



ARTICULATION AGREEMENT with GUARANTEED ADMISSION

between

MADISON AREA TECHNICAL COLLEGE

University Transfer - Associate of Science

Electrical Engineering Pathway

and

MILWAUKEE SCHOOL OF ENGINEERING®

Bachelor of Science in Electrical Engineering

Effective Fall 2025

This articulation agreement aims to enhance transfer opportunities for Madison Area Technical College (Madison College) students seeking to continue their education at Milwaukee School of Engineering (MSOE). Through collaboration among faculty, student services, and administration, students will have well-defined course equivalencies to help them achieve their academic goals.

Students who successfully complete the following Madison Area Technical College degree(s):

**University Transfer-Engineering Associate of Science (AS)
Electrical Engineering Pathway**

and who meet the requirements of Milwaukee School of Engineering and other conditions specified in this agreement will be **guaranteed admission into the Associate Engineering Transfer Pathway of the Electrical Engineering program (BSEE) at MSOE with junior standing.**

PROVISIONS OF THIS AGREEMENT:

1. Admissions & Eligibility:

It is the student's responsibility to meet the current admission requirements of MSOE at the time of entry. Information on transfer admissions requirements may be found at <https://www.msoe.edu/transfer>

The terms of this agreement apply to Madison Area Technical College (Madison College) students who:

- a) Complete all course requirements in the University Transfer - Associate of Science, Electrical Engineering pathway at Madison College with a grade of C or better (not C-),
- b) Complete all additional specified courses at Madison College, as outlined in this agreement, including those specific to the intended engineering major, with a grade of C or better (not C-), and
- c) *Achieve a cumulative grade point average (CGPA) of 3.00 or higher, as reported on the Madison College transcript, meeting MSOE's CGPA transfer admission requirements for engineering programs.
**MSOE evaluates CGPA for admission based on the transcript from the institution where the student most recently completed at least 12 credits.*

Madison College students who meet all transfer requirements will be **guaranteed admission into the Associate Engineering Transfer Pathway of the Electrical Engineering program at MSOE with junior standing**. Students must fulfill the catalog requirements in effect for the year they begin.

2. Advising & Recruitment

MSOE and Madison College will provide academic advising to Madison College students inquiring about MSOE programs. Students will be connected with transfer admission counselors and as needed, with program faculty prior to transfer. MSOE and Madison College will share materials, catalogs, and other information to facilitate their understanding of requirements and programs. Madison College will assist MSOE personnel in arranging recruitment events on its campuses, such as appropriate classroom settings and transfer fairs.

3. Marketing

Each institution must obtain written approval before using the other's name in any promotional or marketing materials related to this agreement. All materials must specify that the transfer is to the specific engineering program at MSOE. Designated contacts in each institution's marketing departments will coordinate and approve these materials. Each institution may link to this agreement and the other's website with prior notice. Guidelines for using MSOE's name and logo are provided in this agreement.

4. Accreditation

Madison College and MSOE will work together to assess student learning outcomes as needed, supporting the effectiveness of this articulation agreement and providing documentation for program accreditation. MSOE may request samples of assessment materials, such as graded assignments and exams, with student names removed to protect privacy. These materials cannot be shared with anyone outside of the program faculty, administrators involved in the articulation courses, and accreditation agency visitors without written permission from the other institution.

This agreement may be terminated by either Madison College or MSOE if either fails to maintain regional accreditation or if the MSOE engineering program accreditation is discontinued or terminated.

5. Periodic Review

An active articulation agreement begins at the commencement of the fall 2025 semester and will remain in effect through fall 2030, at which point it will be subject to renewal. Given the evolving nature of engineering curricula, MSOE and Madison College will conduct an annual review of engineering course equivalencies to ensure continued alignment with program requirements. Any curriculum changes impacting the articulation pathway will not take effect during an active academic year unless both the MSOE Program Director and the designated representative at Madison College provide explicit consent, or if changes are required by accreditation or institutional mandates. Minor revisions (such as course renumbering) are permitted but must be communicated to the other institution promptly.

