



**MC ASSOCIATE OF ARTS IN COMPUTER SCIENCE AND TECHNOLOGIES
INFORMATION SCIENCES AND SYSTEMS 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.



**UNIVERSITY OF MARYLAND
GLOBAL CAMPUS**

**CATALOG YEAR:
2022-2023**

UMGC BACHELOR OF SCIENCE IN COMPUTER SCIENCE

<http://www.umgc.edu/transfers-and-credits/community-college-alliances/maryland-community-college-alliances.cfm>

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 <i>or</i> ENGL 101A recom'd elective ^	WRTG 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	WRTG 112 (Gen Ed Communications; <i>must be completed with C- or better</i>)
3	CMSC 140 Program requirement	CMIS 102 (Gen Ed Computing; related req to major)
4	MATH 182 recom'd Program elective †	MATH 141 (elective; related requirement to the major)
3	Arts <i>or</i> Humanities Distribution <i>or</i> 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
4	CMSC 201 recom'd Program elective †	◆ CMIS 141 (required for the major)
3	CMSC 207 recom'd Program elective †	CMSC 150 (elective; related requirement to the major)
3	COMM 108 <i>or</i> COMM 112 Gen Ed requirement	SPCH 100 <i>or</i> SPCH elective (Gen Ed Communications)
4	CMSC 204 recom'd Program elective †	◆ CMSC 350* (required for the major)
3	CMSC 214 recom'd Program elective †	◆ CMIS 242 (required for the major)
3	Natural Sciences Distribution w/ out Lab Gen Ed requirement	Gen Ed Biological & Physical Science
62	Total Credits Transferred See next page for MC Notes	
REMAINING UMGc DEGREE REQUIREMENT RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE		
	LIBS 150 Introduction to Research or other Gen Ed course (to be fulfilled with 1 credit of CMSC 243 from MC)	---
	PACE 111T Program and Career Exploration in Technology or other PACE 111	3
	◆ CMIS 310 Computer Systems and Architecture (required for the major)	3UL
	Elective	3
	◆ SDEV 300 Building Secure Python Applications (required for the major)	3UL
	Elective	3
	◆ CMSC 330 Advanced Programming Languages (required for the major)	3UL
	WRTG 393 Advanced Technical Writing or other upper-level writing (Gen Ed Communications)	3UL
	Elective	3
	◆ CMSC 335 Object-Oriented and Concurrent Programming (required for the major)	3UL
	Elective	3
	◆ CMIS 330 Software Engineering Principles and Techniques (required for the major)	3UL
	Elective	3
	◆ CMIS 320 Relational Database Concepts and Applications (required for the major)	3UL
	Elective (must be taken upper-level)	3UL
	◆ CMSC 430 Compiler Theory and Design (required for the major)	3UL
	Elective (must be taken upper-level)	3UL
	◆ CMSC 451 Design and Analysis of Computer Algorithms (required for the major)	3UL
	Elective	3
	◆ CMSC 495 Current Trends and Projects in Computer Science (required capstone for the major)	3UL
	Elective	1
TOTAL CREDITS REMAINING AT UMGc		58
<p>NOTES: Minimum of 120 credits, including 36 upper-level (courses numbered 300-499) required for bachelor's degree with minimum 2.0 (C) grade point average (GPA) / No course within major or minor below 2.0 GPA / At least one-half of credits within major and minor comprised of: a. upper-level; b. UMGc resident; c. traditional college courses earning a grade / Maximum of 70 transfer credits to UMGc from 2-year or community college (actual number of transfer credits dependent on meeting all UMGc bachelor's degree requirements) / WRTG 112 completed with grade of 1.67 GPA (C-) or better / ◆ = Denotes course in major at UMGc / * = Denotes lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL = Denotes upper-level course</p>		

MONTGOMERY COLLEGE NOTES:

- ^ 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.
- ^^ Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines. Contact department advisor for transfer requirements for specific schools. Students applying to business schools should consider using economics as an elective because it meets transfer and BSSD requirements. If you have any questions, please see a department advisor.
- † List of program electives: CMSC, DATA, NWIT, CMAP; TECH 190, 200-level TECH courses; ACCT 221, ACCT 222, BSAD 101, ECON 201, ECON 202; MATH 165, MATH150 or MATH 181, MATH 182, MATH 117 or BSAD 210; MGMT 101, MGMT 211, PSYC 102. Four credits can be used to satisfy program electives. Select program electives based on transfer institution requirements. See an advisor for assistance and use ARTSYS for Maryland transfer school requirements, <http://artweb.usmd.edu>. Note: There must be at least 12 credits total at the 200-level for an AA degree.
- †† Please consult an advisor or the transfer institution before selecting institutional requirements.
- ‡ May be replaced by another CMSC course with departmental consent.