

# Network Engineering

Area of Concentration within the A.A.S. in STEM Technology

Frederick Community College Pathway

 Frederick Community College

Catalog Year 2020-2021

## 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	Mathematics Elective (Gen Ed course list) (MATH 120 - Statistics recommended)		3 credits
3	Concentration Course	CMIS 120 - PC Operating Systems		3 credits
4	Concentration Course	CMIS 121 - PC Repair & Diagnostics		3 credits
5	Elective	Any INTR or CMIS or BMGT course		2 credits

## 2 Recommended Second Semester

6	Gen Ed Core	Arts Elective (Gen Ed course list)		3 credits
7	Gen Ed Core	Humanities Elective (Gen Ed course list) (PHIL 208 or PHIL 101 recommended)		3 credits
8	Concentration Course	CMIS 106 - Object Design and Programming		3 credits
9	Concentration Course	CMIS 290 - Cisco 1 Introduction to Networks		3 credits
10	Concentration Course	CMIS 291 - Cisco 2 Switching, Routing, and Wireless Essentials		3 credits

## 3 Recommended Third Semester

11	Gen Ed Core	Biological & Physical Sciences Elective (Gen Ed course list)		3/4 credits
12	Gen Ed Core	Communication Elective (Gen Ed course list) (COMM 105 recommended)		3 credits
13	Concentration Course	CMIS 292 - Cisco 3 Enterprise Networking, Security, and Automation		3 credits
14	Concentration Course	CMIS 294 – Cybersecurity Operations		3 credits
15	Concentration Course	CMIS 179 - Cybersecurity Fundamentals or CMIS 218 - Information Security and Assurance		3 credits

## 4 Recommended Fourth Semester

16	Gen Ed Core	Social & Behavioral Sciences Elective (Gen Ed course list) (HUMS 102 - Human Relations recommended)		3 credits
17	PHED/HLTH/NUTR	Physical Education, Health, or Nutrition Requirement		1/3 credits
18	Concentration Course	BMGT 281 - Global Awareness in the Work Environment		3 credits
19	Concentration Course	CMIS 203 - Systems Analysis & Design		3 credits
20	Elective	Any INTR or CMIS or BMGT course		3 credits
21	Elective	Any INTR or CMIS or BMGT course		3 credits