6. Cancellation

Both parties agree to give a minimum of one hundred eighty (180) days' written notice in advance if they intend to cancel this agreement. Madison College students who apply to MSOE before the cancellation date will still be allowed to transfer credits according to the terms of this agreement.

7. Course Guides

MSOE and Madison College have collaborated to create guides to serve as a resource for students, with every effort made to ensure the information is accurate.

8. Transfer Scholarships

MSOE is committed to supporting transfer students and offers a substantial merit-based scholarship. This scholarship is awarded based on cumulative GPA and is available to eligible students transferring from Madison College. Transfer students are automatically considered for this scholarship upon admission, with no separate application required.

The transfer scholarship is renewable each year for students who continue to meet MSOE's Satisfactory Academic Progress requirements, provided they remain enrolled full-time (up to a maximum of six years). For the most up-to-date information on scholarship opportunities and eligibility criteria, students are encouraged to visit our [scholarship webpage](#) or contact the MSOE Financial Aid Office.

University Transfer Program Guide

Pathway: Electrical Engineering – MSOE Transfer

Plan code:

Associate in Science (AS)
2025-2026

Category	Credits	Requirement	Courses for MSOE Transfer
English and Speech	9	Six credits must be in composition - English 1 and one other composition course. Consult with your advisor to determine which composition course would be best for you. Three credits must be in public speaking.	- ENGLISH 20801201 - JOURNAL 20801256 OR ENGLISH 10801197 - SPEECH 10801198 OR SPEECH 20810202
Mathematics and Natural Science	43	Required courses: MATH 20804231 Calculus and Analytic Geometry 1 (5) MATH 20804232 Calculus and Analytic Geometry 2 (5) MATH 20804233 Calculus 3 (5) COMPSCI 20804215 Computer Science 1 (3) Choose <u>one</u> of the following Chemistry courses: CHEM 20806209 College Chemistry 1 (5) OR CHEM 20806259 Chemistry for Science and Engineering (5) Required Physics and Engineering Courses: PHYSICS 20806223 University Physics 1-Calculus-Based (5) PHYSICS 20806224 University Physics 2-Calculus-Based (5) GENENG 10605270 AC/DC Circuit Techniques & Principles (3) GENENG 10662121 Circuit Modeling 1 (3) GENENG 10662221 Circuit Modeling 2 (4)	All Mathematics & Natural Science Requirements Assumed for Guaranteed Admission
Social Science	6	Social Science Option 2: Completion of courses from at least two disciplines is required. Choose courses from the following disciplines: anthropology, economics, education, history, political science, psychology, sociology, and interdisciplinary social science.	Suggested Course Options to complete CLO Categories @ MSOE (see appendix for more options): ECON 20809212 (Curiosity) SOC 10809172 (Diversity)
Humanities and Fine Arts	6	Completion of courses from at least two disciplines is required. Choose from the following disciplines: art, art history, drama, film, literature, music, philosophy, world languages, writing and communication, and interdisciplinary humanities.	Suggested Course Options to complete CLO Categories @ MSOE (see appendix for more options): ENGLISH 20801204 (Choice) SPANISH 20802211 (Choice) FILM 20810250 (Choice) PHILOS 20809260 (Choice)
Health/Wellness/PE	1	Completion of one credit is required.	NA for MSOE
Ethnic Studies	1 course	Completion of one course is required. Course may also count toward humanities or social science requirement.	SOC 10809172 (suggested)
World Languages	1 course	Completion of one course is required. Requirement may be satisfied with one year in high school (C or better). College course may also count toward humanities requirement. If requirement was satisfied in high school email enrollmentservices@madisoncollege.edu.	High School Course OR SPANISH 20802211 (suggested)
Electives	5	Consult with your advisor to determine which courses are best for your intended transfer program. GENENG 20806294 Engineering Seminar (1) GENENG 10662252 Intro. To Computer Engineering (3) COMPSCI 20804216 Computer Science 2 (3) COMPSCI 20804270 Data Structures and Algorithms (4) MATH 20804265 Introduction to Discrete Mathematics (3) MATH 20804255 Techniques in Ordinary Differential Equations (3) MATH 20804256 Elementary Matrix and Linear Algebra (3) CHEM 20806212 College Chemistry 2 (5)	Suggested Course Options: COMPSCI 20804216 MATH 20804255
Total Minimum Credits	70		

