

General Education

Foundations: (12 Credits)

Oral Communication (3 Credits)

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)

ART 1200 3D Design

Social Sciences (9 Credits)

Natural Sciences & Technology (10 Credits)

MATH 2410 Calculus I

STAT 2020 Elements of Statistics

Wellness & Personal Health: (3 Credits)

CMAC 2000 Introduction to Cybersecurity

Competencies:

Quantitative Applications

PHIL 3000 Formal Logic recommended

Applied Methodologies

CMSC 4920 Senior Project II

Intercultural Fluency

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 3200 Database Application Prog

CMAC 3500 Web Programming I

CMAC 4900 Senior Project I

CMAC 4920 Senior Project II

ENGL 3230 Technical Writing

Two Courses from ART or Two Courses from ENGL: ART 1106

Drawing I, ART 2112 Surface Design, ART 3208 Designing for

the Web, ART 3915 2D Animation Special Topics, ART 3916 3D

Animation Special Topics, ART 4008 Motion Design, ENGL 1300

Introduction to Literature, ENGL 1301 Introduction to Fiction, ENGL

2205 Writing in the Genres, ENGL 2400 Introduction to Creative

Writing, ENGL 2260 Writing Argument and Persuasion, ENGL 2270

Digital Storytelling, ENGL 4400 Studies in Advanced Creative Writing

Required Concentration Courses: (15 Credits)

CMAC 3700 2D Game Programming

CMAC 3720 3D Game Programming

CMAC 3740 Mobile Application Development

CMAC 3780 Computer Graphics

CMAC 4200 Artificial Intelligence

Major Electives: (6 Credits)

Choose Two: CMAC 2100 Log & Switch Theory, CMAC 3180 Data Comm

and Network, CMAC 3320 Tech Computing Using Java, CMAC 3380

Python, CMAC 3580 Systems Programming, CMAC 3640 Computer

Forensic/Incident Res, CMAC 3830 Intro to Machine Learning, CMAC 3990

Special Topics in CS, CMAC 4000 Operating Systems, CMAC 4120 Parallel

Processing, CMAC 4140 Theory of Languages, CMAC 4180 Language

Translation, CMAC 4500 Web Programming II, CMAC 4640 Info Systems

Audit & Security, CMAC 4680 Security Management, CMAC 4950 Internship

Free Electives: (17 Credits)

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
Art 1200: 3 Dimensional Design

Spring Semester

CMAC 1240: Computer Programming I
CMAC 2000: Introduction to Cybersecurity
STAT 2020: Elements of Statistics
PHIL 3000: Formal Logic
Art/Writing Required Course

Year 3

Fall Semester

CMAC 3200: Database Programming
CMAC 3700: 2D Game Programming
---> OR CMAC 3720: 3D Game Programming
CMAC Elective
ENGL 3230 Technical Writing
Free Elective

Spring Semester

CMAC 4900: Senior Project 1
CMAC 3700: 2D Game Programming
---> OR CMAC 3720: 3D Game Programming
CMAC 3000: Principles of Responsible Computing
Free Elective
Free Elective

Year 2

Fall Semester

CMAC 2040: Object-Oriented Programming
Intercultural and Arts & Humanities /Social Sciences
General Education Course
General Education Course
Math leading towards MATH 2410

Spring Semester

CMAC 3100: Assembly Programming/Computer Organization
CMAC 3040: Data Structures
CMAC 3500: Web Programming 1
Art/Writing Required Course
Math leading towards MATH 2410

Year 4

Fall Semester

CMAC 3140: Analysis of Algorithms
---> OR CMAC 3740: Mobile App Development
CMAC 3780: Computer Graphics
---> OR CMAC 4200: Artificial Intelligence
CMAC Elective
Arts And Humanities/Social Sciences Course
Free Elective

Spring Semester

CMAC 4920: Senior Project II
CMAC 3140: Analysis of Algorithms
---> OR CMAC 3740: Mobile App Development
CMAC 3780: Computer Graphics
---> OR CMAC 4200: Artificial Intelligence
General Education Course
Free Elective

