FOR 2010-2011 AND PRIOR YEARS
COMPUTER SCIENCE
College of Science and Health
Bachelor of Science in COMPUTER SCIENCE

**GE Requirements (42 credits)**

1. Arts & Communication (6 credits)
   - COMM 110 Communication in Action

   *Select 1 from the remaining:*
   - ARTH 101 Approaches to Western Art
   - COMM 101 Intro to Theatre
   - MUS 120 Music Appreciation

2. Humanities (12 credits)
   - ENG 110 Writing Effective Prose
   - ENG 150 Intro to Literature
   - HIST 101 Foundations of Western Civ.
   - PHIL 110 Intro to Philosophy

3. Math/Science (12 credits)
   - MATH 160 Calculus I

   *Complete 1 of the sets from the following:*
   - BIO 163 & 164 General Biology I & II
   - CHEM 160 & 161 General Chemistry I & II
   - PHYS 260 & 261 General Physics I & II

4. Social Science (6 credits)
   - ANTH 130 Intro to Anthropology
   - ECON 201 Macroeconomics Principles
   - GEO 150 World Regional Geography
   - POL 110 Intro to Politics
   - POL 120 American Government
   - PSY 110 General Psychology
   - SOC 101 Principals of Sociology

   *Complete 2 courses of the following, no more than 3 credits per discipline:
   - COMM 110 Communication in Action
   - ARTH 101 Approaches to Western Art
   - COMM 101 Intro to Theatre
   - MUS 120 Music Appreciation

5. Health/Movement Science (3 credits)
   - Complete 1 of the following:
     - PBHL 120 Current Health Issues
     - PEGE 150 Fitness for Life

6. Racism & Sexism (3 credits)
   - Complete 1 of the following:
     - AACS 150 Racism & Sexism in the US
     - AACS 155 Justice & Racism
     - WS 110 Women’s Changing Roles
     - WS 150 Racism & Sexism in the US

**Foreign Language (6 credits)**

- FOREIGN LANGUAGE – Basic I
- FOREIGN LANGUAGE – Basic II

**Non-Western (3 credits)**

- 200 or higher level non-western course

**Directed Electives (8 credits)**

- MATH 161 Calculus II
- MATH 324 Probability and Statistics

**Free Electives**

Additional credits may be needed to reach the 120 minimum credits to graduate

---

**COMPUTER SCIENCE:**

**Basic Core Courses (21 credits)**

- CS 230 Computer Science I
- CS 240 Computer Science II
- CS 260 Discrete Structures
- CS 280 Computer and Assembler Language
- CS 341 Digital Logic & Computer Organization
- CS 342 Data Structures

**Advanced Core Courses (15 credits)**

- CS 345 Operating Systems
- CS 350 Software Engineering
- CS 372 Design and Analysis of Algorithms
- CS 382 Programming Languages
- CS 480 Computer Science Seminar

**Computer Science Electives (12 credits)**

Select 4 from the following:

- CS 399 Selected Topics
- CS 402 Numerical Methods
- CS 404 Computer Simulation
- CS 405 Systems Programming
- CS 410 Artificial Intelligence
- CS 420 Compiler Construction
- CS 430 Data Comm. & Computer Networks
- CS 440 Database Management System
- CS 441 Computer Architecture

- CS 445 Theory of Computation
- CS 461 Computer Graphics
- CS 490 Computer Science Senior Project (max. 3) or
  CS 495 Internship (max. 3 credits)

**Additional Math & Science (8/7 credits)**

Select 2 from the following, at least 1 must be a science course:

- BIO 205 Cell Biology
- BIO 206 General Genetics
- BIO 261 General Botany
- CHEM 211 Intro to Instrumental Methods
- CHEM 251 Organic Chemistry
- CHEM 320 Inorganic Chemistry I
- PHYS 250 Basic Electronics I
- PHYS 262 General Physics III
- PHYS 290 Engineering Mechanics: Statics
- PHYS 291 Engineering Mechanics: Dynamics
- ENV 110 Environmental Foundations
- ENV 115 General Geology
- MATH 201 Calculus III
- MATH 202 Linear Algebra
- MATH 301 Modern Algebra
- MATH 322 Differential Equations
- MATH 411 Advanced Discrete Mathematics

2/10/2010