ARTICULATION AGREEMENT with GUARANTEED ADMISSION

between

HARPER COLLEGE
Associate in Science, Computer Science

and

MILWAUKEE SCHOOL OF ENGINEERING®
Bachelor of Science in Computer Engineering

Effective Fall 2026

This articulation agreement aims to enhance transfer opportunities for Harper College (Harper) 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 pursuing the **Associate in Science, Computer Science** (A.S.) degree at Harper are encouraged to complete the degree prior to transfer to ensure a smooth transition and maximize credit applicability. Students who meet MSOE's admission requirements and the conditions specified in this agreement will be guaranteed admission into the Computer Engineering program at MSOE.

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 Harper College (Harper) students who:

   a) Complete course requirements in the Computer Science A.S. program at Harper with a grade of C or better,
   b) Complete additional specified courses at Harper, as outlined in this agreement, including those specific to the intended major, with a grade of C or better, and
   c) *Achieve a cumulative grade point average (CGPA) of 3.00 or higher, as reported on the Harper transcript, meeting MSOE's CGPA transfer admission requirements for the Computer Engineering program.
      **MSOE evaluates CGPA for admission based on the transcript from the institution where the student most recently completed at least 12 credits.*

   Harper students who meet all transfer requirements will be guaranteed admission into the Computer Engineering program at MSOE and must fulfill the catalog requirements in effect for the year they begin.

2. **Reverse Transfer**

   Harper College and MSOE will offer a reverse transfer option for students who transfer to MSOE before completing their Associate of Engineering Science degree at Harper. Eligible students may apply coursework completed at MSOE toward the remaining requirements for the associate degree at Harper College. This option provides students with the opportunity to earn a credential from Harper while continuing their progress toward a bachelor's degree at MSOE.

3. **Advising & Recruitment**

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

4. **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.

5. **Accreditation**

   Harper 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 Harper or MSOE if either fails to maintain regional accreditation or if the MSOE engineering program accreditation is discontinued or terminated.

6. Periodic Review

An active articulation agreement begins at the commencement of the Fall 2026 semester. Harper and MSOE will collaboratively review the agreement annually to address any issues that may arise in the governance of this agreement. 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 Harper 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.

7. 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. Harper students who apply to MSOE before the cancellation date will still be allowed to transfer credits according to the terms of this agreement.

8. Course Articulation Guides

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

9. 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 Harper. 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.

HARPER COURSES FOR BSCE

Computer Science A.S. Degree

Harper Course Number	Harper Course Name	Equivalent MSOE Course Number
Communication & General Education		
ENG 101 (ENG 102 also required for AES degree)	Composition 1	COM 1001
SPE 101	Fundamentals of Speech Communication	COM 3001
MCM 200 (suggested)	Film History See appendix for more options	FNA 4010 Curiosity CLO
PHI 115 (suggested)	Ethics See appendix for more options	HUM 0103 Ethics CLO
ECO 211	Microeconomics	BUS 2221
ECO 212	Macroeconomics	BUS 2222
Mathematics		
MTH 200	Calculus I	MTH 1110
MTH 201	Calculus II	MTH 1120
MTH 220	Discrete Mathematics	MTH 2310
Physical and Life Sciences		
PHY 201	General Physics I	PHY 1110
PHY 202	General Physics II	PHY 1120
Physical and Life Science Elective		
BIO 110	Introduction to Biology & Society	BIO 1110
Computer Engineering Courses		
CSC 121	Computer Science I	CPE 1040
CSC 122	Computer Science II	CPE 1140
MTH 212	Differential Equations	MTH 2140

ADDITIONAL BSCE TRANSFER COURSES AVAILABLE THROUGH HARPER

Complete these additional courses to facilitate a four-semester completion at MSOE

Harper Course Number	Harper Course Name	Equivalent MSOE Course Number
Communication & General Education		
ENG 103	Technical & Report Writing	COM 2001
SOC 101 (suggested)	Introduction to Sociology See appendix for more options	SOC 1001 Diversity CLO Requirement
Choice CLO	See appendix for options	Choice CLO Requirement
Free Elective	See appendix for options	Free Elective Requirement

MSOE COURSES FOR BSCE DEGREE COMPLETION

Courses remaining in the Computer Engineering program at MSOE.

