

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 AA IN GENERAL STUDIES: STUDIES IN STEM AOC with DATA SCIENCE CERTIFICATE OPTION	UMGC BS IN DATA SCIENCE Requirements for Bachelor's Degree
3	ENGL 101 <i>or</i> ENGL 101A recom'd elective <sup>^^</sup>	WRTG elective (Gen Ed Communications)
3	MATH 117 recom'd Mathematics Foundation Gen Ed req. <sup>‡</sup>	◆ STAT 200 (required for the major)
3	Behavioral and Social Sciences Distribution Gen Ed req. <sup>^^^</sup>	Gen Ed Behavioral & Social Science
3-4	Natural Sciences Distribution Gen Ed requirement	Gen Ed Biological & Physical Science
3	COMM 108 <i>or</i> COMM 112 recom'd Gen Ed requirement <sup>††</sup>	SPCH 100 or SPCH elective (Gen Ed Communications)
3	ENGL 102 <i>or</i> ENGL 103 English Foundation Gen Ed req. <sup>‡</sup>	WRTG 112 (Gen Ed Communications; <i>must be completed with C- or better</i> )
3	DATA 101 Program requirement <sup>†</sup>	◆ DATA 320* (required for the major)
3	DATA 110 Program requirement <sup>†</sup>	+ DATA 200 (Gen Ed Computing)
3	Any 200-level Humanities Distribution Gen Ed requirement	Gen Ed Arts & Humanities
4	Natural Sciences Distribution w/ Lab Gen Ed requirement	Gen Ed Biological & Physical Lab Science
3	Behavioral and Social Sciences Distribution Gen Ed req. <sup>^^^</sup>	Gen Ed Behavioral & Social Science
3	DATA 201 Program requirement <sup>†</sup>	◆ DATA 300* (required for the major)
3	GDES 116 <i>or</i> GDES 121 recom'd Arts Distribution Gen Ed req.	GRCO 100 or ARTT 120 (Gen Ed Arts & Humanities)
3	MATH 181 recom'd Program elective	+ MATH 140 (Gen Ed Mathematics)
3	200-level recom'd HLTH <i>or</i> ARTD <i>or</i> HUMD Gen Ed req. <sup>††</sup>	Elective
3	DATA 205 Program requirement <sup>†</sup>	◆ DATA 335* (required for the major)
3-4	MATH 182 <i>or</i> MATH 217 <i>or</i> CMSC 140 recom'd elective <sup>††</sup>	MATH 141, STAT elective, or CMSC 115 (elective)
3	Any 200-level elective	Elective
3	Any 200-level elective	Elective
2	Elective	Elective
<b>60-62</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 for the major)	3UL
Elective	1-3
<b>ESTIMATED CREDITS REMAINING AT UMGC</b>	<b>58-60</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](https://www.umgc.edu/umgc-allyoucanbe) 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> **AA** = ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or select a general elective.
- <sup>6</sup> **AAA** = Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines.
- <sup>7</sup> **†** = These courses are required for Data Science certificate.
- <sup>8</sup> **††** = Two general education institutional requirement (GEIR) courses are required from the following general education courses: COMM, HLTH, or one ARTD or HUMD. Students can only take one course from ARTD and HUMD to fulfill General Education Institutional Requirements.
- <sup>9</sup> **‡** = Students should attempt ENGL and MATH foundation requirements within completion of the first 24 credits of college-level work or at the completion of any prerequisite or required non-credit coursework.
- <sup>10</sup> **‡‡** = Prerequisite for MATH 217; if MATH 117 is taken to fulfill MATH foundation, MATH 181 or MATH 150 or MATH 165 and MATH 181 should be taken as electives to complete MATH 217.
- AA and AS programs require one global and cultural perspectives (GCP) General Education course.
- 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>6</sup> **AAA** Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines. Students must complete one Global and Cultural Perspectives course as part of their General Education program.

<sup>7</sup> **†** These courses are required for Data Science certificate.

<sup>8</sup> **††** Two general education institutional requirement (GEIR) courses are required from the following general education courses: COMM, HLTH, or one ARTD or HUMD. Students can only take one course from ARTD and HUMD to fulfill General Education Institutional Requirements.

<sup>9</sup> **‡** Students should attempt ENGL and MATH foundation requirements within completion of the first 24 credits of college-level work or at the completion of any prerequisite or required non-credit coursework.

<sup>10</sup> **‡‡** Prerequisite for MATH 217; if MATH 117 is taken to fulfill MATH foundation, MATH 181 or MATH 150 or MATH 165 and MATH 181 should be taken as electives to complete MATH 217.