

**MC ASSOCIATE OF ARTS IN COMPUTER SCIENCE & TECHNOLOGIES
INFORMATION SCIENCES & SYSTEMS AREA OF CONCENTRATION**

Students transferring from MC with a conferred Associate of Arts or Associate of Science degree will have the General Education Requirement (Gen Ed) block of courses met at UMGC (A.A.S. degrees not included). See community college advisor for course sequencing.

UMGC BACHELOR OF SCIENCE IN COMPUTER SCIENCE
UMGC Maryland Community College Alliances

Degree requirements may change based on date of initial enrollment at UMGC.

CREDITS	MONTGOMERY COLLEGE Requirements for Associate's Degree	UNIVERSITY OF MARYLAND GLOBAL CAMPUS Requirements for Bachelor's Degree
3	ENGL 101 or ENGL 101A recom'd elective ^^	WRWG elective (Gen Ed Communications)
4	MATH 181 recom'd Mathematics Foundation Gen Ed req	MATH 140 (Gen Ed Mathematics; related requirement to the major)
3	CMSC 110 Program requirement	IFSM 201 (elective)
3	Arts Distribution Gen Ed requirement	Gen Ed Arts & Humanities
3	Behavioral and Social Sciences Distribution Gen Ed req ^^^	Gen Ed Behavioral & Social Science
3	ENGL 102 recom'd English Foundation Gen Ed requirement	WRWG 112 (Gen Ed Communications; <i>must be completed with C- or better</i>)
3	CMSC 140 Program requirement	CMSC 105 (Gen Ed Computing; related requirement to major)
4	MATH 182 recom'd Program elective †	MATH 141 (elective; related requirement to the major)
3	Arts or Humanities Distribution or Health Gen Ed req ‡	Elective
4	Natural Sciences Distribution w/ Lab Gen Ed requirement	Gen Ed Biological & Physical Lab Science
3	CMSC 243 Program requirement	IFSM 461* (elective)
3	Behavioral and Social Sciences Distribution Gen Ed req ^^^	Gen Ed Behavioral & Social Science
3	Humanities Distribution Gen Ed requirement	Gen Ed Arts & Humanities
3	CMSC 201 recom'd Program elective ††	♦ CMSC 115 (required for the major)
4	CMSC 203 recom'd Program elective ††	♦ CMSC 215 (required for the major)
3	COMM 108 or COMM 112 Gen Ed requirement	SPCH 100 or SPCH elective (Gen Ed Communications)
4	CMSC 207 recom'd Program elective ††	CMSC 150 (elective; related requirement to the major)
4	CMSC 204 recom'd Program elective ††	♦ CMSC 315* (required for the major)
3	Natural Sciences Distribution w/ out Lab Gen Ed requirement	Gen Ed Biological & Physical Science
62	Total Credits Transferred	Total Credits Transferred

REMAINING REQUIREMENTS FOR BACHELOR'S DEGREE	CREDITS
LIBS 150 Introduction to Research or any Gen Ed credit (to be fulfilled with 1 Gen Ed credit from MC)	--
PACE 111T Program and Career Exploration in Technology or any PACE 111	3
♦ CMSC 310 Computer Systems and Architecture (required for the major)	3UL
Elective	3
♦ CMIT 265 Fundamentals of Networking (required for the major)	3
♦ CMSC 320 Relational Database Concepts and Applications (required for the major)	3UL
Elective	3
♦ CMSC 330 Advanced Programming Languages (required for the major)	3UL
Elective	3
WRWG 393 Advanced Technical Writing or any upper-level writing (Gen Ed Communications)	3UL
Elective	3
♦ CMSC 335 Object-Oriented and Concurrent Programming (required for the major)	3UL
Elective	3
♦ CMSC 345 Software Engineering Principles and Techniques (required for the major)	3UL
Elective	3
♦ CMSC 430 Compiler Theory and Design (required for the major)	3UL
Elective	3
♦ CMSC 451 Design and Analysis of Computer Algorithms (required for the major)	3UL
Elective	3
♦ CMSC 495 Computer Science Capstone (required capstone for the major)	3UL
Elective	1
TOTAL CREDITS REMAINING AT UMGC	58

NOTES: Minimum of 120 credits, including 30 with UMGC of which at least 15 must be upper-level (courses numbered 300-499), are required for the bachelor's degree with a UMGC grade point average (GPA) of 2.0 (C) or higher / At least one-half of the credits within the major and minor must be comprised of: a. traditional college courses earning a grade (except for the CJLE major); b. UMGC resident coursework (except for the APTC, CJLE, and GECU majors, which require only the major capstone as UMGC resident credit) / No course within the major or minor below the grade of C (2.0) / UMGC does not accept grades below a C (2.0) in transfer from schools outside of the University System of Maryland and the Maryland community colleges (except WRWG 112 which must be completed with a grade of C- (1.67) or better from all schools) / Maximum of 70 transfer credits to UMGC from two-year or community colleges & maximum of 90 transfer credits from all sources combined (actual number of transfer credits dependent on meeting all UMGC bachelor's degree requirements) / ♦¹ = Course in major at UMGC / *² = Lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL³ = Upper-level course (numbered 300-499)

MONTGOMERY COLLEGE NOTES:

¹ ♦ Course in major at UMGC

² * Lower-level course meets content requirement of upper-level course but does not transfer as upper-level

³ UL Upper-level course (numbered 300-499)

- ⁴ = ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective. Please consult an advisor or transfer institution for assistance with course selection.
- ⁵ = Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines.
- ⁶ † = Many, but not all four-year institutions require MATH 150 or MATH 181 as a Mathematics foundation. Students should consult with an advisor regarding the requirements of transfer institutions.
- ⁷ †† = Students should consult an advisor regarding the requirements of transfer institutions. For some institutions, MGMT 201 may be appropriate, for others (e.g., The Smith School at the University Maryland) another course will be more appropriate. If necessary, use as needed to fill the 60-credit requirement.
- ⁸ ‡ = Students must complete one Global or Cultural Perspectives designated course as part of their General Education Program to graduate

⁴ ⁴ ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective.

⁵ ⁵ Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines.

⁶ † Many, but not all four-year institutions require MATH 150 or MATH 181 as a Mathematics foundation. Students should consult with an advisor regarding the requirements of transfer institutions.

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⁸ ‡ Students must complete one Global or Cultural Perspectives designated course as part of their General Education Program to graduate.