

ARTICULATION AGREEMENT GUIDE

Oakland Community College – **AAS or Certificate in CIS - Software Engineering Option**
 Eastern Michigan University – **BS in Computer Science Applied**

Oakland Community College Courses: Eastern Michigan University Courses:

Michigan Transfer Agreement (MTA) Requirements (30-33 credits)

Students with the MTA endorsement on their community college transcript have satisfied EMU's General Education Core Requirements and will be required to complete only the General Education Application Requirements of one Perspectives on a Diverse World course, one Learning Beyond the Classroom experience, and a Writing Intensive course in the major. Courses listed below for the MTA also satisfy program requirements at EMU and/or OCC. For OCC approved MTA courses go to the community college's website. Students without an MTA or MACRAO endorsement must complete EMU's general education program.

- 1. A course in English Composition**
 Choose one: ENG 1510, ENG 1510E, ENG 1510S3-6 WRTG 120 Composition I (3) 3-6
- 2. A course in English Composition or Communication**
 COM 1290 Interpersonal Communication 3 COMM 227 Interpersonal Communication 3
- 3. A course in Mathematics**
 * MAT 1730 Calculus I4 MATH 120 Calculus I 4
- 4. Two courses in Natural Sciences from different disciplines (one lab required)**
 Choose two from the approved MTA list7-8 General Transfer Credit 7-8
- 5. Two courses in Humanities and Fine Arts from different disciplines**
 PHI 1710 Introduction to Formal Logic3 PHIL 120 Introduction to Critical Reasoning 3
 Choose one from the approved MTA list3 General Transfer Credit 3
- 6. Two courses in Social Sciences from different disciplines**
 Choose two from the approved MTA list6 General Transfer Credit 6

EMU's Perspectives on a Diverse World Requirement: Transfer students are required to complete one course that meets the diversity requirement. The course may also fulfill an MTA requirement at OCC. The following courses can be used to fulfill MTA requirements above. **Communication:** COM 2290; **Natural Science:** BIO 1500; **Humanities:** ENG 1610, 2540, 2570; HIS 1520; MUS 1585; **Social Sciences:** ANT 1540; GEO 1520; HIS 1520, 1550, 2610, 2620; POL 2530, 2610; SOC 2620

These courses apply, but do not satisfy the MTA: BUS 2150; GLS 2510, 2520; HIS 1661; PSY 2730; SOC 2530, 2560

OCC Program Requirements – Choose one (33- 46 credits)

Certificate – Software Engineering (33-34 credits)

- | | |
|---|--|
| CIS 1200 Introduction to Database Systems4 | BMMT 000 General Transfer Credit 4 |
| * CIS 1500 Introduction to Programming (Java)4 | COSC 111/112 Introduction to Programming 4 |
| CIS 1512 Principles of Software Engineering3 | COSC 000 General Transfer Credit 3 |
| * CIS 2353 Data Structures4 | COSC 211/212 Programming Data Structures 4 |
| CIS 2991 Special Project in Software Engineering3 | COSC 000 General Transfer Credit 3 |
| Focus Area Coursework15-16 | Variable Credits 15-16 |

AAS in CIS – Software Engineering Option (46 credits)

- | | |
|--|--|
| CIS 1200 Introduction to Database Systems4 | BMMT 000 General Transfer Credit 4 |
| CIS 1300 Networking Concepts4 | IT 110 Concepts of Network + Business Tech 4 |
| CIS 1420 HTML5 Programming3 | CMT 000 General Transfer Credit 3 |
| CIS 1440 JavaScript Programming for Websites4 | COSC 000 General Transfer Credit 4 |
| * CIS 1500 Introduction to Programming (Java)4 | COSC 111/112 Introduction to Programming 4 |
| CIS 1512 Principles of Software Engineering3 | COSC 000 General Transfer Credit 3 |
| CIS 2111 Systems Analysis and Design (UML)4 | ISAC 000 General Transfer Credit 4 |
| CIS 2151 Object-Oriented Programming (Java)4 | COSC 000 General Transfer Credit (or COSC 111/112) 4 |
| CIS 2252 Object-Oriented Programming (C++)4 | IS 000 General Transfer Credit (or COSC 111/112) 4 |
| * CIS 2353 Data Structures4 | COSC 211/212 Programming Data Structures 4 |
| CIS 2454 Web System Development (PHP, Java)4 | IS 000 General Transfer Credit 4 |
| CIS 2818 Mobile Application Development (Android)4 | COSC 000 General Transfer Credit 4 |

EMU Requirements and Electives that may be taken at OCC or EMU (0-9 credits)

- | | |
|---|-----------------------------------|
| Open Elective Credit (consult with an advisor)0-9 | General Transfer Credit 0-9 |
|---|-----------------------------------|

Students may transfer up to 72 credits to apply to the BS in Computer Science Applied. The degree does not require a minor.

