# STEM (Science, Technology, Engineering, & Mathematics) **Associate of Science**

## Frederick Community College Pathway

This program is designed for students who plan to transfer to a four-year college or university and major in one of the traditional STEM areas (science, technology, engineering, math) with a heavy emphasis on undergraduate mathematics or science. Students wishing to concentrate in one of these areas should consult with a STEM advisor or ARTSYS as early as possible to ensure that all or most of their course credits will transfer to the four-year school of their choice.

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/classschedules.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.

### **Recommended First Semester**

1	Gen Ed Core	ENGL 101 - English Composition	$\bigcirc$	3 credits
2	Gen Ed Core	MATH 165 - Precalculus or MATH 185 - Calculus I*	()	4 credits
3	Elective	Choose a STEM course in consultation with an advisor**	$\checkmark$	3 credits
4	Gen Ed Core	Biological & Physical Sciences Elective (Gen Ed course list) (BSCI 150, CHEM 101, or PHYS 151 recommended)		3/4 credits
5	Gen Ed Core	Humanities Elective (Gen Ed course list)		3 credits

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#### **Recommended Second Semester**

6	Gen Ed Core	Communications Elective (Gen Ed course list)	3 credits
7	Gen Ed Core	Biological & Physical Sciences Elective w/lab (Gen Ed course list) (BSCI 150, CHEM 101, or PHYS 151 recommended)	
8	Elective	Choose a STEM course in consultation with an advisor** $\checkmark$	4 credits
9	Elective	Choose an elective in consultation with an advisor	4 credits

#### **Recommended Third Semester**

10	Gen Ed Core	Arts Elective (Gen Ed course list)	3 credits
11	Gen Ed Core	Social & Behavioral Sciences Elective (Gen Ed course list)	3 credits
12	Elective	Choose a STEM course in consultation with an advisor**	4 credits
13	Elective	Choose a STEM course in consultation with an advisor**	4 credits

#### **Recommended Fourth Semester**

14	Gen Ed Core	Social & Behavioral Sciences Elective (Gen Ed course list) (in a different discipline from first)	3 credits
15	Gen Ed Core	Gen Ed Elective (Gen Ed course list)	3 credits
16	PHED/HLTH/NUTR	Physical Education, Health, or Nutrition Requirement	1/3 credits
17	Elective	Choose a STEM course in consultation with an advisor**	4 credits
18	Elective	Choose an elective in consultation with an advisor (credits may vary to fulfill 60 credits for degree)	4 credits

\*Areas of Concentration in Biology, Chemistry, Engineering, and Mathematics require MATH 185 - Calculus I or more advanced Math.

\*\*Choose a course from Biology (BSCI), Chemistry (CHEM), Computer Aided Design (CADT), Computer & Information Sciences (CMIS), Engineering (ENGR), Mathematics (MATH), Physical Science (PHSC), Physics (PHYS). Recommend CMIS 106 - Object Design and Programming and MATH 185 - Calculus I (or more advanced Math). A minimum of 6 credits must be in the same discipline. Consult an advisor to maximize transfer of coursework.