Computer Engineering Program
Catalog 2017/2018 – 128 Hours

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

EGN 4450 (2 hrs) Intro to Linear Systems

MAC 2283 (4 hrs) Engineering Calculus III

MAP 2302 (3 hrs) Diff Equations or EGN 3433 (3 hrs) Model and Analysis*

Science – 15 hours

FKL Natural Sciences Elective (3 hrs)

CHM 2045
CHM 2045L
Gen. Chem w/ Lab

PHY 2048/2048L Physics I w/ Lab (4 hrs)

PHY 2049/2049L Physics II w/ Lab (4 hrs)

EGN 3000/3000L (1 hr) Foundations of Engineering

COP 2510 (3 hrs) Programming Concepts

COP 3514 (3 hrs) Program Design

Note: 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.

CDA 3103 (3 hrs) Computer Organization

COP 3331 (3 hrs) Object Oriented Software Design

Co-prereq

COT 3100 (3 hrs) Discrete Structures

Engineering fundamentals and core courses
EGN 3615 (3 hrs) Engineering Economics with Social and Global Implications
EGN 3443 (3 hrs) Probability and Statistics for Engineers (MAC 2282 pre-req)
EGN 3373 (3 hrs) Electrical Systems (PHY 2049 and PHY 2049L pre-req, MAP 2302 co-req)
EEE 3394 (3 hrs) Electronic Materials (CHM 2045 and PHY 2049 pre-req)

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)

FKL exit requirements
CIS 4250 (3 hrs – FKL capstone) Ethical Issues and Professional Conduct (Senior Standing in Department)
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 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 may be best if seeking a Math minor – see the Department advisor

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

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

ENGL Human and Cultural Diversity in a GC – 3 hrs
Foreign Lang – 5 yrs (or 2 years high school)

Engr. fundamentals and core courses

Technology courses
CIS 4203/4203L (4 hrs) Computer System Design w/ Lab

CIS 4205 (3 hrs) Computer Architecture

CIS 4213/4213L (4 hrs) CMOS VLSI Design w/ Lab

CIS 4910 (2 hrs) Comp Science Senior Project

Electives
Hardware Electives (6 hrs)

Departmental Electives

Note: Department website lists elective courses by category. Should also consult with Department advisor.

Version 1.01 (Christensen – March 3, 2017)