Computer Engineering Program
Catalog 2014/2015 – 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) 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 (4 hrs) 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**
- 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

**FKL Social and Behavioral Sciences – 6 hrs**
- FKL Humanities – 6 hrs
- FKL Fine Arts – 3 hrs
- FKL Human Cultural Diversity and GC – 3 hrs
- Foreign Lang – 8 hrs (or 2 years high school)

**FKL Natural Sciences Elective (3 hrs)**

**Electives – 65 hours**
- EGN 2048/2048L Physics II w/Lab (4 hrs)
- MAC 2283 (4 hrs) Engineering Calculus III
- PHY 2049/2049L Physics II w/Lab (4 hrs)

**CIS 4910 (2 hrs) Comp Science Senior Project**

**Possible hardware electives (3 credit hours each)**
- CDA 4253 – FPGA Design and Analysis
- CDA 4621 – Control of Mobile Robots
- CDA 4930 – Advanced VLSI System Design
- CDA 4930 – VLSI Design Automation
- CDA 4930 – Testing/Fault Tolerance Digital Sys
- CDA 4930 – Introduction to Embedded Systems
- CDA 4930 – Digital Circuit Synthesis

There may be other offerings. See Department advisor for all available options.

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

**Note**
- Data Structures is prerequisite for all software electives. Logic Design is prerequisite for all hardware courses. Discrete Structures and Data Structures are prerequisite for all theory courses. See catalog for specific prerequisites for elective courses.

- Hardware Electives (6 hrs) (choose 2 from above list)
- Departmental Electives Hardware, Software, Theory (8 hrs)

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

**Version 1.00 (Christensen – June 16, 2014)**