MSOE ELECTRICAL ENGINEERING REQUIREMENTS - MADISON COLLEGE COURSES

BSEE Requirement	Madison Coursework	Equivalent MSOE Course Number
General Education (Raider Core) Requirements		
Communicate Effectively	ENGLISH 20801201	COM 1001
Collaborate Successfully	JOURNAL 20801256 OR ENGLISH 10801197	COM 2001
Collaborate Successfully	SPEECH 10801198 OR SPEECH 20810202	COM 3001
Embrace Diversity	Suggested in Artic. Agreement: SOC 10809172	SOC 1001
Exhibit Curiosity	Suggested in Artic. Agreement: ECON 20809212	BUS 2221
Choice CLO	Suggested in Artic. Agreement: ENGLISH 20801204 SPANISH 20802211 FILM 20810250 PHILOS 20809260	LIT 2010 SPN 1001 FNA 4010 PHIL 3201
Mathematics & Science Requirements		
Chemistry	CHEM 20806209 OR CHEM 20806259	CHM 1010
Physics I	PHYSICS 20806223	PHY 1110
Physics II	PHYSICS 20806224	PHY 1120
Calculus I	MATH 20804231	MTH 1110
Calculus II	MATH 20804232	MTH 1120
Calculus III	MATH 20804233	MTH 2130
Differential Equations	MATH 20804255	MTH 2140
Electrical Engineering Courses @ Madison		
Intro to EE	GENENG 10605270	ELE 1000
Electric Circuits I	GENENG 10605270 AND GENENG 10662121	ELE 2001
Electric Circuits II	GENENG 10662121 AND GENENG 10662221	ELE 2011
Technical Elective	COMPSCI 20804215 AND COMPSCI 20804216	EL Tech Elective

MSOE ELECTRICAL ENGINEERING REQUIREMENTS – COURSES REMAINING

MSOE Course Number	MSOE Course Name	Semester Credits
Communication & General Education		
PHL 3101, 3102, or 3103	[choice of Ethics courses]	3
Think Critically CLO	Met by Math & Science Requirements	
Integrate Learning CLO	Met by EE Requirements	
Mathematics & Natural Science		
PHY 3700	Physics of Electronic Materials & Semiconductor Devices	4
BSEE Program		
CPE 1500	Digital Logic	4
ELE 1601	Introduction to Programming for EEs	3
IDS 2020	Career Development	0
ELE 2610	Embedded Systems	4
ELE 3101	Electronics I	4
ELE 3900	Career & Professional Guidance	1
ELE 3201	Electromagnetics & Transmission Lines	4
ELE 3300	Signals & Systems	3
ELE 3401	Electric Power & Machines	4
ELE 3510	Digital Systems	4
ELE 3111	Electronics II	3
ELE 3701	Control Systems	4
ELE 3320	Digital Signal Processing	3
ELE 3310	Introduction to Probability & Random Processes	3
ELE 4901	Electrical Engineering – Senior Design Project I	3
ELE 4902	Electrical Engineering – Senior Design Project II	3
Elective	Free Elective	3
Elective	ECBE or CSSE Technical Elective	3
Elective	ECBE or CSSE Technical Elective	3
Total		66

APPENDIX: GENERAL EDUCATION HUMANITIES & SOCIAL SCIENCE EQUIVALENCIES

MSOE requires courses that fulfill Common Learning Outcome (CLO) categories.

Students who follow the suggested courses listed in the program guide will satisfy these requirements as part of their transfer pathway.

The following three CLO categories can be satisfied with Madison College courses:

- Exhibit Curiosity CLO
- Embrace Diversity CLO
- Choice of CLO – Select any course listed from the table below

Note: Each course counts towards only one CLO and the same course cannot fulfill multiple CLO categories.

This appendix is provided for informational purposes to help students plan their coursework and ensure a smooth transition to MSOE.