*Courses marked with an asterisk are available at Harper College. Completion is recommended prior to MSOE enrollment to facilitate a four-semester graduation.

MSOE Course Number	MSOE Course Name	Semester Credits
Communication & General Education		
*COM 2001	Writing for the STEM Disciplines	3
*Diversity CLO	Many Options Available	3
*Choice CLO	Many Options Available	3
Mathematics & Natural Science		
MTH 2480	Probability and Statistics	3
MTH 2340	Linear Algebra	3
BSCE Program		
CPE 1500	Digital Logic	3
CPE 1510	Computer Architecture and Assembly Language	4
CPE 2600	Systems Programming	4
CPE 2610	Embedded Systems	4
CPE 3600	Advanced Embedded Systems	4
CPE 3300	Computer Networking	4
CPE 4800	Information Security	4
CPE 4901	Senior Design Project I	3
CPE 4902	Senior Design Project II	3
IDS 2020	Career Development	0
ELE 2001	Electric Circuits I	4
ELE 2011	Electric Circuits II	4
ELE 3101	Electronics I	4
ELE 3300	Signals & Systems	3
ELE 3320	Digital Signal Processing	3
Elective	Program Elective	3
Elective	Program Elective	3
*Elective	Free Elective	3

APPENDIX: GENERAL EDUCATION HUMANITIES & SOCIAL SCIENCE EQUIVALENCIES

MSOE requires courses that fulfill Common Learning Outcome (CLO) categories.
The following four CLO categories and Computer Engineering Free Elective can be satisfied with Harper courses:

- Exhibit Curiosity CLO
- Embrace Diversity CLO
- Demonstrate Ethical Understanding CLO
- Choice of CLO – Select any course listed from the table below
- Computer Engineering Free Elective – Select any course listed from the table below

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

General Education Humanities & Social Science

CLO	Harper Courses	Equivalent MSOE Courses
Exhibit Curiosity	ANT 202 Cultural Anthropology	ANT 1001 Cultural Anthropology
	ART 114 Intro to Film	FNA 4010 Film & Media Studies
	ART 133 Non-Western Art	HUM 0106 Exhibit Curiosity
	ECO 211 Microeconomics	BUS 2221 Microeconomics
	ECO 212 Macroeconomics	BUS 2222 Macroeconomics
	GEG 100 Cultural Geography	ANT 1001 Cultural Anthropology
	HUM 125 World Mythology	HUM 0106 Exhibit Curiosity
	HST 111 Amer. Experience to 1877	HST 1013 US History I
	HST 112 Amer. Experience Since 1877	HST 1014 US History II
	HST 121 History of Latin America	HST 1015 Latin American History I
	HST 282 World War II	HST 2031 World War II
	MCM 200 Film History	FNA 4010 Film & Media Studies
	PHI 105 Introduction to Philosophy	PHL 3201 Introduction to Philosophy
	PSY 101 Intro to Psychology	PSY 1001 Foundations of Psychology
	PSY 228 Psychology of Human Dev.	PSY 3003 Developmental Psychology
	PSY 230 Abnormal Psychology	PSY 3002 Psych. Disorders
	SOC 101 Introduction to Sociology	SOC 1001 Foundations of Sociology
	SPA 101 Elementary Spanish I	SPN 1001 Elementary Spanish
	SPA 102 Elementary Spanish II	SPN 1001 Elementary Spanish
	SPA 202 Intermediate Spanish II	SPN 2001 Intermediate Spanish
Embrace Diversity	ANT 202 Cultural Anthropology	ANT 1001 Cultural Anthropology
	GEG 100 Cultural Geography	ANT 1001 Cultural Anthropology
	LIT 208 Non-Western Literature	LIT 3001 Topics in Global Literature
	SOC 120 The Family in Cont. Society	PSY 2005 The Family
	PSY 230 Abnormal Psychology	PSY 3002 Psych. Disorders
	SOC 101 Introduction to Sociology	SOC 1001 Foundations of Sociology
	SPA 101 Elementary Spanish I	SPN 1001 Elementary Spanish
	SPA 102 Elementary Spanish II	SPN 1001 Elementary Spanish
	SPA 202 Intermediate Spanish II	SPN 2001 Intermediate Spanish
Demonstrate Ethical Understanding	PHI 115 Ethics	HUM 0103 Demonstrate Ethical

