicated to statics
Statics	LAKE SUPERIOR STATE UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	Course is equivalent to EGMT 225
Statics	MICHIGAN TECHNOLOGICAL UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	We require 3 credits of Statics. This is a combined Statics and Strength of Materials course. It is equivalent to our ENG 2120, Statics-Strength of Material.
Statics	MICHIGAN TECHNOLOGICAL UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Statics	N/A	GLEN OAKS COMMUNITY COLLEGE	No course
Statics	N/A	GRAND RAPIDS COMMUNITY COLLEGE	No course
Statics	N/A	JACKSON COLLEGE	No course
Statics	N/A	LAKE MICHIGAN COLLEGE	No course

Statics	N/A	MACOMB COMMUNITY COLLEGE	No course
Statics	N/A	MID MICHIGAN COLLEGE	No course
Statics	N/A	NORTH CENTRAL MICHIGAN COLLEGE	No course
Statics	N/A	SOUTHWESTERN MICHIGAN COLLEGE	No course
Statics	N/A	WASHTENAW COMMUNITY COLLEGE	No Course
Statics	N/A	WAYNE COUNTY COMMUNITY COLLEGE DISTRICT	No course
Statics	OAKLAND UNIVERSITY	OAKLAND COMMUNITY COLLEGE	New course; equivalency not yet established
Statics	SPRING ARBOR UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	MCCC class is only 1 credit, ours is a 3 credit class
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	ALPENA COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	BAY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	GOGEBIC COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	KELLOGG COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	LANSING COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	MONROE COUNTY COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	MUSKEGON COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	UNIVERSITY OF MICHIGAN-DEARBORN	ST. CLAIR COUNTY COMMUNITY COLLEGE	UM-D course is a combined Solids/Strengths and Statics course; Statics course will be accepted as general elective credit
Statics	WESTERN MICHIGAN UNIVERSITY	LANSING COMMUNITY COLLEGE	PHYS 260 not equivalent

Statics	WESTERN MICHIGAN UNIVERSITY	MONROE COUNTY COMMUNITY COLLEGE	METC 220 is engineering credit and equivalent to WMU's EDMM 2810 STATICS AND STRENGTH OF MATERIALS
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