

**ARTICULATION AGREEMENT GUIDE**

Wayne County Community College District – AAS in Computer Information Systems  
 Eastern Michigan University - BS in Computer Science Curriculum

**Wayne County Community College District Courses: Eastern Michigan University Courses:**

**Michigan Transfer Agreement (MTA) Requirements (30 credits)**

Students with the MTA endorsement on their community college transcript have satisfied EMU’s General Education Core Requirements. Courses listed below for the MTA also satisfy program requirements at EMU and/or WCCCD. For WCCCD approved MTA courses go to WCCCD’s website. Students without an MTA or MACRAO endorsement must complete EMU’s general education program.

<b>1. A Course in English Composition</b>		
ENG 119 English I.....	3	WRTG 120 Composition I ..... 3
<b>2. A Course in English Composition or Communication</b>		
SPH 101 Fundamentals of Speech.....	3	COMM 124 Found of Speech Communication ..... 3
<b>3. A Course in Mathematics</b>		
* MAT 171 Analytics Geometry & Calculus I.....	5	MATH 120 Calculus I (4)+1 (GEQR) ..... 5
<b>4. Two courses in Natural Sciences from different disciplines (one lab required)</b>		
Choose one from the following for the science sequence .....	4	First course in the science sequence ..... 4
CHM 136 (4), GEL 210 (4) or PHY 265 (4).....		CHEM 121/122 (4), ESSC 110 (4), PHY 223 (5)
Choose one from the approved MTA list .....	4	General Transfer Credit..... 4
<b>5. Two courses in Humanities from different disciplines</b>		
Choose two from the approved MTA list .....	6	General Transfer Credit..... 6
<b>6. Two courses in Social Sciences from different disciplines</b>		
PS 101 American Government.....	3	PLSC 112 American Government ..... 3
Choose from the approved MTA list .....	3	General Transfer Credit..... 3

\* **EMU’s Perspective 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 WCCCD. The following courses can be used to fulfill MTA requirements above. **Humanities:** AAS 253; ENG 212, 260, 261, 266, 290, 292; HUM 126; MWS 102; **Social Science:** AAS 120, 131, 140, 150, 175, 180, 253; ANT 152, 154; HIS 152, 261, 262; MWS 101, 103, 106, 107, 114; PS 160; SOC 230.

**These courses apply to the diversity requirement, but do not satisfy the MTA:** COR 218, ECE 210; GEG 202; GER 110; PLT 260; SED 101; MGT 210.

**WCCCD AAS in Computer Information Systems Requirements (30 credits)**

CIS 110 Introduction to Computer Information Systems .....	4	IS 000 General Transfer Credit..... 4
CIS 112 Structured Design.....	3	COSC 000 General Transfer Credit..... 3
CIS 120 Introduction to Database Concepts .....	3	IS 000 General Transfer Credit..... 3
CIS 200 Python Programming Language .....	4	COSC 000 General Transfer Credit..... 4
CIS 201 C# Programming Language.....	4	COSC 000 General Transfer Credit..... 4
* CIS 207 Java Programming Language.....	4	COSC 111/112 Introduction to Programming..... 4
CIS 210 Introduction to Operating Systems .....	3	ISAC 000 General Transfer Credit..... 3
CIS 212 Linux .....	4	IA 212 Open Source Platform & Network Admin..... 3
CIS 240 Networking Essentials .....	3	IT 110 Concepts of Business and Network Tech..... 3
CIS 241 Internet Foundations.....	4	AACR GEN General Transfer Credit..... 4
CIS 260 System Analysis and Design .....	3	IS 000 General Transfer Credit..... 3

**EMU Requirements that May be Taken at WCCCD or EMU (12-13 credits)**

*Choose two from: MAT 172, MAT 272, MAT 271, MAT 273....	8	MATH 121, MATH 122, MATH 223, MATH 325 (6-7) ..... 8
* Complete the second course in the science sequence .....	4-5	Second course of required science sequence:..... 4-5
CHM 145, or PHY 275		CHEM 123/124, or PHY 224

*Students who completed GEL 210 will complete the second course in the sequence, ESSC 111, at EMU.*

**Credits at WCCCD: ..... 72-73 Credits that transfer to EMU ..... 72-73**

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

All of the EMU Computer Science Programs offer a mix of theory that prepares students for career employment in computer science fields such as systems programming and analysis, software development and maintenance, as well as applications programming. **The Computer Science Curriculum Major** is the most rounded computer science degree. It includes additional Mathematical and Science requirements that better prepare students for graduate school post the bachelor’s degree. [Read more about the Computer Science programs on our website.](#)

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**Completion of the BS in Computer Science Curriculum****Major Requirements (56 credits)**

Students who choose the Biology or Earth Science “science sequence” option must complete the coursework at EMU.

**Mathematics Requirements (3 credits)**

STAT 360 Statistical Methods .....3

**Required Computer Science Courses (33 credits)**

COSC 211 Programming Data Structures..... 3  
 COSC 212 Programming Data Structures Online Lab ... 1  
 COSC 221 Computer Organization I..... 3  
 COSC 231 Internet-based Computing..... 3  
 COSC 311 Algorithms and Data Structures .....4  
 COSC 314 Computational Discrete Structures .....4  
 COSC 321 Computer Organization II.....4  
 COSC 341 Programming Languages.....4  
 COSC 381 Software Engineering Solutions .....4  
<sup>1</sup>COSC 481W Software Engineering and Senior Project .....3

**Restricted Elective Courses (20 credits)**

Five courses from the following: ..... 20

A minimum of two courses must be from List A and the remaining courses may be selected from either list.

## List A

COSC 423 Computer Operating Systems (4)  
 COSC 439 Computing Network Principles (4)  
 COSC 444 Found of Automata & Languages (4)  
 COSC 471 Database Principles (4)

## List B

COSC 374 Applied Cryptography (4)  
 COSC 411 Algorithm Design & Analysis (4)  
 COSC 421 Systems Programming (4)  
 COSC 422 Intro to Microprocessors (4)  
 COSC 426 Software Dvlpmnt for Mobile Devices (4)  
 COSC 436 Web Programming (4)  
 COSC 445 Compiler Construction (4)  
 COSC 456 Computer Graphics (4)  
 COSC 457 Computer Game Programming (4)  
 COSC 461 Heuristic Programming (4)  
 COSC 462 Introduction to Information Retrieval (4)  
 COSC 472 Big Data I (4)  
 COSC 473 Big Data II (4)  
 COSC 480 Special Topics (4)

<sup>1</sup> Fulfills EMU’s Writing Intensive requirement.

**LBC Requirement**

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

**Credits at EMU: ..... 56**

**Transfer Credits: ..... 72-73**

**Total Credits: ..... 128-129**

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#### 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. WCCCD 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 56 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. WCCCD 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, 2023 until August 31, 2026.**

This agreement is consistent with the 2023-2024 catalog. Students have until summer 2031 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:**

**Wayne County Community College District**

**Eastern Michigan University**  
EMU Undergraduate Admissions  
Student Center, Ste. 220  
734.487.6453  
[transfer\\_admissions@emich.edu](mailto:transfer_admissions@emich.edu)  
[Schedule an appointment](#)