Computer Engineering Program
Catalog 2015/2016 – 128 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
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 2045L (4 hrs) Gen. Chem w/ Lab
PHY 2048/2048L (4 hrs) Physics I w/ Lab
PHY 2049/2049L (4 hrs) Physics II w/ Lab

EGN 2049/2049L (4 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 Fine Arts – 3 hrs

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 catalog.
2) COP 4530 is the minimum prerequisite for most software electives. CDA 3201L is the minimum prerequisite for most hardware electives. COP 4530 and COP 3100 are the minimum prerequisites for theory electives. See the undergraduate catalog for the specific prerequisites for elective courses. See catalog.

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)

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

CDA 3103 (3 hrs) Computer Organization
COP 3514 (3 hrs) Program Design
COP 3331 (3 hrs) Object Oriented Software Design
COT 3100 (3 hrs) Discrete Structures

COP 4530 (3 hrs) Data Structures
CDA 4203/4213L (4 hrs) CMOS VLSI Design w/ Lab
CDA 4205 (3 hrs) Computer Architecture

Note: COP 2510 with a minimum grade of B. 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 catalog.

Hardware Electives (6 hrs)
(choose 2 from above list)

Departmental Electives
Hardware, Software, Theory (6 hrs)

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

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