INSTITUTION SPECIFIC INFORMATION

For more information about HARPER COLLEGE (HARPER) and the Associate of Computer Science Degree:

Administrative person(s) responsible for coordinating curricular matters and articulation agreements and renewals:

Dr. Sean Warren-Crouch
Director of College Transitions
847-925-6133
swarrenc@harpercollege.edu

For more information about Milwaukee School of Engineering (MSOE) and the BSCE Degree:

Administrative person(s) responsible for coordinating curricular matters and articulation agreements and renewals:

Dr. Kelsey Johnson
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
414-277-7141
thachenkary@msoe.edu

JoEllen Burdue
Senior Director of Communications & Media Relations
414-277-7117
burdue@msoe.edu

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.

01-06-2025

SIGNATORIES

This agreement signed and dated this ____day of _____27/0_____, 20___, has been thoroughly reviewed and approved by both institutions. The agreement is in effect for the 2026–2027 academic year.

Milwaukee School of Engineering

Dr. Alicia Domack
Interim Vice President of Academics

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

Dr. Russell Meier
Program Director, Computer Engineering

Harper College

Ruth Williams
Ruth Williams (Apr 24, 2026 12:54:55 CDT)

Dr. Ruth Williams
Provost

Kimberley Polly
Kimberley Polly (Apr 24, 2026 12:43:07 CDT)

Kimberley Polly
Dean, Mathematics & Science Division

ACS-CE Harper 2026 FINAL

Final Audit Report 2026-04-27

Created:	2026-04-24
By:	Kelsey Johnson (johnsonkd@msoe.edu)
Status:	Signed
Transaction ID:	CBJCHBCAABAA27FImljH77iJdCI3f6GupVE3Zy9-U65Y

"ACS-CE Harper 2026 FINAL" History

Document created by Kelsey Johnson (johnsonkd@msoe.edu)
2026-04-24 - 5:02:58 PM GMT

Document emailed to Alicia Domack (domack@msoe.edu) for signature
2026-04-24 - 5:03:05 PM GMT

Document emailed to Sheila Ross (ross@msoe.edu) for signature
2026-04-24 - 5:03:05 PM GMT

Document emailed to Russell Meier (meier@msoe.edu) for signature
2026-04-24 - 5:03:05 PM GMT

Document emailed to Ruth Williams (wr25681@harpercollege.edu) for signature
2026-04-24 - 5:03:06 PM GMT

Document emailed to Kimberley Polly (kpolly@harpercollege.edu) for signature
2026-04-24 - 5:03:06 PM GMT

Email viewed by Russell Meier (meier@msoe.edu)
2026-04-24 - 5:05:26 PM GMT

Email viewed by Sheila Ross (ross@msoe.edu)
2026-04-24 - 5:11:30 PM GMT

Document e-signed by Sheila Ross (ross@msoe.edu)
Signature Date: 2026-04-24 - 5:11:52 PM GMT - Time Source: server

Document e-signed by Russell Meier (meier@msoe.edu)
Signature Date: 2026-04-24 - 5:22:27 PM GMT - Time Source: server

Email viewed by Kimberley Polly (kpolly@harpercollege.edu)
2026-04-24 - 5:37:33 PM GMT

Document e-signed by Kimberley Polly (kpolly@harpercollege.edu)
Signature Date: 2026-04-24 - 5:43:07 PM GMT - Time Source: server

Email viewed by Ruth Williams (wr25681@harpercollege.edu)
2026-04-24 - 5:54:20 PM GMT

Document e-signed by Ruth Williams (wr25681@harpercollege.edu)
Signature Date: 2026-04-24 - 5:54:55 PM GMT - Time Source: server

Email viewed by Alicia Domack (domack@msoe.edu)
2026-04-27 - 1:07:27 PM GMT

Document e-signed by Alicia Domack (domack@msoe.edu)
Signature Date: 2026-04-27 - 1:09:03 PM GMT - Time Source: server

Agreement completed.
2026-04-27 - 1:09:03 PM GMT