Credits at OCC:72-79 Credits that transfer to EMU 72-79

**Required for EMU's BA in Computer Science, BS in Computer Science Applied, BS in Computer Science Curriculum program. If not transferred, must be completed at EMU.*

ARTICULATION AGREEMENT GUIDE

Oakland Community College – **AAS or Certificate in CIS - Software Engineering Option**
 Eastern Michigan University – **BS in Computer Science Applied**

Completion of the BS in Computer Science Applied

Major Requirements (48 credits)

Program Requirements (28 credits)

STAT 360	Statistical Methods	3
COSC 221	Computer Organization	3
COSC 231	Internet Based Computing	3
COSC 311	Algorithms and Data Structures.....	4
COSC 314	Computational Discrete Structures.....	4
COSC 341	Programming Languages	4
COSC 381	Software Engineering Solutions	4
¹ COSC 481W	Software Engineering & Senior Project	3

Restricted Electives (20 credits)

Select 20 credit hours from the following. Only one 300-level course may be used to satisfy this requirement.

COSC 315	Symbolic Computing.....	4
COSC 321	Computer Organization II	4
COSC 374	Applied Cryptography	4
COSC 405	Switching Theory	4
COSC 411	Algorithm Design and Analysis.....	4
COSC 421	Systems Programming	4
COSC 422	Introduction to Microprocessors	4
COSC 423	Computer Operating Systems	4
COSC 426	Software Development for Mobile Devices.....	4
COSC 436	Web Programming.....	4
COSC 439	Computing Network Principles	4
COSC 444	Foundations of Automata and Languages.....	4
COSC 445	Compiler Construction	4
COSC 456	Computer Graphics	4
COSC 457	Computer Game Programming	4
COSC 461	Introduction to Artificial Intelligence	4
COSC 462	Introduction to Informal Retrieval.....	4
COSC 471	Database Principles.....	4
COSC 472	Big Data I.....	4
COSC 473	Big Data II.....	4
COSC 480	Special Topics	4

¹ Satisfies EMU's Writing Intensive requirement.

LBC Requirement

Students must complete one Learning Beyond the Classroom course or noncredit experience offered by EMU. Consult your advisor for options.

Minimum Credits at EMU:	48
Transfer Credits:	72-79
Minimum Total Credits:	120-127

ARTICULATION AGREEMENT GUIDE

Oakland Community College – AAS or Certificate in CIS - Software Engineering Option
Eastern Michigan University –BS in Computer Science Applied

Additional Information:

1. Each institution will determine the satisfaction of their individual program and degree requirements. Both institutions agree to accept transferable courses from each other and from other regionally accredited institutions. OCC courses indicated with an * are required for EMU’s BA in Computer Science, BS in Computer Science Applied, or BS in Computer Science Curriculum. Substitutions for these courses must be approved by the EMU program coordinator.
2. Students with the MTA endorsement on their community college transcript have satisfied EMU’s General Education Core Requirements and will be required to complete only the General Education Application Requirements of one “Perspectives on a Diverse World” course, one “Learning Beyond the Classroom” experience, and a “Writing Intensive” course in the major. The Perspectives on a Diverse World requirement may be transferred to EMU.
To use the Michigan Transfer Agreement (MTA), students must have an official community college transcript, with the “MTA Satisfied” endorsement sent to EMU’s Admissions Office. Students who do not have “MTA Satisfied” on their community college transcript, will be required to satisfy EMU’s general education requirements as applied to transfer students. The MTA may be completed after admission to EMU, however, students should inform their advisors or they may be advised to complete additional courses for the general education program. If already on the transcript, the MACRAO designation will be accepted at EMU after August 2019.
3. Only courses with a grade of “C” or better (2.0 on a 4.0 scale) will be accepted for transfer to either institution.
4. Under this agreement, EMU will waive the 60-hour rule and require that a minimum of 48 credit hours must be completed in EMU courses, with at least 15 hours in the program or (9 hours in the major and 6 hours in the minor), at the 300-level or above. Of the last 30 hours completed before graduating, a minimum of 10 credit hours must be in courses offered by EMU. A minimum of 120 credit hours, completed in-residence or accepted in transfer, is required for graduation.
5. Students must satisfy all admission requirements at the time of application for admission to EMU, including submitting transcripts from all previously attended colleges. OCC students will receive equal consideration with other students for course registration and financial aid.
6. Students are encouraged to contact EMU’s Undergraduate Admissions Office before applying to EMU. To facilitate advising and the evaluation of transcripts, bring a copy of this articulation guide to all advising sessions.

Effective Date: September 1, 2024 until August 31, 2027.

This is a renewal of an agreement made in September 2021. This agreement is consistent with the 2024-2025 catalog. Students have until summer 2032 to graduate from Eastern Michigan University following this agreement. In the event that a student does not complete the program within seven years, they may be required to have their credits reevaluated using the requirements of the current articulation guide.

Contacts:

Oakland Community College

Auburn Hills: 248.232.4350
Royal Oak: 248.246.2464
Southfield: 248.233.2750
Highland Lakes: 248.942.3050
Orchard Ridge: 248.522.3450

Eastern Michigan University

Undergraduate Admissions
Student Center Suite 220
734.487.6453; transfer_admissions@emich.edu
[Schedule an appointment](#)