



**MC ASSOCIATE OF ARTS IN GENERAL STUDIES
DATA SCIENCE CERTIFICATE 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.

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 ^^	WRTG 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
3-4	Natural Sciences Distribution 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	WRTG 112 (Gen Ed Communications; <i>must be completed with C- or better</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	Total Credits Transferred	Total Credits Transferred

REMAINING REQUIREMENTS FOR BACHELOR'S DEGREE	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 Analytics (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
♦ DATA 440 Advanced Machine Learning (required for the major)	3UL
Elective	3
♦ DATA 445 Advanced Data Science (required for the major)	3UL
Elective	3
♦ DATA 450 Data Ethics (required for the major)	3UL
Elective	3
♦ 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
TOTAL CREDITS REMAINING AT UMGC	59-60

NOTES: Minimum of 120 credits, including 30 with UMGC of which at least 15 must be upper-level (courses numbered 300-499), are required for the bachelor's degree with a UMGC grade point average (GPA) of 2.0 (C) or higher / At least one-half of the credits within the major and minor must be comprised of: a. traditional college courses earning a grade (except for the CJLE major); b. UMGC resident coursework (except for the APTC, CJLE, and GECU majors, which require only the major capstone as UMGC resident credit) / No course within the major or minor below the grade of C (2.0) / UMGC does not accept grades below a C (2.0) in transfer from schools outside of the University System of Maryland and the 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 & maximum of 90 transfer credits from all sources combined (actual number of transfer credits dependent on meeting all UMGC bachelor's degree requirements) / ♦¹ = Course in major at UMGC / *² = Lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL³ = Upper-level course (numbered 300-499)

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 = 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, for others (e.g., The Smith School at the University Maryland) another course will be more appropriate. If necessary, use as needed to fill the 60-credit requirement.
- ⁸ = Students must complete one Global or Cultural Perspectives designated course as part of their General Education Program to graduate

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