

Suggested Transfer Pathway
**Montgomery College A.S. in Data Science to
Coppin State University B.S. in Data Science**
Catalog Year: 2022-2023

Year One – Montgomery College

(Courses may be taken in any order)

Fall Semester	Cr
ENGL 101 Introduction to College Writing*	3
MATH 181 Calculus I (MATF)	4
PSYC 102 General Psychology (BSSD) **	3
COMM 108 or Foundations of Human Communication (GEEL) OR COMM 112 Business and Professional Speech Communication (GEEL)	3
MATH 117 or Elements of Statistics OR MATH 217 Biostatistics	3
Total Credits	16

Spring Semester	Cr
ENGF English Foundation	3
PHIL 140 Intro to the Study of Ethics (HUMD)	3
GEOG 130 Global Geography (BSSD) (GCP) **	3
DATA 101 Intro to Data Science	3
DATA 110 Data Visualization and Communication	3
Total Credits	15

Year Two – Montgomery College

Fall Semester	Cr
NSLD Natural Sciences Distribution with Laboratory (NSLD) ‡	4
DATA 201 Statistical Methods in Data Science	3
MATH 264 Applications in Linear Algebra ***	4
Program Elective †	4
Total Credits	15

Spring Semester	Cr
ARTD Arts Distribution (ARTD)	3
NSLD Natural Sciences Distribution with Laboratory (NSLD) ‡	4
DATA 205 Capstone in Data Science	4
200-Level Program Elective † (CMSC 206 Recommended)	3
Total Credits	14

Apply to graduate from MC with an Associate of Science in Data Science

* 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: strongly recommended CMSC 206 and GEOG 240; CMSC 206 will provide students with programming skills in Python and GEOG 240 provides foundational knowledge of Geographic Information Systems (GIS); other program electives may include MATH 165, MATH 182, CMSC 140, CMSC 203, GEOG 130, 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.

Year Three – Coppin State University

Fall Semester	Cr
ACCT 201 Principles of Financial Accounting	3
BDSC 340 Operations Management	3
BUSI 310 Business Law	3
DSCI 310 Data Science Programming	3
ECON 211 Principles of Economics I	3
Total Credits	15

Spring Semester	Cr
ACCT 202 Principles of Managerial Accounting	3
BUSI 320 Fundamentals of Intl. Business	3
ECON 212 Principles of Economics II	3
MGMT 305 Business Communications	3
MISY 341 Small Systems Software	3
Total Credits	15

Year Four – Coppin State University

Fall Semester	Cr
DSCI 375 Time Series Modeling and Forecasting	3
DSCI 420 Machine Learning	3
FINM 330 Business Finance	3
MGMT 320 Principles of Management	3
MKTG 310 Principles of Marketing	3
Total Credits	15

Spring Semester	Cr
BUSI 495 Seminar in Business Strategy & Policy	3
DSCI 356 Data Science Cloud Computing	3
DCSI 490 Data-driven Decision Making	3
MISY 360 Database Mgmt. Principles	3
General Elective (Recommended: Any COSC, MATH, or MISY course)	3
Total Credits	15

Data Science A.S.

<u>GENERAL EDUCATION: FOUNDATION COURSES</u>			
	Course	Hours	Grade
Critical Reading, Writing, and Research (ENGF) or Critical Reading, Writing, and Research in the Workplace (ENGF) *	ENGL 102 or ENGL 103	3	
Elements of Statistics (MATF)	MATH 117	3	
<u>GENERAL EDUCATION: DISTRIBUTION COURSES</u>			
	Course	Hours	Grade
Arts Distribution (ARTD)		3	
Intro to Study of Ethics (HUMD)	PHIL 140	3	
General Psychology (BSSD) **	PSYC 102	3	
Behavioral & Social Sciences Distribution (BSSD) **		3	
Recommended GEOG 130 (GCP)			
Natural Sciences Distribution with Lab (NSLD)		4	
Natural Sciences Distribution with Lab (NSLD)		4	
Foundations of Human Communication (GEEL) or Business and Professional Speech Communication (GEEL)	COMM 108 or COMM 112	3	
PROGRAM REQUIREMENTS			
	Course	Hours	Grade
Introduction to Data Science	DATA 101	3	
Data Visualization and Communication	DATA 110	3	
Statistical Methods in Data Science	DATA 201	3	
Capstone Experience in Data Science	DATA 205	4	
Calculus I *	MATH 181	4	
Applications in Linear Algebra	MATH 264	4	
Program Elective †		3	
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Program Elective †		4	

<i>Has student completed the Global Perspectives requirement?</i>	Yes	No
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Overall GPA of 2.0 is required to graduate

Total Credits: 60

Apply to graduate from Montgomery College with an A.S. in Data Science