General Education Humanities & Social Science

CLO	Madison College Courses	Equivalent MSOE Courses
Exhibit Curiosity	ANTHRO 20809283 Cult. Anthro & Hum	ANT 1001 Cultural Anthropology
	ECON 20809211 Macroeconomics	BUS 2222 Macroeconomics
	ECON 20809212 Microeconomics	BUS 2221 Microeconomics
	ENGLISH 20809204 Intro to Lit.	LIT 2010 Literary Genres
	FILM 20810250 Intro to Film	FNA 4010 Film & Media Studies
	HISTORY 20803201 Twentieth Cent.	HST 2015 Topics in 20 th Cent. AM
	HISTORY 20803211 AM Hist 1607-1865	HST 1013 US History I
	HISTORY 20803212 AM Hist 1865-Pres.	HST 1014 US History II
	HISTORY 20803214 Indigenous Amer. Hist.	ANT 2020 Native American Culture
	PHILOS 20809260 Intro to Philosophy	PHL 3201 Intro to Philosophy
	POLISCI 10809122 Intro to Amer. Govt.	PSC 2011 American Government
	POLISCI 20809227 Political Theory	PSC 2010 Foundations of Pol. Science
	PSYCH 20809199 Human Relations	PSY 3004 Social Psychology
	PSYCH 20809231 Intro Psychology	PSY 1001 Foundations of Psychology
	PSYCH 10809159 Abnormal Psych.	PSY 3002 Psych. Disorders & Mental
	PSYCH 20809233 Develop. Psychology	PSY 3003 Developmental Psychology
	SOC 10809196 Sociology, Introduction	SOC 1001 Foundations of Sociology
	SOC 20809203 Intro Sociology	SOC 1001 Foundations of Sociology
	SOC 20809204 Marriage Family	PSY 2005 The Family
	SOC 10809197 Cont. Amer. Society	SSC 0106 Exhibit Curiosity
Embrace Diversity	SPANISH 20802211 Spanish I	SPN 1001 Elementary Spanish
	SPANISH 20802212 Spanish II	SPN 2001 Intermediate Spanish
	ANTHRO 20809283 Cult. Anthropology	ANT 1001 Cultural Anthropology
	ENGLISH 20801207 World Indigenous	LIT 3001 Topics in Global Lit.
	ENGLISH 20801222 U.S. Latino Lit.	HUM 0104 Embrace Diversity
	ENGLISH 20801213 Native Amer. Lit	HUM 0104 Embrace Diversity
	ENGLISH 20801214 African Amer. Lit	HUM 0104 Embrace Diversity

	HISTORY 20803214 Indigenous Amer. Hist.	ANT 2020 Native American Culture
	PSYCH 10809159 Abnormal Psych.	PSY 3002 Psych. Disorders & Mental
	SOC 10809172 Intro to Diversity	SSC 0104 Embrace Diversity
	SOC 10809196 Sociology, Introduction	SOC 1001 Foundations of Sociology
	SOC 20809203 Intro Sociology	SOC 1001 Foundations of Sociology
	SOC 20809252 Race & Ethnicity in U.S.	SSC 0104 Embrace Diversity
	SPANISH 20802211 Spanish 1	SPN 1001 Elementary Spanish
	SPANISH 20802212 Spanish 2	SPN 2001 Intermediate Spanish
	SPANISH 20802214 Spanish 4	SPN 3001 Advanced Spanish
Other	PHILOS 20809261 Elementary Logic	PHL 3202 Introduction to Logic
	PHILOS 20809264 Intro Logic/Critical Think	PHL 3202 Introduction to Logic
	POLISCI 20809223 International Relations	PSC 2015 International Relations

INSTITUTION-SPECIFIC INFORMATION

Administrative person(s) responsible for coordinating curricular matters and articulation agreements and renewals at Madison Area Technical College:

Kevin Mirus

Dean, School of Science, Technology, Engineering, & Mathematics (STEM)

