

COMPUTER SCIENCE - APPLIED ARTICULATION AGREEMENT GUIDE

Washtenaw Community College – **AS in Computer Science: Programming in Java**
 Eastern Michigan University – **BS in Computer Science Major - Applied**

Washtenaw Community College Courses:

Transfer to Eastern Michigan University:

Michigan Transfer Agreement (MTA) Requirements (30 credits)

Students with an 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 major requirements at EMU. For WCC courses approved to satisfy the MTA go to <http://www.wccnet.edu/services/transferresources/mta/>. Students who do not have the MTA or MACRAO endorsement must complete EMU's general education program.

1. A Course in English Composition

ENG 111 Composition I..... 4 WRTG 121 Composition II (3)+1 4

2. A Course in English Composition or Communication

Choose from the approved MTA list..... 3 University Elective 3

3. A Course in Mathematics

¹MTH 176 College Algebra..... 4 MATH 105 College Algebra (3)+1..... 4

4. Two courses in Natural Sciences from different disciplines (one lab required)

Choose from the approved MTA list 7-8 University Electives 7-8

5. Two courses in Humanities from different disciplines

Choose two from the approved MTA list 6 University Elective 6

6. Two courses in Social Sciences from different disciplines

Choose from the approved MTA list 6 University Elective 6

If needed, complete additional courses in any of the above categories to satisfy the 30 credit minimum for the MTA

EMU's Perspectives on a Diverse World requirement: Complete one course from the following list:

These courses also satisfy an MTA area: **Communication:** COM 225; **Natural Science:** ENV 101, 105; **Humanities:** ART 143, 150; COM 225; DAN 180; DRA 180; ENG 181, 213, 214, 224, 242; HUM 150, 175, 221; MUS 180; **Social Science:** ANT 201; ECO 280; GEO 101; HST 109, 123, 150, 230, 235; PSY 251, 270; SOC 205. **These courses apply, but do not satisfy the MTA:** CCP 251

WCC AS in Computer Science: Programming in Java Requirements (31 credits)

CIS 121 Linux/UNIX I: Fundamentals..... 4	IA 212 University Elective (3)+1..... 4
CIS 282 Database Principles and Application 3	IS 000 University Elective 3
*CPS 161 An Introduction to Programming with Java..... 4	COSC 111 & 112 Intro to Programming 4
CPS 251 Android Programming using Java 4	AACR Gen Credit..... 4
*CPS 261 Advanced Java Concepts..... 4	COSC 211 & 212 Programming Data Structures 4
*CPS 276 Web Programming using Apache, MySQL, or PHP4	COSC 231 Internet Based Computing (3)+1..... 4
CPS 278 Java Server Programming..... 4	AACR Gen Credit (or COSC 111/112) 4
CPS 298 Professional Team Programming..... 4	AACR Gen Credit..... 4

EMU Requirements that May be Taken at WCC or EMU (18 credits)

* MTH 191 Calculus I (Elective at WCC)..... 5	MATH 120 Calculus I (4)+1 5
Open Electives 13	University Electives 13

Credits at WCC: 79 Credits that transfer to EMU 79

*This course is required for EMU's Computer Science Major - Applied.

¹ Prerequisite for Calculus I. If students initially place into Calculus I, College Algebra isn't required.

Sign up with us: If you let us know you are using this articulation agreement we can stay in touch with you and provide information and advising to you while you are still at your community college. Sign up at: <https://www.emich.edu/ccr/articulation-agreements/signup.php>

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Completion of EMU’s BS in Computer Science Major-Applied

Major Requirements (45 credits)

Mathematics Requirements (3 credits)

STAT 360 Statistical Methods3

Required Computer Science Courses (22 credits)

COSC 221 Computer Organization I3
 COSC 311 Algorithms and Data Structures4
 COSC 314 Computational Discrete Structures4
 COSC 341 Programming Languages4
 COSC 381 Software Engineering Solutions4
 COSC 481W Software Engineering and Senior Project3

Restricted Elective Courses (20 credits)

Five courses from the following:20
 Only one 300-level course may be used to satisfy this requirement.

- COSC 315 Symbolic Computing
 or COSC 321 Computer Organization
 or COSC 374 Applied Cryptography
- COSC 405 Switching Theory
- COSC 421 Systems Programming
- COSC 422 Intro to Microprocessors
- COSC 423 Computer Operating Systems
- COSC 426 Software Dvlpmnt for Mobile Devices
- COSC 436 Web Programming
- COSC 439 Computing Network Principles
- COSC 444 Found of Automata & Languages
- COSC 445 Compiler Construction
- COSC 456 Computer Graphics
- COSC 457 Computer Game Programming
- COSC 461 Heuristic Programming
- COSC 462 Introduction to Information Retrieval
- COSC 471 Database Principles
- COSC 472 Big Data I
- COSC 473 Big Data II
- COSC 480 Special Topics (4)

LBC Requirement

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

Credits at EMU: 45
Transfer Credits 79
Minimum Credits to Graduate: 124

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Additional information:

1. Each institution will determine the satisfaction of their individual program and degree requirements. Both WCC and EMU agree to accept transferrable courses from each other and from other regionally accredited institutions. WCC courses indicated with an * are required for EMU's BS in Computer Science. 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. Students who enrolled in college prior to fall semester 2014 will have until the end of summer semester 2019 to complete the MACRAO agreement. 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 45 credit hours must be completed at the four-year college level, of which 30 hours must be in courses offered by EMU at the 300-level or above. Of the last 30 hours completed before graduating, at least 10 hours must be in courses offered by EMU. A minimum of 124 credit hours, completed in-residence or accepted in transfer, is required for graduation.
5. A minimum cumulative GPA of 2.0 is required for admission to EMU. Students must meet all admission requirements at the time of application for admission to EMU, including submitting transcripts from all previously attended colleges. WCC students will receive equal consideration with other students for course registration and financial aid.
6. Students are encouraged to contact the computer science major advisor before applying to EMU. To facilitate advising and the evaluation of transcripts, sign up for this articulation agreement using the link <https://www.emich.edu/ccr/articulation-agreements/signup.php>, and bring a copy to all advising sessions.

Effective Dates: September 1, 2017 until August 31, 2020.

This is an updated guide of the September 2017 renewal of an agreement made in September 2009 and renewed in January 2013. This guide is consistent with the 2019-2020 catalog. Students have until summer 2027 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:

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