

**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/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.

1 Recommended First Semester

1	Gen Ed CORE	EN 101 English Composition		3 credits
2	Gen Ed CORE	MA 111 Precalculus or MA 210 Calculus*		4 credits
3	Program Requirement	Choose a STEM course in consultation with an advisor (see list below)**		3 credits
4	Gen Ed CORE	Biological & Physical Sciences Gen Ed (BI 101 General Biology, CH 101 General Chemistry, or PY 203 Introductory Physics I recommended)		3/4 credits
5	Gen Ed CORE	Humanities Gen Ed		3 credits

2 Recommended Second Semester

6	Gen Ed CORE	Communications Gen Ed		3 credits
7	Gen Ed CORE	Biological & Physical Sciences Gen Ed with a lab (BI 101, Principles of Biology I, CH 101 General Chemistry, or PY 203 Introductory Physics I recommended)		4 credits
8	Program Requirement	Choose a STEM course in consultation with an advisor (see list below)**		4 credits
9	Program Requirement	Choose an elective in consultation with an advisor		4 credits

3 Recommended Third Semester

10	Gen Ed CORE	Art Gen Ed		3 credits
11	Gen Ed CORE	Social & Behavioral Science Gen Ed		3 credits
12	Program Requirement	Choose a STEM course in consultation with an advisor (see list below)**		4 credits
13	Program Requirement	Choose a STEM course in consultation with an advisor (see list below)**		4 credits

4 Recommended Fourth Semester

14	Gen Ed CORE	Social & Behavioral Sciences Gen Ed in a different discipline from first		3 credits
15	Gen Ed CORE	General Education Elective		3 credits
16	PE/Health	PE/Health Requirement		1/3 credits
17	Program Requirement	Choose a STEM course in consultation with an advisor (see list below)**		4 credits
18	Program Requirement	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 MA 210 Calculus or more advanced Math.

** Choose a course from Biology (BI), Chemistry (CH), Computer & Information Sciences (CIS), Engineering (EG), Mathematics (MA), Physical Science (PC), Physics (PY). Recommend CIS 106 Object Design and Programming and MA 210 Calculus (or more advanced Math). A minimum of 6 credits must be in the same discipline.

























The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
BI 55	Preparation For Allied Health	☀	☀ ☾		☀ ☾
BI 100	Fundamental Concepts of Biology	☀ ☾	☀ ☾ 🖱		☀ ☾ 🖱
BI 101	General Biology I	☀ ☾	☀ ☾		☀ ☾
BI 102	General Biology II	☀	☀		☀
BI 103	Anatomy and Physiology I	☀ ☾	☀ ☾		☀ ☾
B 104	Anatomy and Physiology II	☀ ☾	☀ ☾		☀ ☾
BI 107	Human Biology		☀		☀
BI 117	Study of the Human Body		☀ ☾ 🖱		☀ ☾ 🖱
BI 120	Microbiology for Allied Health	☀ ☾	☀ ☾		☀ ☾
BI 130	Forensic Biology		☀ 🖱		☀ 🖱
BI 140	Biotechnology and Society	☀			🖱

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.
































Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
BI 201	General Ecology		☀		☀
BI 202	Human Ecology	☀	☀ 🖱	☀	☀ 🌙
BI 203	Elements of Microbiology		☀		
BI 220	Cell Biology and Tissue Culture		🌙 🖱		🌙 🖱
BI 240	Genetics				☀

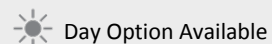
The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
CH 100	Chemistry and Society				
CH 101	General Chemistry I	  	  		  
CH 102	General Chemistry II	 	 		 
CH 201	Organic Chemistry I		 		 
CH 202	Organic Chemistry II				

Computer Science

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Fall 2018	Jan Session 2019	Spring 2019
CIS 101	Info Systems & Technology	  	  	  
CIS 106	Object Design & Programming	  		  
CIS 107	Introduction to Programming	 		
CIS 117	Data Science Essentials			
CIS 118	Data Analytics Using Spreadsheet			
CIS 119	Statistical Analysis System			
CIS 140	Java Programming			
CIS 170	Security Fundamentals	  		  
CIS 173	Healthcare Information Technology			
CIS 175	Game Theory and Design			
CIS 176	Game Creation			



Day Option Available



Night Option Available

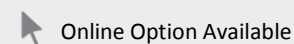
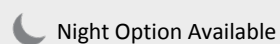
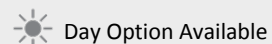


