MC MONTGOMERY COLLEGE

UNIVERSITY OF MARYLAND GLOBAL CAMPUS

MC ASSOCIATE OF SCIENCE IN DATA SCIENCE

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 DATA SCIENCE

UMGC Maryland Community College Alliances

Degree requirements may change based on date of initial enrollment at UMGC. *UMGC Notes at bottom of this page. Montgomery College Notes on next page.*

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 ^^	WRTG elective (Gen Ed Communications)
4	MATH 181 recom'd Program elective	MATH 140 (Gen Ed Mathematics; related requirement to the major)
3	PSYC 100 Gen Ed requirement	PSYC 100 (Gen Ed Behavioral & Social Science)
3	COMM 108 or COMM 112 Gen Ed requirement	SPCH 100 or SPCH elective (Gen Ed Communications)
3	MATH 117 or MATH 217 Program requirement	♦ STAT 200 (required for the major)
3	ENGL 102 or ENGL 103 recom'd Gen Ed requirement	WRTG 112 (Gen Ed Communications; *must be completed with 'C-' or*
3	PHIL 140 Gen Ed requirement	PHIL 100 (Gen Ed Arts & Humanities)
3	GEOG 130 Gen Ed requirement	GEOG 110 (Gen Ed Behavioral & Social Science)
3	DATA 101 Program requirement	♦ DATA 320* (required for the major)
3	DATA 110 Program requirement	DATA 200 (Gen Ed Computing; related requirement to the major)
4	Natural Sciences Distribution w/ Lab Gen Ed requirement ††	Gen Ed Biological & Physical Lab Science
3	DATA 201 Program requirement	♦ DATA 300* (required for the major)
4	MATH 264 Program requirement †	MATH 340* (elective)
4	CMSC 206 recom'd Program elective ‡	CMSC 105 (elective)
3	Arts Distribution Gen Ed requirement	Gen Ed Arts & Humanities
4	Natural Sciences Distribution w/ Lab Gen Ed requirement ††	Gen Ed Biological & Physical Science
4	DATA 205 Program requirement	♦ DATA 335* (required for the major)
3	GEOG 240 recom'd Program elective ‡	GEOG elective
60	**Total Credits Transferred**	**Total Credits Transferred**

REMAINING REQUIREMENTS FOR BACHELOR'S DEGREE	CREDITS
LIBS 150 Introduction to Research or other Gen Ed credit (to be fulfilled with 1 Gen Ed credit from MC)	---
PACE 111T Program and Career Exploration in Technology or other PACE 111	3
♦ DATA 230 Mathematics for Data Science (required for the major)	3
Elective	3
♦ CSIA 300 Cybersecurity for Leaders and Managers (required for the major)	3UL
Elective	3
♦ IFSM 330 Business Intelligence and Data Analytics (required for the major)	3UL
Elective	3
WRTG 393 Advanced Technical Writing or other upper-level writing (Gen Ed Communications)	3UL
♦ DATA 430 Foundations of Machine Learning (required for the major)	3UL
Elective	3
♦ DATA 440 Advanced Machine Learning (required for the major)	3UL
Elective (must be taken upper-level)	3UL
♦ DATA 445 Advanced Data Science (required for the major)	3UL
Elective (must be taken upper-level)	3UL
♦ DATA 450 Data Ethics (required for the major)	3UL
Elective (must be taken upper-level)	3UL
♦ DATA 460 Artificial Intelligence Solutions (required for the major)	3UL
Elective	3
♦ DATA 495 Data Science Capstone (required capstone for the major)	3UL
Elective	3
TOTAL CREDITS REMAINING AT UMGC	**60**

NOTES: Minimum of 120 credits, including 36 upper-level required for bachelor's degree with minimum 2.0 ('C') grade point average (GPA) / Minimum of 30 UMGC resident credits of which at least 15 must be upper-level / 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 / No course within major or minor below 2.0 GPA ('C') / 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 / ♦1 = Course in major at UMGC / ∗2 = Lower-level course meets content requirement of upper-level course but does not transfer as upper-level / **UL**3 = Upper-level course (numbered 300-499)

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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)

MONTGOMERY COLLEGE NOTES:

- **^^**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 = Students may substitute MATH 284 for MATH 264.

- **††**7 = Students are strongly encouraged to take two consecutive lab sciences courses. Examples include BIOL 105/106 or CHEM 131/132 or PSCI 101/102 or PHYS 203/204.

- **‡**8 = Program Electives include: strongly recommended CMSC 206, CMSC 246, and GEOG 240; CMSC 206 and CMSC 246 will provide students with programming skills in Python and SQL and GEOG 240 provides foundational knowledge of Geographic Information Systems (GIS); other program electives may include any MATH, or CMSC course, or GEOG 130 or GEOG 260. Not all program elective options transfer to all institutions. Please consult a data science program advisor or the transfer institution before selecting program elective courses.

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4 ^^ ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective.
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.
8 ‡ Students must complete one Global or Cultural Perspectives designated course as part of their General Education Program to graduate.