# Bachelor of Science in Computer Science

## Software Design and Development Track

## Plan of Study

## Freshman Year - 30 Credits

CGS 1920 - Introduction to Computing (1 credit)

General Electives (3 credits)

MAC 2311 - Calculus I (4 credits)

MAC 2312 - Calculus II (4 credits)

CS Science Elective (3 credits) [May need to take corresponding lab]

UCC courses (15 credits)

### Sophomore Year - 30 credits

COP 2210 - Computer Programming I (4 credits)

PHY 2048/PHY 2048L - Physics I w/Calculus (5 credits)

PHY 2049/PHY 2049L - Physics II w/ Calculus (5 credits)

COT3100 - Discrete Structures or MAD 2104 - Discrete Mathematics (3 credits)

UCC Courses (6 credits)

CS Science Elective (3 credits) [May need to take corresponding lab]

General Electives (4 credits)

### Junior Year - 30 credits

CDA 3103 - Fundamentals of Computer Systems (3 credits)

COP 3337 - Computer Programming II (3 credits)

ENC 3249 - Professional and Technical Writing for CS (3 credits)

STA 3033 - Introduction to Probability and Statistics for CS (3credits)

COP 3530 - Data Structures (3 credits)

COP 4338 - Computer Programming III (3 credits)

COT 3541 - Logic for Computer Science (3 credits)

CDA 4101 - Structured Computer Organization (3 credits)

CGS 3095 - Technology in the Global Arena (GL) (3 credits)

General Electives (3 credits)

#### Senior Year - 30 credits

COP 4713 - Net-centric Computing (3 credits)

MAD 3512 - Theory of Algorithms (3 credits)

CEN 4010 - Software Engineering (3 credits)

COP 4710 - Database (3 credits)

COP 4555 - Principles of Programming Languages (3 credits)

COP 4610 - Operating Systems Principles (3 credits)

CEN 4021 - Software Engineering II (3 credits)

CEN 4072 - Software Testing (3 credits)

CIS 4911 - Senior Project (3 credits)

CS Elective (3 credits)

For students who are deficient in a foreign language, the general electives should include a two-semester sequence in one foreign language. Also, students are required to earn at least nine credit hours prior to graduation by attending one or more summer semesters at FIU or any other University of the Florida State University System.