**Computer Science Program**

**Catalog 2019/2020 – 120 Hours**

**NOTE:** This flow chart is provided as a guide; the catalog is the only definitive source of requirements.

### Mathematics – 17 hours
- MAC 2281 (4 hrs) Engineering Calculus I
- MAC 2282 (4 hrs) Engineering Calculus II
- EGN 4450 (2 hrs) Intro to Linear Systems
- EGN 3443 (3 hrs) Prob and Statistics for Engineers

### Science – 14 hours
- MAC 2283 (4 hrs) Engineering Calculus III
- COP 2510 (3 hrs) Programming Concepts
- COP 3514 (3 hrs) Object Oriented Software Design
- CDA 3103 (3 hrs) Computer Organization
- COP 4530 (3 hrs) Data Structures
- CDA 4205 (3 hrs) Computer Architecture
- COP 4600 (3 hrs) Operating Systems
- CEN 4020 (3 hrs) Software Engineering
- COT 4400 (3 hrs) Analysis of Algorithms
- COT 4419 (3 hrs) Secure Coding

### English – 6 Hours
- ENC 1101 (3 hrs) Composition I
- ENC 1102 (3 hrs) Composition II

### Additional requirements
- Gen Ed Social Science (3 hrs)
- Gen Ed Humanities (3 hrs)
- Gen Ed Human and Cultural Diversity in GC (3 hrs)
- ENC 3246 Communication for Engineers (3 hrs)
- Foreign Lang (8 hrs or 2 years high school)

### Industry internship
An industry internship is recommended for the third summer. Credit can be earned as CIS 4940 Industry Internship. See the Department Advisor for more information.

### Notes
1) Unless otherwise stated, the minimum acceptable grade in all BSCS required math, science, and engineering courses is a C or higher (C- is insufficient). The minimum acceptable grade in specialization courses is a C-, except as stated in the program admission and continuation requirements in the catalog. See the undergraduate catalog.
2) A student may substitute a second "Physical Science" course for the required "Life Science" course. See the undergraduate catalog.
3) COP 4530 is the minimum prerequisite for most software electives, some software electives have COP 3331 as the prerequisite. CDA 3201 with lab is the minimum prerequisite for most hardware electives. COP 4530 and COT 3100 are the minimum prerequisites for theory electives. See the undergraduate catalog.
4) A one hour course or lab (to satisfy a fifth Departmental Elective) is under development. See Department Advisor.

### General Electives (6 hrs)
- ___________________
- ___________________
- ___________________
- ___________________
- ___________________
- ___________________