

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.



CATALOG YEAR: 2022-2023

UMGC BACHELOR OF SCIENCE IN DATA SCIENCE

http://www.umgc.edu/transfers-and-credits/community-collegealliances/maryland-community-college-alliances.cfm

Degree requirements may change based on date of initial enrollment at UMGC.

CREDITS	MONTGOMERY COLLEGE	UNIVERSITY OF MARYLAND GLOBAL CA	AMPUS
CKEDI 13	Requirements for Associate's Degree	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 102 Gen Ed requirement	PSYC 100 (Gen Ed Behavioral & Social Science)	
3	COMM 108 <u>or</u> COMM 112 Gen Ed requirement	SPCH 100 or SPCH elective (Gen Ed Communications)	
3	MATH 117 or MATH 217 Gen Ed Mathematics	◆ STAT 200 (required for the major)	
3	ENGL 102 <u>or</u> ENGL 103 Gen Ed requirement	WRTG 112 (Gen Ed Communications; must be completed with C- or better)	
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 †	CMIS 102 (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 See next page for MC Notes		
REMAINING UMGC DEGREE REQUIREMENT RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE			
LIBS 150 Introduction to Research or other Gen Ed course (to be fulfilled with 1 credit of MATH 264 from MC)			
PACE 111T Program and Career Exploration in Technology or other PACE 111			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			3
◆ DATA 445 Advanced Data Science (required for the major)			3UL
Elective (must be taken upper-level)			30L 3UL
◆ DATA 450 Data Ethics (required for the major)			
			3UL
Elective			3
Elective (must be taken upper-level)			3UL
DATA 460 Artificial Intelligence Solutions (required for the major)			3UL
Elective (must be taken upper-level)			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 (courses numbered 300-499) required for bachelor's degree with minimum 2.0 (C) grade point average (GPA) / No course within major or minor below 2.0 GPA / 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 / 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 / ◆ = Denotes course in major at UMGC / * = Denotes lower-level course meets content requirement of upper-level course but does not transfer as upper-level / UL = Denotes upper-level course

MONTGOMERY COLLEGE NOTES:

- ^ ENGL 101, if needed for ENGL 102/ENGL 103, or select a program elective.
- ** ** 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.
- ‡ MATH 284 may be substituted for MATH 264
- † Program Electives: MATH 165, MATH 182, CMSC 140, CMSC 203, CMSC 206, GEOG 240, and GEOG 260. Department strongly recommends CMSC 206 and GEOG 240. CMSC 206 provides programming skills in Python; GEOG 240 provides foundational knowledge of Geographic Information Systems (GIS). 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.