

# Mathematics

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 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](http://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.

## 1 Recommended First Semester

1	Gen Ed Core	ENGL 101 - English Composition		3 credits
2	Gen Ed Core	MATH 185 - Calculus I (Prerequisite MATH 165)*		4 credits
3	Gen Ed Core	Humanities Elective (Gen Ed course list)		3 credits
4	PHED/HLTH/NUTR	Physical Education, Health, or Nutrition Requirement		1 credit
5	Gen Ed Core	CMIS 106 - Object Design & Programming		3 credits

## 2 Recommended Second Semester

6	Concentration	MATH 195 - Calculus II		4 credits
7	Gen Ed Core	Biological & Physical Sciences Elective w/lab (Gen Ed course list) (PHYS 151 - General Physics I recommended)		4 credits
8	Gen Ed Core	Social & Behavioral Sciences Elective (Gen Ed course list)		3 credits
9	Concentration	MATH 220 - Introduction to MATLAB		1 credit
10	Concentration	MATH 170 - Introduction to Discrete Math or CMIS 201 - Computer Science I		3 credits

## 3 Recommended Third Semester

11	Concentration	MATH 285 - Calculus III		4 credits
12	Gen Ed Core	Communications Elective (Gen Ed course list)		3 credits
13	Concentration	MATH 265 - Linear Algebra		4 credits
14	Gen Ed Core	Biological & Physical Sciences Elective (Gen Ed course list) (PHYS 252 - General Physics II recommended)		3/4 credits
15	Elective	Choose an elective in consultation with an advisor**		3/4 credits

## 4 Recommended Fourth Semester

16	Concentration	MATH 275 - Differential Equations		3 credits
17	Elective	Choose an elective in consultation with an advisor**		3/4 credits
18	Gen Ed Core	Social & Behavioral Sciences Elective (Gen Ed course list) (in a different discipline from first)		3 credits
19	Gen Ed Core	Arts Elective (Gen Ed course list)		3 credits
20	Elective	Choose an elective in consultation with an advisor** (unless two 4 credit electives are taken above, and the 8 credit electives requirement is satisfied)		2/3 credits

\*Students who have not taken MATH 165 - Precalculus should take it as an elective in the first semester before starting the Calculus sequence.

\*\*Choose electives in consultation with an advisor. PHYS 253 is required at the University of Maryland - College Park. Depending on transfer school, CMIS 202 may be recommended.