



**A.S. Data Science**



CATALOG YEAR:  
2025-26

**B.S. Information Science**

MONTGOMERY COLLEGE Requirements for Associate's Degree		UNIVERSITY OF MARYLAND Requirements for Bachelor's Degree
3	ENGL 101 Intro to College Writing *	Lower-level Elective
3	MATH 117 Elements of Statistics	STAT100
4	MATH 150 or MATH 181 Calculus (MATF)	MATH120 or MATH140
3	PSYC100 General Psychology (BSSD)**	PSYC100
3	COMM 112 - Business & Professional Speech or COMM 108 Foundations of Human Comm (HUMD)	COMM107
3	ENGL 102 or 103 Critical Reading, Writing, & Research (in the Work Place) (ENGF)	ENGL101
3	PHIL 140 - Intro to the Study of Ethics (GEIR)	PHIL140
3	Behavioral & Social Sciences Distribution (BSSD) ** (GEOG130 recommended)	
3	DATA101 Introduction to Data Science	Lower Level Elective
3	DATA110 Data Visualization and Communication	Lower Level Elective
4	Natural Science Distribution with Lab (NSLD)	
3	DATA201 Statistical Methods in Data Science	Lower Level Elective
4	MATH264 Applications in Linear Algebra ***	Lower Level Elective
3	Elective †	
3	Arts Distribution (ARTD)	
4	Natural Science Distribution with Lab (NSLD)	
4	DATA205 Capstone in Data Science	Lower Level Elective
3	200-Level Program Elective †	
60	<b>TOTAL CREDITS TRANSFERRED</b>	
<b>REMAINING UNIVERSITY OF MARYLAND DEGREE REQUIREMENTS RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE</b>		
	INST 301 Intro to Information Science	3
	INST 311 Information Organization	3
	INST 326 Object-Oriented Programming	3
	INST 314 Statistics for Info Science	3
	INST 335 Teams and Organizations	3
	INST 327 Database Design and Modeling	3
	INST 352 Info User Needs & Assessment	3
	INST 362 User-Centered Design	3
	INST 346 Technologies, Infrastructure & Architecture	3
	Professional Writing	3
	INST 490 Integrative Capstone	3
	Upper-Level Major Elective	15
	Elective	12
	<b>TOTAL CREDITS REMAINING AT UNIVERSITY OF MARYLAND</b>	<b>60</b>

\* ENGL 101/ENGL 101A, if needed for ENGL 102/ ENGL 103 or program elective.

\*\* Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines. Contact department advisor for transfer requirements for specific schools.

\*\*\* Students may substitute MATH 284 for MATH 264

‡ Students are strongly encouraged to take two consecutive lab sciences courses. Examples include BIOL 105/106 or CHEM 131/132 or PSCI 101/102 or PHYS 203/204

† Program Electives include: strongly recommended CMSC 206, CMSC 246, and GEOG 240; CMSC 206 and CMSC 246 will provide students with programming skills in Python and SQL and GEOG 240 provides foundational knowledge of Geographic Information Systems (GIS); other program electives may include any MATH or CMSC course or GEOG 130 or GEOG 260. 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.

The UMCP B.S. in Information Science degree program has four prerequisites that are expected to be completed prior to transferring. These include:

- PreCalculus or better - MATH150, MATH165, or higher
- Introductory Statistics - MATH117, BSAD210, or equivalent
- Introductory Psychology - PSYC100
- Introductory Programming - CMSC140

CMSC 206 - Introduction to Python is also recommended

#### UNIVERSITY OF MARYLAND NOTES

**UMD Contact:** [usqinfosci@umd.edu](mailto:usqinfosci@umd.edu)

^The number of elective credits students are required to complete depends upon how many transfer credits were accepted by UMD.

The UMCP B.S. in Information Science degree program requires students to complete 30 credits of required core courses and 15 credits of upper-level major electives, which include INST300-level and INST400-level courses.

The number of general electives a student takes depends on the transferable credits accepted. The number of transferable credits that can be applied to a degree at UMD varies by the source of those credits:

- **2-year institutions:** A maximum of 70 credits can be applied toward a degree.
- **4-year institutions or a combination of 2-year and 4-year institutions:** A maximum of 90 credits can be applied toward a degree.

As of Fall 2024, UMD does NOT grant credits for the following Montgomery College elective courses (*please note that this list is subject to change; check with the Information Science program representative for details*):

- **CMSC:** 220, 234, 237, 253, 269
- **NWIT:** UMD does not accept NWIT courses.
- **CMAP:** UMD does not accept CMAP courses, except for CMAP120.
- **TECH:** UMD does not accept TECH courses, except for TECH276.
- For more information, please check the UMD Transfer Database: [UMD Transfer Database](#).