Computer Engineering Program
Catalog 2016/2017 – 128 Hours

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

Requires a 3.0 average in Calculus I & II, Physics I & II with Labs, and Composition I & II

Mathematics – 17 hours
- MAC 2281 (4 hrs) Engineering Calculus I
- MAC 2282 (4 hrs) Engineering Calculus II
- MAC 2283 (4 hrs) Engineering Calculus III
- MAP 2302 (3 hrs) Diff Equations or EGN 3433 (3 hrs) Model and Analysis*
- PHY 2048/2048L Physics I w/ Lab (4 hrs)
- PHY 2049/2049L Physics II w/ Lab (4 hrs)
- EGN 3000/3000L Foundations of Engineering
- CHM 2045L Gen. Chem w/ Lab
- COP 2510 (3 hrs) Programming Concepts
- COP 3514 (3 hrs) Program Design
- COP 3331 (3 hrs) Object Oriented Software Design
- COP 4530 (3 hrs) Data Structures
- COP 4600 (3 hrs) Operating Systems
- CIS 4910 (2 hrs) Comp Science Senior Project

Science – 15 hours
- FKL Natural Sciences Elective (3 hrs)
- CHM 2045L Gen. Chem w/ Lab
- COP 3201/3201L Computer Logic Design w/ Lab
- CDA 4203/4203L Computer System Design w/ Lab
- CDA 4205 (3 hrs) Computer Architecture
- CDA 4213/4213L CMOS VLSI Design w/ Lab
- COT 4400 (3 hrs) Algorithms (Theory course)
- CDA 3103 (3 hrs) Computer Organization
- EGN 3000/3000L Foundations of Engineering
- ENC 1101 (3 hrs) Composition I
- ENC 1102 (3 hrs) Composition II
- COP 2510 (3 hrs) Programming Concepts
- COP 3514 (3 hrs) Program Design
- COP 3331 (3 hrs) Object Oriented Software Design
- COP 4530 (3 hrs) Data Structures
- COP 4600 (3 hrs) Operating Systems
- CIS 4910 (2 hrs) Comp Science Senior Project

Electives
- COP 2510, CDA 3103, and COP 3514 with a minimum grade of B based on best attempts in each course. These requirements must be met with a maximum of two attempts allowed for each course. See the undergraduate catalog.

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

General Education requirements
- FKL Social and Behavioral Sciences – 6 hrs
- FKL Humanities – 6 hrs (one course with HHCP)
- FKL Fine Arts – 3 hrs
- FKL Human and Cultural Diversity in a GC – 3 hrs
- Foreign Lang – 8 hrs (or 2 years high school)

Exit requirements
- CIS 4250 (3 hrs – FKL capstone) Ethical Issues and Professional Conduct (Senior Standing in Department pre-req)
- ENC 3246 (3 hrs) Communications for Engineers

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 BSCE 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) 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.

* Taking MAP 2302 is probably best if seeking a Math minor – see the Department advisor.

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