## ARCHIVED COMPUTER SCIENCE ARTICULATION AGREEMENT GUIDE

## Schoolcraft College - AAS in CIS: Programming

 Eastern Michigan University - BA in Computer ScienceSchoolcraft College Courses: Transfer to Eastern Michigan University:
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 and willbe required to complete only the EMU General Education Application Requirements of one Perspectives on a Diverse World course, one Learningbeyond the Classroom experience, and one Writing Intensive course in the major. Specific courses listed below for the MTA will also satisfyprogram requirements at Schoolcraft and/or EMU. For courses approved by Schoolcraft to satisfy the MTA go to Schoolcraft's website. Studentswho do not have a MACRAO or MTA endorsement must complete EMU's general education program.

1. A Course in English Composition ENG 101 English Composition 1 . 3 University Elective ..... 3
2. A Second Course in English Composition or Communication ENG 102 English Composition 2 ..... 3
University Elective ..... 3
3. A Course in Mathematics *MATH 126 College Algebra (in place of MATH 102, 113)......... 4 MATH 105 College Algebra ..... 4
4. Two Natural Science courses from different disciplines (one lab required) Choose from the approved MTA list ...................................7-8 University Elective ..... 7-8
5. Two Humanities courses from different disciplines COMA 103 Fundamentals of Speech ..... 3
CTAC 124 Foundations of Speech Communication ..... 3
Choose from the approved MTA list . 6 University Electives ..... 6
6. Two Social Science courses from different disciplines Choose one of the following: POLS 105; PSYCH 153 or 201 .3-4 University Electives ..... 3-4
Choose from the approved MTA list . 3 University Electives ..... 3
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: Natural Science: BIOL 104; GEOG 212; Humanities: ENG 170, 275; HIST 138; HUM 201,202, 203, 204; Social Sciences: ANTH 112, 201, 214; GEOG 133; HIST 138; POLS 207, 209; SOC 210These courses apply, but do not satisfy the MTA: BUS 240; CCD 217; EDUC 200; SPE 100
Schoolcraft CIS: Programming Requirements (43-44 credits)
CIS 115 Introduction to Computer Based Systems. . 3 IS 215 Information Systems for Business ..... 3
*CIS 129 Introduction to Programming Logic (3) and0*CIS 290 Object-Oriented Programming w/Java (3).................. 6 COSC 111/112 Intro to Computer Programming (4)+2
6
CIS 176 Visual Basic.NET . 3 BMMT 000 University Elective ..... 3
*CIS 211 Introduction to $\mathrm{C}++$ (2) and
*CIS 221 Advanced C++ (2)................................................ 4 ..... 4
COSC 211/212 Programming Data Structures ..... 4
CIS 225 Database Management Systems.3
*CIS 238 JavaScript (Program Elective). .....  3
CIS 250 Systems Development and Design ..... 4
CIS 255 Introduction to Linux .....  3
IS 000 University Elective ..... 3
COSC 231 Internet Based Computing ..... 3
IA 212 University Elective ..... 3CNT 115 Cybersecurity Fundamentals 3
IS 000 University Elective ..... 4
ISAC 000 University Elective ..... 3Choose one of the following: CIS 170 or 178 3
Choose 8-9 credits from the following
Choose 8-9 credits from the following ..... 8-9 ..... 8-9
University Electives ..... 8-9CIS 120, 122, 171, 185, 223, 238, 251
BMMT 000 University Elective ..... 3Credits at Schoolcraft:.73-74 Credits that transfer to EMU73-74

[^0]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 toyou while you are still at your community college.

## ARCHIVED COMPUTER SCIENCE ARTICULATION AGREEMENT GUIDE Schoolcraft College - AAS in CIS: Programming Eastern Michigan University - BA in Computer Science

## Completion of EMU's BA in Computer

## Science

## Major Requirements <br> (34 credits)

Required Computer Science Courses ( 22 credits)
COSC 221 Computer Organization I ................................. 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
COSC 481W Software Engineering and Senior Project........... 3

## LBC Requirement

Students must complete one Learning Beyond the
Classroom course or noncredit experience offered by EMU.
Consult advisor for options.
Minor Requirement (15-20 credits)
Students must complete a minor of at least 20 hours. Some of those hours may be completed at SC. At least 6 credits must be completed at EMU at the 300 level or above. Some minors are more than 20 hours.

Minimum Credits at EMU:.............................................. 49
Transfer Credits: .......................................................73-74
Minimum Credits to Graduate:..................................... 120

| Restricted Electives (12 credits) |  |
| :--- | :--- |
| COSC 374 | Applied Cryptography |
| COSC 421 | Systems Programming |
| COSC 423 | Computer Operating Systems |
| COSC 426 | Soffware Dvlpmnt for Mobile Devices |
| COSC 436 | Web Programming |
| COSC 439 | Computing Network Principles |
| COSC 445 | Compiler Construction |
| COSC 456 | Computer Graphics |
| COSC 457 | Computer Game Programming |
| COSC 461 | Heuristic Programming |
| COSC 471 | Database Principles |
| Choose two courses from below or above, not already taken |  |
| COSC 315 | Symbolic Computing |
| COSC 321 | Computer Organization II |
| COSC 405 | Switching Theory |
| COSC 411 | Algorithm Design \& Analysis |
| COSC 422 | Intro to Microprocessors |
| COSC 444 | Found of Automata \& Languages |
| COSC 462 | Introduction to Information Retrieval |
| COSC 472 | Big Data I |
| COSC 473 | Big Data II |
| COSC 480 | Special Topics |

# ARCHIVED COMPUTER SCIENCE ARTICULATION AGREEMENT GUIDE Schoolcraft College - AAS in CIS: Programming Eastern Michigan University - BS in Computer Science - Applied, BS in Computer Science Curriculum, or a BA in Computer Science 

## Additional information:

1. Each institution will determine the satisfaction of their individual program and degree requirements. Both Schoolcraft and EMU agree to accept transferrable courses from each other and from other institutions. Schoolcraft courses indicated with an * are required for EMU's BS in Computer Science or the BA 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. 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 with at least 30 hours in EMU courses, 15 hours of which must be in program requirements 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. Schoolcraft students will receive equal consideration with other students for course registration and financial aid.
6. Students are encouraged to contact EMU's Francine Parker Advising Center before applying to EMU. To facilitate advising and the evaluation of transcripts, sign up for this articulation agreement and bring a copy of this articulation guide to all advising sessions.
Effective Dates: September 1, 2019 until August 31, 2022
This agreement 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:

Schoolcraft College
Academic Advising
McDowell 175
734.462.4429
eadvise@schoolcraft.edu

Eastern Michigan University
Francine Parker Advising Center
Student Center, Room 120
734.487.4599
francineparker_advising@emich.edu


[^0]:    *This course is required for EMU's Computer Science Major-Applied.

