



**Suggested Transfer Pathway**  
**Montgomery College A.A. in General Studies STEM to**  
**Shepherd University B.S. in Data Analytics w/**  
**Advanced Analytics Concentration**



Total Credits: 67, Catalog Year: 2018-2019

**0 – 36 Credits – Montgomery College**

(Courses may be taken in any order, pending prerequisites)

	Cr
ENGL101 (if needed for ENGL102/103, or elective)	3
MATH 117 Elements of Statistics	3
ARTT127 or MUSC110, or THET100 (Arts Distribution)	3
Natural Sciences Distribution with Lab	4
Behavioral & Social Science Distribution * ‡	3
<b>Total Credits</b>	<b>16</b>

	Cr
ENGL102 or ENGL103 English Foundation (ENGL103 recommended)	3
Natural Sciences Lab Distribution	4
Behavioral & Social Science Distribution (200-level) * ‡	3
MATH165 Precalculus	4
DATA101 Intro to Data Science	3
DATA110 Writing & Comm in Data Science	3
<b>Total Credits</b>	<b>20</b>

**37 – 67 Credits – Montgomery College**

	Cr
DATA201 Statistical Methods in Data Science	3
COMM 108 or COMM 112 (GEIR)	3
Humanities Distribution * (200-level recommended)	3
MATH 181 Calculus 1	4
CMSC140 Intro to Programming	3
<b>Total Credits</b>	<b>16</b>

	Cr
DATA205 Capstone Experience in Data Science	4
GEIR Arts Distribution, Humanities Distribution or Health Class (HLTH125 recommended)	3
MATH182 Calculus II	4
CSMC203 Computer Science I	4
<b>Total Credits</b>	<b>15</b>

***Apply to graduate from Montgomery College with an Associate of Arts in General Studies STEM***

\* Choose one course from the [Gen Ed List](#) to fulfill the Global & Cultural Perspectives Requirement

‡ Select BSSD courses from different disciplines

**Year Three – Shepherd University**

Semester One	Cr
Natural Science Elective / Lab	4
Quantitative Methods Elective 1/3	3
MATH 254 Discrete Math	3
CIS 314 Advanced Computer Lang Concepts	3
CIS 234 Introduction to Networking	3
<b>Total Credits</b>	<b>16</b>

Semester Two	Cr
Tier I History	3
Business Elective 1/2	3
CIS 321 Data and File Structures	4
CIS 388 Database Management Systems	4
Tier II Social Science	3
<b>Total Credits</b>	<b>17</b>

**Year Four – Shepherd University**

Semester Three	Cr
MATH 489 Mathematics Capstone I	1
ENVS 390 Geographic Info Sys	4
MATH 307 Linear Algebra	3
Math 309 Calculus III	4
Advanced CIS Elective 2/3	3
<b>Total Credits</b>	<b>15</b>

Semester Four	Cr
DATA 418 Big Data Analytics	3
MATH 490 Mathematics Capstone II	2
Advanced CIS Elective 3/3	3
Quantitative Methods Elective 2/2	3
Business Elective 2/2	3
<b>Total Credits</b>	<b>14</b>

## MC [A.A. in General Studies STEM](#) to Shepherd [B.S. in Data Analytics](#)

Total Credits: 67, Catalog Year: 2018-2019

Name:	Date:	ID#	
<b>Foundation and Distribution Courses</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
ENGL101 Intro to College Writing (if needed for ENGL102/103, elective if not)		3	
English Foundation (ENGL102 or ENGL103, ENGL103 recommended)	ENGL	3	
Math Foundation (MATH117, MATH165 or MATH181 recommended)	MATH	3-4	
Arts Distribution (GDES116 or GDES121 recommended) *		3	
Humanities Distribution *		3	
Behavioral & Social Science Distribution ‡		3	
Behavioral & Social Science Distribution ‡		3	
Natural Sciences Distribution with Lab		4	
Natural Sciences Distribution, Lab or non-Lab		3-4	
GEIR – Arts, Humanities or Health * (COMM108 or COMM112, COMM112 recommended)	COMM	3	
GEIR – Arts, Humanities or Health *		3	
<b>STEM Core Courses</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
Introduction to Data Science	DATA101	3	
Writing and Communication in Data Science	DATA110	3	
Statistical Methods in Data Science	DATA201	3	
Capstone Experience in Data Science	DATA205	4	
STEM Core Elective (MATH 181 or MATH 217 or other STEM recommended)		4	
<b>Elective Courses</b>	<b>COURSE</b>	<b>HRS</b>	<b>GRADE</b>
Elective (200-level recommended)		3	
Elective (MATH181, MATH217 or CMSC140 recommended)		3	
Elective		1-3	

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‡ Select BSSD courses from different disciplines

**Global & Cultural Perspectives Requirement:** \_\_\_\_\_

Choose one course with an asterisk from the [General Education List](#)

[www.shepherd.edu/data-analytics-home](http://www.shepherd.edu/data-analytics-home)

**Shepherd Contact:**

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