

**MC ASSOCIATE OF ARTS IN GENERAL STUDIES  
DATA SCIENCE DISCIPLINE OPTION**

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 <u>or</u> ENGL 101A recom'd elective ^^	WRWG elective (Gen Ed Communications)
3	MATH 117 recom'd Mathematics Foundation Gen Ed req	◆ STAT 200 (required for the major)
3	Behavioral and Social Sciences Distribution Gen Ed req ^^^	Gen Ed Behavioral & Social Science
3	Natural Sciences Distribution w/ out Lab Gen Ed requirement	Gen Ed Biological & Physical Science
3	COMM 108 <u>or</u> COMM 112 recom'd Gen Ed requirement ††	SPCH 100 or SPCH elective (Gen Ed Communications)
3	ENGL 102 <u>or</u> ENGL 103 Gen Ed requirement	WRWG 112 (Gen Ed Communications; <i>must be completed with 'C-' or</i>
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)
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 ^^^	Gen Ed Behavioral & Social Science
3	DATA 201 Program requirement †	◆ DATA 300* (required for the major)
3	GDES 116 <u>or</u> 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; related requirement to the major)
3	200-level HLTH <u>or</u> ARTD <u>or</u> HUMD recom'd Gen Ed req ††	Elective
3	DATA 205 Program requirement †	◆ DATA 335* (required for the major)
3-4	MATH 182 <u>or</u> MATH 217 <u>or</u> CMSC 140 recom'd elective ^^^	MATH 141, STAT elective, or CMSC 115 (elective)
3	Any 200-level elective	Elective
3	Any 200-level elective	Elective
2	Elective	Elective
60-61	<b>Total Credits Transferred</b>	<b>Total Credits Transferred</b>

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
WRWG 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	2-3
<b>TOTAL CREDITS REMAINING AT UMGC</b>	<b>59-60</b>

**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) / WRWG 112 completed with grade of 1.67 GPA ('C-') or better / ◆ = Course in major at UMGC / \*2 = Lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL<sup>3</sup> = Upper-level course (numbered 300-499)

<sup>1</sup> ◆ Course in major at UMGC

<sup>2</sup> \* Lower-level course meets content requirement of upper-level course but does not transfer as upper-level

<sup>3</sup> UL Upper-level course (numbered 300-499)

## MONTGOMERY COLLEGE NOTES:

- <sup>4</sup> = 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.
- <sup>5</sup> = Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines.
- †<sup>6</sup> = Required for the Data Science Certificate.
- ††<sup>7</sup> = Two general education institutional requirement (GEIR) courses required from the following general education courses: COMM, HLTH , or one ARTD or HUMD. Students may only take one course from ARTD or HUMD to fulfill General Education Institutional Requirements.
- ‡<sup>8</sup> = Students must complete one Global or Cultural Perspectives designated course as part of their General Education Program to graduate.
- 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.

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<sup>4</sup> = ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective.

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

<sup>6</sup> † 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.

<sup>7</sup> †† Students should consult an advisor regarding the requirements of transfer institutions. For some institutions, MGMT 201 may be appropriate.

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