## **Data Science**

## Area of Concentration within the A.A.S. in STEM Technology Frederick Community College Pathway



**Guided Pathway to Success** (GPS) Suggested schedules map your path to degree completion.

**Full-time student:** Follow the green semester blocks in order.

**Part-time student:** Follow the blue course sequence at your own pace.

Students should meet with an advisor each semester to carefully select and sequence courses based on their specific academic goals and interests. Visit Jefferson Hall or call 301.846.2471 for advising.

Students who take fewer than
15 credits each semester or who
require developmental English or
Math coursework will need additional
semesters to complete their degrees.
Summer and January term classes may
help students to make faster progress.

General Education CORE courses can often be taken in any semester. One course must be designated as a Cultural Competence course. A minimum of nine credits must be taken at the 200 level. Refer to the college catalog for course details and the list of General Education and Cultural Competence classes. http://www.frederick.edu/class-schedules.aspx#catalog

Students are strongly recommended to consult an FCC advisor to select elective courses. Students planning to transfer may also reference ARTSYS, the Maryland Articulation System, www.artsys.usmd.edu.



Take this course within the first 24 credits.



Milestone course – take within recommend credit range to stay on track for completion.



This course is offered in the fall semester only.



This course is offered in the spring semester only.

U	Recommended	First Semester		
1	Gen Ed Core	ENGL 101 - English Composition		3 credits
2	Gen Ed Core	Mathematics Elective (Gen Ed course list) (MATH 120 – Statistics recommended)	()	3 credits
3	Gen Ed Core	CMIS 106 - Object Design and Programming		3 credits
4	Concentration	CMIS 111E - Spreadsheets		3 credits
5	Concentration	CMIS 117 - Data Science Essentials		3 credits
2	Recommended	Second Semester		
6	Gen Ed Core	Arts Elective (Gen Ed course list)		3 credits
7	Gen Ed Core	Humanities Elective (Gen Ed course list)		3 credits
8	Concentration	CMIS 118 - Data Analytics Using Spreadsheets		3 credits
9	Concentration	CMIS 119 - Statistical Analysis System (SAS)		3 credits
10	Concentration	CMIS 256 - Statistical Computing		3 credits
3	Recommended	Third Semester		
11	Gen Ed Core	Third Semester  Biological & Physical Sciences Elective (Gen Ed course list)		3/4 credits
11 12	,			3/4 credits 3 credits
	Gen Ed Core	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list)		, 
12	Gen Ed Core Gen Ed Core	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)		3 credits
12	Gen Ed Core  Gen Ed Core  Concentration	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)  CMIS 203 - Systems Analysis & Design		3 credits
12	Gen Ed Core  Gen Ed Core  Concentration  Concentration  Concentration	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)  CMIS 203 - Systems Analysis & Design  CMIS 230 - Database Management Systems		3 credits 3 credits
12	Gen Ed Core  Gen Ed Core  Concentration  Concentration  Concentration	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)  CMIS 203 - Systems Analysis & Design  CMIS 230 - Database Management Systems  CMIS 257 - Data Visualization		3 credits 3 credits
12 13 14 15	Gen Ed Core  Gen Ed Core  Concentration  Concentration  Concentration  Recommended	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)  CMIS 203 - Systems Analysis & Design  CMIS 230 - Database Management Systems  CMIS 257 - Data Visualization  Fourth Semester		3 credits 3 credits 3 credits 3 credits
12 13 14 15 4	Gen Ed Core  Gen Ed Core  Concentration  Concentration  Concentration  Recommended  Gen Ed Core	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)  CMIS 203 - Systems Analysis & Design  CMIS 230 - Database Management Systems  CMIS 257 - Data Visualization  Fourth Semester  Communications Elective (Gen Ed course list)		3 credits 3 credits 3 credits 3 credits
12 13 14 15 4 16	Gen Ed Core  Gen Ed Core  Concentration  Concentration  Concentration  Recommended  Gen Ed Core  PHED/HLTH/NUTR	Biological & Physical Sciences Elective (Gen Ed course list)  Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 – Human Relations recommended)  CMIS 203 - Systems Analysis & Design  CMIS 230 - Database Management Systems  CMIS 257 - Data Visualization  Fourth Semester  Communications Elective (Gen Ed course list)  Physical Education, Health, or Nutrition Requirement		3 credits 3 credits 3 credits 3 credits 1/3 credits

<sup>\*</sup>Electives – Select 5 credits from any CMIS, BMGT, or MATH course.