

**REPRESENTATIVE COURSE SEQUENCE
SOFTWARE ENGINEERING (SE)**

Freshman Year

First Semester

CSE 1104 – Introduction to Engineering
CSE 1105 – Introduction to CSE
CSE 1320 – Intermediate Programming
ENGL 1301 – Critical Thinking, Reading
and Writing I
MATH 1426 – Calculus I
HIST 1311 – History of the United States
Total Credit 15 Hours

Second Semester

CSE 1325 – Object-Oriented Programming
in Java
ENGL 1302 – Critical Thinking, Reading
and Writing II
MATH 2425 – Calculus II
PHYS 1443 – General Technical Physics I
HIST 1312 – History of the United States
Total Credit 17 Hours

Sophomore Year

First Semester

CSE 2315 – Discrete Structures
CSE 2312 – Computer Organization & Assembly
Language Programming
Linear
MATH 2326 – Calculus III
PHYS 1444 – General Technical Physics II
POLS 2311 – Government of the United States
Total Credit 16 Hours

Second Semester

CSE 2320 – Algorithms and Data Structures
IE 3301 – Engineering Probability –
MATH 3330 – Introduction to Matrices &
Algebra
POLS 2312 – State & Local Government
COMS 3302 – Professional and Technical
Communication–
Total Credit 15 Hours

Junior Year

First Semester

CSE 3310 – Fundamentals of Software
Engineering
CSE 3315 – Theoretical Concepts in CSE
Processes
CSE 3322 – Computer Architecture
Engineering
IE 3312 – Engineering Economy
Math/Science Elective, 3 hours
Total Credit 15 Hours

Second Semester

CSE 3302 – Programming Languages
CSE 3320 – Operating Systems
CSE 4310 – Software Engineering
CSE 4311 – Object-Oriented Software
Literature Elective, 3 hours
Total Credit 15 Hours

Senior Year

First Semester

CSE 3330 – Database Systems and File Structures
Project II
CSE 4321 – Software Testing and Maintenance
CSE 4322 – Software Project Management
CSE 4316 – Computer System Design Project I
Social/Cultural Elective, 3 hours
Total Credit 15 Hours

Second Semester

CSE 4317 – Computer System Design
CSE 4361 – Software Design Patterns
Math/Science Elective, 3 hours
Fine Arts Elective, 3 hours
Total Credit 12 Hours

TOTAL CREDIT HOURS = 120 hours, plus modern and classical languages as required.