

### General Education

**Foundations: (12 Credits)**

**Oral Communication (3 Credits)**

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**Written Communication (3 Credits)**

ENGL 1200 College Composition

**Quantitative Reasoning (3 Credits)**

MATH 1510 Discrete Structures

**Technological Literacy (3 Credits)**

CMAC 1200 Prob. Solving & Prog. Concepts

**Discoveries: (Credits 28)**

**Art/Humanities (9 Credits)**

PHIL 3000 Formal Logic

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**Social Sciences (9 Credits)**

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**Natural Sciences & Technology (10 Credits)**

MATH 2410 Calculus I

STAT 2020 Elements of Statistics

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**Wellness & Personal Health: (3 Credits)**

CMAC 2000 Introduction to Cybersecurity

**Competencies:**

**Quantitative Applications**

PHIL 3000 Formal Logic

**Applied Methodologies**

CMSC 4920 Senior Project II

**Intercultural Fluency**

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**Ethical Reasoning**

CMAC 3000 Principles of Resp Comp

**Information Literacy**

CMAC 4900 Senior Project I

**Writing Intensive**

CMAC 4900 Senior Project & ENGL 3230 Technical Writing

**Keystone Experience**

CMAC 4920 Senior Project II

### Program Requirements

**Required Major Courses: (39 Credits)**

CMAC 1240 Computer Programming I

CMAC 2040 Object-Oriented Prog

CMAC 3000 Principles of Responsible Computing

CMAC 3040 Data Structures

CMAC 3100 Assembly/Architecture

CMAC 3140 Analysis of Algorithms

CMAC 3180 Data Comm. and Networking

CMAC 3200 Database Application Prog

CMAC 3500 Web Programming I

CMAC 4000 Operating Systems

CMAC 4900 Senior Project I

CMAC 4920 Senior Project II

ENGL 3230 Technical Writing

**Major Electives: (21 Credits)**

**Choose Seven:** CMAC 2100 Log & Switch Theory, CMAC 3320 Tech Computing Using Java, CMAC 3380 Python, CMAC 3580 Systems Programming, CMAC 3640 Computer Forensic/Incident Res, CMAC 3700 2D Game Programming, CMAC 3720 3D Game Programming, CMAC 3740 Mobile Application Development, CMAC 3780 Computer Graphics, CMAC 3830 Intro to Machine Learning, CMAC 3990 Special Topics in CS, CMAC 4120 Parallel Processing, CMAC 4140 Theory of Languages, CMAC 4180 Language Translation, CMAC 4200 Artificial Intelligence, CMAC 4500 Web Programming II, CMAC 4640 Info Systems Audit & Security, CMAC 4680 Security Management, CMAC 4950 Internship

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**Free Electives: (17 Credits)**

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## Suggested Four Year Course Sequence

### Year 1

#### Fall Semester

CMAC 1200: Problem Solving and Programming Constructs  
ENGL 1200: College Composition  
COMJ 1010: Public Speaking  
MATH 1510: Discrete Structures  
Arts & Humanities/Social Sciences 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 Comm. and Networking  
~Or~ CMAC 4000: Operating Systems  
CMAC Electve  
Arts & Humanities/Social Sciences course  
ENGL 3230: Technical Writing

#### Spring Semester

CMAC 3140: Analysis of Algorithms  
~Or~ CMAC Elective  
CMAC Elective course  
CMAC Elective course  
Arts & Humanities/Social Sciences course  
Free Elective

### Year 2

#### Fall Semester

CMAC 2040: Object-Oriented Programming  
CMAC Elective  
Math leading towards MATH 2410: Calc 1  
Intercultural AND Arts & Humanities/Social Sciences course  
General Education Course

#### Spring Semester

CMAC 3100: Assembly Programming/Computer Organization  
CMAC 3040: Data Structures  
CMAC 3500: Web Programming 1  
Math leading towards  
MATH 2410: Calc 1  
– If Math 2410 completed, 1 Natural Science/Tech  
Elective  
Free Elective

### Year 4

#### Fall Semester

CMAC 4900: Senior Project I  
CMAC 3180 Data Comm 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 Electives

