

## FCC Curriculum Pathway

The Curriculum Pathway provides full-time students with a suggested guide for completing an Associate degree in two years (four semesters). Students who choose to take less than 15 credits per semester or who require Developmental English and/or Math will need additional semesters to complete their degrees. Taking classes in the Summer and/or January terms allow students to catch up and stay on target. \*

***\*It is strongly recommended that all Engineering students meet with an Advisor each semester to carefully select and sequence courses based on their intended Engineering specialization and transfer university. Refer to the Engineering Transfer Guide on the Engineering website.***

**Major: STEM – Engineering Focus**

**Catalog Year: 2015**

Course Number	Course	Credit	Complete
<b>First Year – First Semester</b>			
EN 101	English Composition	3	
CORE	Mathematics General Education Elective MA 210 Calculus I	4	
<b>STEM Elective*</b>	EG 100 Introductory Engineering Science, or other STEM elective	3	
CORE	Biological & Physical Sciences General Education Elective CH 101 General Chemistry	4	
	PE/Health	1/3	
		Total Credits:	<b>15/17</b>
<b>First Year – Second Semester</b>			
CORE	Biological & Physical Sciences General Education Elective PY 203 Introductory Physics I recommended	4	
MA 211	Calculus II	4	
<b>STEM Elective*</b>	MA 214 Introduction to MATLAB recommended	1	
CORE	Communication General Education Elective	3	
CORE	Social & Behavioral Science General Education Elective	3	
		Total Credits:	<b>15</b>
<b>Second Year – First Semester</b>			
<b>STEM Elective*</b>	PY 204 Introductory Physics II recommended	4	
<b>STEM Elective*</b>	MA 212 Calculus III recommended	4	
<b>STEM Elective*</b>	EG 110 or other STEM elective	3/4	
CORE	Social & Behavioral Science General Education Elective	3	
		Total Credits:	<b>14/15</b>
<b>Second Year – Second Semester</b>			
<b>STEM Elective*</b>	EG 210, or other STEM elective	3/4	
<b>STEM Elective*</b>	EG 211, or other STEM elective	3/4	
<b>STEM Elective*</b>	MA 213 Differential Equations	3	
CORE	Humanities General Education Elective	3	
CORE	Arts General Education Elective	3	
STEM Elective	Select one course to meet minimum of 25 credits of STEM for graduation	1-4	
		Total Credits:	<b>16/17</b>
<b>Total Credits:</b>			<b>60</b>

**Students must complete their credit English and Mathematics within the first 24 credits.**

General Education Electives can be taken in the semester that works best for the student's schedule.

Students are strongly recommended to consult an FCC advisor and to use ARTSYS, the Maryland Articulation System, [www.artsys.usmd.edu](http://www.artsys.usmd.edu) to select elective courses needed for transfer based on their intended major at their four-year college/university.

Developmental courses must be completed prior to enrolling into college-level courses in the major. See an advisor for further information, if needed.

\_\_\_\_\_ Reading: EN51; EN52  
 \_\_\_\_\_ Writing: EN50; EN61  
 \_\_\_\_\_ Math: MA80, MA81, MA82 or MA85  
 \_\_\_\_\_ English as a Second Language:  
 ESL 99 & 95; or ESL 72 & 73