Online Option Available

Computer Science

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Fall 2018	Jan Session 2019	Spring 2019
CIS 177	Interactive 3D Technology	☀		☀
CIS 178	3D Modeling and Animation	☀		☀
CIS 179	Cybersecurity Fundamentals	☀ ☾ ➡		☀ ☾ ➡
CIS 180	Networking Fundamentals	☀ ☾ ➡		☀ ☾ ➡
CIS 190	Cisco 1 Network Fundamentals			☾
CIS 191	Cisco 2 Routing Technologies	☀ ➡		☾
CIS 192	Cisco 3 Switching Technologies			➡
CIS 193	Cisco 4 WAN Technologies			➡
CIS 200	IT Support Services			➡
CIS 201	Computer Science I	☀ ☾		☀ ☾
CIS 202	Computer Science II			☾



Computer Science

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.







Course #	Course Name	Fall 2018	Jan Session 2019	Spring 2019
CIS 203	Systems Analysis & Design	  		  
CIS 204	CIS Project			
CIS 208	C++ Programming			
CIS 212	PC Repair & Diagnostics	  		  
CIS 217	Cybercrime & Digital Forensics			 
CIS 218	Info Security & Assurance			 
CIS 219	Ethical Hacking & System Defense			  
CIS 222	Computer Organization			
CIS 223	Cloud Security			 
CIS 226	Game Scripting			
CIS 227	Game Programming			

Computer Science

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.





















































Course #	Course Name	Fall 2018	Jan Session 2019	Spring 2019
CIS 228	Simulation & Game Development	☾		
CIS 256	Statistical Computing	☾		
CIS 111B	Database			➤
CIS 111E	Spreadsheets	☾ ➤		☾ ➤
CIS 111L	UNIX/Linux Operating System	☾ ➤		☾ ➤
CIS 111M	PC Operating Systems	☀ ☾ ➤		☀ ☾ ➤
CIS 111R	Business Software Applications			➤
CIS 225C	Computer Program Language: Mobile App	☾		☾

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
EG100	Introductory Engineering Science		 		 
EG110	Engineering Statics				
EG 210	Mechanics of Materials				
EG211	Engineering Dynamics				

Mathematics
































The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
MA 83	Educator Preparation in Mathematics		 		 
MA 103	Foundations of Mathematics	 	 		 
MA 103A	Foundations of Mathematics				
MA 105	Fundamental Concepts of Mathematics I		 		 
MA 106	Fundamental Concepts of Mathematics II				 
MA 111	Precalculus	  	  		  
MA 130	College Algebra		  		  
MA 130S	College Algebra with Algebra Support		 		
MA 201	Applied Calculus		 		 
MA 202	Introduction to Discrete Mathematics				
BU/MA 205	Business Statistics		  		  

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
MA 206	Elementary Statistics	☀ ☾ ➤	☀ ☾ ➤	☀ ➤	☀ ☾ ➤
MA 206A	Elementary Statistics with Algebra	☀ ☾	☀ ☾		☀ ☾
MA 207	Elementary Statistics with Probability		☀		☀
MA 210	Calculus I	☀ ☾ ➤	☀ ☾ ➤		☀ ☾ ➤
MA 211	Calculus II		☀ ☾ ➤		☀ ☾
MA 212	Calculus III		☀		☀
MA 213	Differential Equations				☾ ➤
MA 214	Introduction to Matlab			➤	➤
MA 218	Linear Algebra		☀		

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan Session 2019	Spring 2019
PC 103	Elements of Physical Science		 		 
PC 104	The Water Planet: Introduction to Oceanography		 		 
PC 105	Introduction to Science of Weather				 
PC 106	Introduction to Meteorology				
PC107	Introductory Astronomy	 	 		 
PC 108	Historical Geology				
PC 109	Physical Geology				
PC 114	Contemporary Physical Science		 		 
PC 115	Introduction to Earth Systems Science		 		 
PC 121	Energy and Society				

The course rotation lists FCC's planned offerings by semester, as well as the format in which the course is available (day, evening, and/or online). This is an advising tool to help students anticipate when and how classes are offered. Please reference this document alongside the program pathway, and in consultation with a faculty or staff advisor. Be aware that while FCC will adhere to the rotation as closely as possible, the college cannot guarantee that all classes will be offered in the predicted times and formats. The schedule of courses in a given semester supersedes the rotation in the event of discrepancies.

Course #	Course Name	Summer 2018	Fall 2018	Jan session 2019	Spring 2019
PY 101	Survey of Physics	☀			☀
PY 201	Fundamentals of Physics I		☾		
PY 202	Fundamentals of Physics II				
PY 203	Introductory Physics I	☀	☀ ☾		☀ ☾
PY 204	Introductory Physics II	☀	☀		☾