

# Software Engineering

Area of Concentration within the A.A.S in STEM Technology  
Frederick Community College Pathway

 Frederick Community College

Catalog Year 2017-2018

## 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](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   | EN 101 English Composition                                    |  | 3 credits |
| 2 | Gen Ed CORE   | Mathematics Gen Ed (MA 206 Elementary Statistics recommended) |  | 3 credits |
| 3 | Gen Ed CORE   | CIS 106 Object Design and Programming                         |   | 3 credits |
| 4 | Concentration | CIS 226 Game Scripting  |   | 3 credits |
| 5 | Concentration | CIS Elective  |   | 3 credits |

## 2 Recommended Second Semester

|    |               |   |  |           |
|----|---------------|---|--|-----------|
| 6  | Gen Ed CORE   | Art Gen Ed                                |  | 3 credits |
| 7  | Gen Ed CORE   | Humanities Gen Ed                         |  | 3 credits |
| 8  | Concentration | CIS 119 Statistical Analysis System (SAS) |  | 3 credits |
| 9  | Concentration | CIS 201 Computer Science I                |  | 4 credits |
| 10 | Concentration | CIS 208 C++ Programming                   |  | 3 credits |

## 3 Recommended Third Semester

|    |               |  |  |             |
|----|---------------|--|--|-------------|
| 11 | Gen Ed CORE   | Science Gen Ed   |  | 3/4 credits |
| 12 | Gen Ed CORE   | Social Science Gen Ed (HS 102 Human Relations recommended) |  | 3 credits   |
| 13 | Concentration | CIS 203 Systems Analysis & Design                          |  | 3 credits   |
| 14 | Concentration | CIS 256 Statistical Computing                              |  | 3 credits   |
| 15 | Concentration | CIS 230 Database Management Systems                        |  | 3 credits   |

## 4 Recommended Fourth Semester

|    |               |                                 |  |             |
|----|---------------|---------------------------------|--|-------------|
| 16 | Gen Ed CORE   | Communications Gen Ed           |  | 3 credits   |
| 17 | PE/Health     | PE/Health Requirement           |  | 1/3 credits |
| 18 | Concentration | CIS 225C Mobile App Programming |  | 3 credits   |
| 19 | Concentration | CIS 227 Game Programming        |  | 4 credits   |
| 20 | Concentration | CIS Elective                    |  | 3 credits   |