

**Applied Methodologies** 

**Ethical Reasoning** 

**Information Literacy** 

Intercultural Fluency

☐ Any Course

Keystone Experience

☐ CMSC 4920 Senior Project II

☐ CMAC 4900 Senior Project I

☐ CMAC 4920 Senior Project II

☐ CMAC 4900 Senior Project I

☐ ENGL 3230 Technical Writing

Quantitative Applications

PHIL 3000 Formal Logic

**Writing Intensive** 

☐ CMAC 3000 Principles of Responsible Computing

Degree: Bachelor of Science

College: Science, Technology, and Business

Major: Applied Computing

Major Code: APCO Minor: N/A
Concentration: N/A Minor Code: N/A

### **General Education Program Requirements** Foundations: (12 Credits) Required Major Courses: (39 Credits) **Oral Communication: (3 Credits)** ☐ CMAC 1240 Computer Programming I ☐ COMJ 1010 Public Speaking ☐ CMAC 2040 Object-Oriented Programming **Quantitative Reasoning: (3 Credits)** ☐ CMAC 3000 Principles of Responsible Computing ☐ MATH 1510 Discrete Structures ☐ CMAC 3040 Data Structures **Technological Literacy: (3 Credits)** ☐ CMAC 3090 Computer Architecture and Assembly Language ☐ CMAC 1200 Problem Solving and Programming ☐ CMAC 3140 Analysis of Algorithms Written Communication: (3 Credits) ☐ ENGL 1200 College Composition ☐ CMAC 3180 Data Communication and Networking ☐ CMAC 3200 Database Application Programming ☐ CMAC 3500 Web Programming I **Discoveries:** (Credits 27) $\overline{At | least two (2)}$ disciplines must be represented within each of the ☐ CMAC 4000 Operating Systems three (3) categories. Art/Humanities: (9 Credits) ☐ CMAC 4900 Senior Project I ☐ PHIL 3000 Formal Logic ☐ CMAC 4920 Senior Project II ☐ ENGL 3230 Technical Writing ☐ Or CMAC 3010 Structured System Documentation Natural Sciences & Technology: (9 Credits) Major Electives: (21 Credits) Select seven (7) from the following: ☐ MATH 2410 Analytical Geometry and Calculus CMAC 2100.CMAC 2600.CMAC 3320.CMAC ☐ STAT 2020 Elements of Statistics 3380,CMAC 3580,CMAC 3640,CMAC 3700,CMAC 3720, CMAC 3730, CMAC 3740, CMAC 3780, CMAC 3830,CMAC 3990,CMAC 4120,CMAC 4140,CMAC 4180,CMAC 4200,CMAC 4250,CMAC 4500,CMAC Social Sciences: (9 Credits) 4640,CMAC 4680,CMAC 4950 Free Electives: (18 Credits) Elective/Wellness & Personal Health: (3 Credits) ☐ CMAC 2000 Introduction to Cybersecurity **Competencies:**

Updated: 5/13/2025

Credits Required: 120

# **Suggested Four Year Course Sequence**

## Year 1

#### **Fall Semester**

CMAC 1200 Problem Solving & Programming Constructs ENGL 1200 College Composition COMJ 1010 Public Speaking MATH 1510 Discrete Structures General Education Course

#### **Spring Semester**

CMAC 1240 Computer Programming I CMAC 2000 Introduction to Cybersecurity STAT 2020 Elements of Statistics PHIL 3000 Formal Logic General Education Course

## Year 3

#### Fall Semester

CMAC 3200: Database Programming
CMAC 3180 Data Communication and Networking
Or CMAC 4000 Operating Systems
CMAC Elective
ENGL 3230 Technical Writing
Or CMAC 3010 Structured System Documentation
Arts & Humanities/Social Science Course

### **Spring Semester**

CMAC 3140 Analysis of Algorithms
Or CMAC Elective
CMAC Elective Course
CMAC Elective Course
Arts & Humanities/Social Science Course
Free Elective
Free Elective

## Year 2

### **Fall Semester**

CMAC 2040 Object-Oriented Programming
CMAC Elective
Math leading towards MATH 2410
Intecultural AND Arts & Humanities/Social Sciences
Course
General Education Course

#### **Spring Semester**

CMAC 3090 Computer Archiecture and Assembly Language
CMAC 3040 Data Structures
CMAC 3500 Web Programming 1
MATH 2410 Calculus I
If already taken, choose Natural Science/Tech
Elective.
Free Elective

## Year 4

### Fall Semester

CMAC 4900 Senior Project I
CMAC 3180 Data Communication and Networking
Or~ CMAC 4000 Operating Systems
CMC Elective
CMAC Elective
Free Elective

### **Spring Semester**

CMAC 3000 Principles of Responsible Computing CMAC 4920 Senior Project II CMAC Elective Course Or~CMAC 3140 Analysis of Algorithms Free Elective Free Elective



Updated: 5/13/2025