

☐ CMAC 4920 Senior Project II

☐ CMAC 4900 Senior Project I

☐ CMAC 4920 Senior Project II

☐ CMAC 4900 Senior Project I

Writing Intensive - Two (2) courses are required

☐ ~And~ ENGL 3230 Technical Writing ~Or~

CMAC 3010 Structured System Documentation

Quantitative Applications

PHIL 3000 Formal Logic

☐ CMAC 3000 Principles of Responsible Computing

Ethical Reasoning

Information Literacy

Intercultural Fluency

☐ Any Course

Keystone Experience

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 3100: 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 3740,CMAC 3780,CMAC 3830,CMAC 3990,CMAC 4120,CMAC 4140,CMAC 4180,CMAC 4200,CMAC 4250,CMAC 4500,CMAC 4640,CMAC Social Sciences (9 Credits) 4680.CMAC 4950 Free Electives: (18 Credits) Elective/Wellness & Personal Health: (3 Credits) ☐ CMAC 2000 Introduction to Cybersecurity **Competencies: Applied Methodologies**

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 3100 Assembly Program/Comp. Organization 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
CMAC 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: 7/16/2024