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Jennifer Jackowski

Dept. Chair, Engineering & Engineering Technology

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Transfer Services Lead

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Person(s) designated for coordination and signoff of public relations/marketing and other promotional materials:

Administrative person(s) responsible for coordinating curricular matters and articulation agreements and renewals at Milwaukee School of Engineering:

Kelsey Johnson

Associate Director of Academic Partnerships

414-277-7194

Johnsonkd@msoe.edu

Person(s) designated for coordination and signoff of public relations/marketing and other promotional materials:

Sebastian Thachenkary (for sign-off)

Vice-President Marketing & Community Engagement

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Senior Director of Communications & Media Relations

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GUIDELINES FOR USE OF THE MILWAUKEE SCHOOL OF ENGINEERING® NAME AND/OR LOGO

In an effort to meet standards set by our accreditation agencies, to minimize any confusion on the part of prospective or current students, and to protect the use of MSOE's name and logo, it is imperative that use of or reference to our name or programs be limited to those deemed appropriate by MSOE. As specified in the articulation agreement, MSOE's Vice President of Marketing and Community Engagement or his/her designee will approve any and all narrative and graphic representation containing MSOE's name, logo or reference to our programs before it is published or distributed in any way.

To expedite the process of developing content for use in promotional literature or digital platforms, the following minimum guidelines should be followed. Noncompliance will result in disapproval.

Our preferred reference is MSOE, however, for clarity purposes it is sometimes appropriate to use Milwaukee School of Engineering (MSOE), then use MSOE in later references of the same communication. Furthermore, MSOE will be referred to as a university. In no instance shall MSOE be referred to as a college or school. Although MSOE refers to itself as a university and the word is present in the logo, the word "university" is not part of its name.

The official MSOE logo appears as below and should be used on all materials and on all digital platforms unless it would be so small that "UNIVERSITY" would be illegible. If that is the case, contact MSOE's Marketing Communications Department for an alternative solution.

In materials where color is used, MSOE's logo will always be red and black. MSOE red is PMS 200. This can be created in CMYK by using the formula C-3, M-100, Y70, K-12. For screens, RGB is used which is R-197, G-5, B-12. Finally, for the web the HEX code is #C5050C.

Official logos:



When possible the two-color logo should be used. For materials with a dark background there is a "reversed" version of this two-color logo. For black and white materials, the black logo should be used. If the background is dark, there is a "reversed" version of the black logo as well. Finally, for materials with a red background there is a special version of the logo in white. Reach out to MSOE's Marketing Communications to request any of these options.

The name Milwaukee School of Engineering®, the acronym MSOE® and the MSOE logo are all registered trademarks. The first time the name or acronym appear in any document they must have the ® mark. It is not necessary to include the ® mark with subsequent mentions in the same document or page. The logos have the ® mark embedded.

Given the need to provide clarity as to the limitations of the articulation agreement and avoid potential misunderstandings, any use of the MSOE logo in related marketing communications in print or digital form (brochures, catalogs, Web pages, blogs, letters, e-mail, social media, posters, etc.) must comply with the MSOE Brand standards and be reviewed and approved by MSOE. Visit <https://www.msoe.edu/faculty-staff/marketing> to obtain the brand standards.

Contact the Vice President of Marketing & Community Engagement or Senior Director of Communications & Media Relations indicated on the Institution-Specific Information section in this articulation agreement with any questions you may have and for needed approvals.

SIGNATORIES

04/30/2025

This agreement signed and dated this ____ day of _____, 20 ___, has been thoroughly reviewed and approved by both institutions. The agreement is in effect for the 2025–2026 academic year.

Milwaukee School of Engineering



Dr. Eric T. Baumgartner
Executive Vice President of Academics

Madison Area Technical College



Dr. Beth Giles-Klinkner
Provost



Dr. Sheila Ross
Department Chair, Electrical, Computer,
and Biomedical Engineering



Dr. Kevin Mirus
Dean, School of Science, Technology, Engineering and
Mathematics



Dr. Steve Holland
Program Director, Electrical, Computer, and
Biomedical Engineering



Dr. Jennifer Jackowski
Department Chair, Engineering & Engineering
Technology