

This guide aligns course articulations from a Montgomery College (MC) associate's degree to a UMGC bachelor's degree and additional bachelor's degree requirements for Academic Catalog year 2025-2026. See a community college advisor for associate degree course sequencing. UMGC degree requirements and course articulations may change based on your initial UMGC enrollment term. UMGC offers multi-term registrations in 8-week sessions. In your transfer year, meet with a UMGC advisor to plan your UMGC schedule.

CREDITS	MC AS IN DATA SCIENCE Requirements for Associate's Degree	UMGC BS IN DATA SCIENCE Requirements for Bachelor's Degree
3	ENGL 101 <i>or</i> ENGL 101A recom'd elective <sup>1</sup>	WRTG elective (Gen Ed Communications)
4	MATH 181 recom'd Mathematics Foundation Gen Ed req.	+ MATH 140 (Gen Ed Mathematics)
3	PSYC 100 Gen Ed requirement	PSYC 100 (Gen Ed Behavioral & Social Science)
3	COMM 108 <i>or</i> COMM 112 Gen Ed requirement	SPCH 100 <i>or</i> SPCH elective (Gen Ed Communications)
3	MATH 117 <i>or</i> MATH 217 Program requirement	♦ STAT 200 (required for the major)
3	ENGL 102 <i>or</i> ENGL 103 recom'd English Found. Gen Ed req.	WRTG 112 (Gen Ed Communications; <i>must be completed with C- or better</i> )
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)
4	Natural Sciences Distribution w/ Lab Gen Ed requirement <sup>2</sup>	Gen Ed Biological & Physical Lab Science
3	DATA 201 Program requirement	♦ DATA 300* (required for the major)
4	MATH 264 Program requirement <sup>3</sup>	MATH 340* (elective)
4	Program elective <sup>4</sup>	Elective
3	Arts Distribution Gen Ed requirement	Gen Ed Arts & Humanities
4	Natural Sciences Distribution w/ Lab Gen Ed requirement <sup>2</sup>	Gen Ed Biological & Physical Science
4	DATA 205 Program requirement	♦ DATA 335* (required for the major)
3	Any 200-level Program elective <sup>4</sup>	Elective
<b>60</b>	<b>Estimated Credits Transferred</b>	<b>Estimated Credits Transferred</b>

REMAINING BACHELOR'S DEGREE REQUIREMENTS (recommended sequence)	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
♦ 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
♦ DATA 330 Business Intelligence and Data Management (required for the major)	3UL
Elective	3
WRTG 393 Advanced Technical Writing or any upper-level writing (Gen Ed Communications)	3UL
♦ DATA 430 Foundations of Machine Learning (required for the major)	3UL
Elective	3
♦ ARIN 440 Advanced Machine Learning (required for the major)	3UL
Elective	3
♦ DATA 445 Advanced Data Science (required for the major)	3UL
Elective	3
♦ ARIN 450 Data Ethics (required for the major)	3UL
Elective	3
♦ ARIN 460 Artificial Intelligence Solutions (required for the major)	3UL
Elective	3
♦ DATA 495 Data Science Capstone (required capstone for the major)	3UL
Elective	3
<b>ESTIMATED CREDITS REMAINING AT UMGC</b>	<b>60</b>

**NOTES:** Minimum of 120 credits, including 30 with University of Maryland Global Campus (UMGC) of which at least 15 must be upper-level, are required for the bachelor's degree with a UMGC grade point average (GPA) of 2.0 (C) or higher / UMGC does not accept grades below C (2.0) in transfer from schools outside the University System of Maryland and Maryland community colleges (except WRTG 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 and maximum of 90 transfer credits from all sources combined (actual number of transfer credits dependent on meeting all UMGC bachelor's degree requirements) / ♦<sup>1</sup> = Major core, major elective, or capstone: all courses within the major require a grade of C (2.0) or higher, and all majors (except APTC, GECU, and CJLE, which require only the capstone as UMGC graded coursework) must complete at least half of these as 1) traditional college courses earning a grade and 2) UMGC resident credit / +<sup>2</sup> = Business core course or major related requirement / \*<sup>3</sup> = Lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL<sup>4</sup> = Upper-level course (numbered 300-499) / Visit [UMGC Maryland Community College Alliances](#) to learn more!

<sup>1</sup> ♦ Major core, major elective, or capstone

<sup>2</sup> + Business core course or major related requirement

<sup>3</sup> \* Lower-level course meets content requirement of upper-level course but does not transfer as upper-level

<sup>4</sup> UL Upper-level course (numbered 300-499)

## MONTGOMERY COLLEGE NOTES:

- <sup>5</sup> = ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or program elective.
- <sup>6</sup> = MATH 284 may be substituted for MATH 264.
- <sup>7</sup> = Students are strongly encouraged to take two consecutive lab sciences courses. Examples include CHEM 131/CHEM 132, PSCI 101/PSCI 102, PHYS 203/PHYS 204.
- <sup>8</sup> = Program electives: any MATH or CMSC course or GEOG 240 or GEOG 260. Department strongly recommends CMSC 140, CMSC 206, CMSC 246, or GEOG 240.
- For the Natural Sciences Distribution and Arts Distribution requirement, please see the full list of other acceptable General Education courses found under the General Education Program Requirements and Course Lists section of [MC Acceptable General Education Courses](#)

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<sup>7</sup> = Students are strongly encouraged to take two consecutive lab sciences courses. Examples include CHEM 131/CHEM 132, PSCI 101/PSCI 102, PHYS 203/PHYS 204.

<sup>8</sup> = Program Electives: any MATH or CMSC course or GEOG 240 or GEOG 260. Department strongly recommends CMSC 206, CMSC 246, and GEOG 240.