B.S.C.S. Requirements

alexander

July 21, 2025

(14 units) FIRST YEAR FALL

- (1 unit) GNEG 11101 Introduction to Engineering I

- (3 units) ENGL 10103 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)

- (3 units) CHEM 14103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture)

- (4 units) MATH 24004 Calculus I (ACTS Equivalency = MATH 2405) (Satisfies General Education Outcome 2.1)

- (3 units) History Elective (Satisfies General Education Outcomes 3.2 and 4.2). Choose from one of the following courses:

    - HIST 20003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)
    - HIST 20103 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)

(16 units) FIRST YEAR SPRING

- (unit 1) GNEG 11201 Introduction to Engineering II

- (unit 4) MATH 25004 Calculus II

- (unit 4) PHYS 20304 University Physics I (ACTS Equivalency = PHYS 2034)

- (unit 4) Freshman Science Elective (Satisfies General Education Outcome 3.4) Choose one of the following science and corresponding lab options:

    - BIOL 10103 Principles of Biology (ACTS Equivalency = BIOL 1014 Lecture)
    - BIOL 10101 Principles of Biology Laboratory (ACTS Equivalency = BIOL 1014 Lab)
    - CHEM 14203 University Chemistry II (ACTS Equivalency = CHEM 1424 Lecture)
    - CHEM 14201 University Chemistry II Laboratory (ACTS Equivalency = CHEM 1424 Lab)
    - GEOL 11103 Physical Geology (ACTS Equivalency = GEOL 1114 Lecture)
    - GEOL 11101 Physical Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)
    - PHYS 20404 University Physics II (ACTS Equivalency = PHYS 2044 Lecture) (For students who already have credit for PHYS 2054, they may wish to select PHYS 2074 for their Freshman Science Elective.)

- (unit 3) ENGL 10303 Technical Composition II (ACTS Equivalency = ENGL 1023) (Satisfies General Education Outcome 1.2)

(17 units) SECOND YEAR FALL

- (4 units) CSCE 20004 Programming Foundations I

- (4 units) CSCE 21104 Digital Design

- (3 units) MATH 26103 Discrete Mathematics

- (3 units) Fine Arts Elective (Satisfies General Education Outcome 3.1)

- (3 units) Social Sciences Elective (Satisfies General Education Outcomes 3.3 and 4.1)

(14 units) SECOND YEAR SPRING

- (3 units) CSCE 20104 Programming Foundations II

- (3 untis) CSCE 22104 Computer Organization

- (3 units) MATH 30803 Linear Algebra

- (3 units)Social Sciences Elective (Satisfies General Education Outcome 3.3)

(15 units) THIRD YEAR FALL

- (3 units) CSCE 31903 Programming Paradigms

- (3 units) CSCE 36103 Operating Systems

- (3 units) INEG 33103 Engineering Probability and Statistics

- (3 units) PHIL 31003 Ethics and the Professions (Satisfies General Education Outcome 5.1)

- (3 units) General Elective

(15 units) THIRD YEAR SRPING

- (3 units) CSCE 35103 Software Engineering (Satisfies General Education Outcome 6.1)

- (3 units) CSCE 45203 Database Management Systems

- (3 units) CSCE Elective (4000 level)

- (3 units) MATH 31003 Combinatorics

- (3 units) SPCH 10003 Public Speaking (ACTS Equivalency = SPCH 1003) (Satisfies General Education Outcome 1.2)

(16 units) FOURTH YEAR FALL

- (1 unit) CSCE 45601 Capstone I

- (3 units) CSCE 41303 Algorithms

- (3 units) CSCE 47503 Computer Networks

- (3 units) CSCE Elective (4000 level)

- (3 units) General Elective

- (3 units) General Elective

(15 units) FOURTH YEAR SPRING

- (3 units) CSCE 49603 Capstone II

- (3 units) CSCE 43203 Formal Languages and Computability

- (3 units) CSCE Elective (4000 level)

- (3 units) General Elective

- (3 units) Social Sciences Elective (Satisfies General Education Outcome 3.3)