# BS Computer Science

These offerings are in effect as of Fall 2012

## I. Core Requirements

### Math Requirements
- MAT 211 Calculus I
- MAT 313 Statistics I
- MAT 225 Discrete Math
- MAT 318 Elementary Linear Algebra

### Computer Science Requirements
- CSC 107 Computer Science I Lab
- CSC 110 Computer Science I
- CSC 111 Computer Science II
- CSC 110 Computer Science I
- CSC 310 Design & Analysis of Algorithms
- CSC 318 Elementary Linear Algebra
- SWE 210 Design Patterns
- CMPE 320 Operating Systems
- CMPE 220 Computer Organization
- CSC 371 Database Management
- CSC 498 Senior Research Methods
- CSC 499 Research and Development Project

## II. BS CS no Concentration - Upper Division Requirements

- CSC 350 Intro. To Computer Graphics
- CSC 401 Simulation Techniques
- CSC 431 Computer Networks
- CSC 440 Compiler Design
- CSC 462 Artificial Intelligence

## III. BS CS with Concentration - Upper Division Requirements

### Embedded Programming
- CMPE 322 Embedded Programming
- CSC 401 Simulation Techniques
- CMPE 410 Real-Time and Mobile Computing
- CMPE 420 Digital and Reconfigurable Computing
- CMPE 322 Embedded Programming
- CMPE 410 Real-Time and Mobile Computing
- CMPE 420 Digital and Reconfigurable Computing
- One of:
  - CSC 431 Computer Networks
  - CSC 440 Compiler Design
  - CSC 463 Introduction to Robotics
- CSC 431 Computer Networks
- CSC 440 Compiler Design
- CSC 463 Introduction to Robotics

### Computer Graphics Concentration
- CSC 350 Intro. To Computer Graphics
- CSC 450 Advanced Computer Graphics
- CSC 451 Computer Graphics Algorithms
- CSC 350 Intro. To Computer Graphics
- CSC 450 Advanced Computer Graphics
- CSC 451 Computer Graphics Algorithms
- Math/CSC/SWE Elective (3 credit)
- Math/CSC/SWE Elective (3 credit)
- Art 217 Computer Design I
- Art 217 Computer Design I
- Any Two From:
  - Art 217 Computer Design I
  - Art 306 Computer Design II
  - Art 217 Computer Design I
  - Art 306 Computer Design II
  - Art 319 Computer Design III
  - Art 319 Computer Design III
  - Art 425 Computer Design IV
  - Art 425 Computer Design IV

### Related Discipline Concentration
- CSC/SWE Electives (12 credits)
- Major/Minor in other discipline
- * No electives can overlap with your other major/minor