Engineering Area of Concentration within the A.S. in STEM 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 (301.846.2625 TDD) 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

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.

J

This course is offered in the spring semester only.

Recommended First Semester				
1	Gen Ed CORE	EN 101 English Composition	()	3 credits
2	Gen Ed CORE	MA 210 Calculus I (Prerequisite MA 111)*	()	4 credits
3	Concentration	EG 100 Introductory Engineering Sciences (Prerequisite MA 111)*	 Image: A start of the start of	3 credits
4	Gen Ed CORE	Social & Behavioral Sciences Gen Ed		3 credits
5	Gen Ed CORE	Arts Gen Ed		3 credits
2 Recommended Second Semester				
6	Gen Ed CORE	CH 101 General Chemistry		4 credits
7	Gen Ed CORE	Social & Behavioral Sciences Gen Ed in a different discipline from the first		3 credits
8	Concentration	MA 211 Calculus II	/	4 credits
9	Concentration	MA 214 MatLab		1 credit
10	Gen Ed CORE	Communications Gen Ed		3 credits
3	Recommende	ed Third Semester		
11	Concentration	MA 213 Differential Equations	/	3/4 credits
12	Gen Ed CORE	PY 203 Introductory Physics I**		4 credits
13	Concentration	Choose a STEM elective in consultation with an advisor***		4 credits
14	Concentration	Choose a free elective in consultation with an advisor****		4 credits
4 Recommended Fourth Semester				
15	Gen Ed CORE	Humanities Gen Ed		3 credits
16	Concentration	Choose a STEM elective in consultation with an advisor***		4 credits
17	PE/Health	PE/Health Requirement		1/3 credits
18	Gen Ed CORE	General Education Elective		3 credits
19	Concentration	Choose a free elective in consultation with an advisor (credits may vary; to fulfill 60 credits for degree)****		3 credits

*Students who have not taken MA 111 Precalculus will take it as an elective before starting the Calculus sequence.

** Students who have not taken high school physics are strongly recommended to take PY 101 as an elective prior to enrolling in PY 203.

*** Choose a course from Biology (BI), Chemistry (CH), Computer & Information Sciences (CIS), Engineering (EG), Mathematics (MA), or Physics (PY). A minimum of 6 credits must be in the same discipline.

****Depending on transfer institution, electives may include EG 110 Engineering Statics (fall only), EG 211 Engineering Dynamics, EG 210 Mechanics of Materials (spring only), MA 212 Calculus III, PY Introductory Physics, or PY 205 Modern Physics (spring only)