**Computer Engineering Program**
**Catalog 2013/2014 – 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) 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**
- MAC 2283 (4 hrs) Engineering Calculus II
- PHY 2048/2048L Physics I w/Lab (4 hrs)
- PHY 2049/2049L Physics II w/Calc/Lab (4 hrs)

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

**Science – 15 hours**
- EGN 3000 (1 hr) Foundations of Engineering
- ENC 1101 (3 hrs) Composition I
- ENC 1102 (3 hrs) Composition II

**Science – 15 hours**
- COP 3514 (3 hrs) Program Design
- COP 3514 (3 hrs) Data Structures
- COP 4530 (3 hrs) Operating Systems
- COP 4600 (3 hrs) Operating Systems

**Possible hardware electives (3 credit hours each)**
- CDA 4253 – FPGA Design and Analysis
- CDA 4261 – Control of Mobile Robots
- CIS 4930 – Advanced VLSI System Design
- CIS 4930 – VLSI Design Automation
- CIS 4930 – Testing/Fault Tolerance Digital Sys
- CIS 4930 – Introduction to Embedded Systems
- CIS 4930 – Digital Circuit Synthesis

**General Education requirements**
- 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)

**Engineering fundamentals and core courses**
- EGN 3615 – Engineering Economics with Social and Global Implications
- EGN 3443 – Engineering Statistics (MAC 2282 pre-req)
- EGN 3373 – Electrical Systems (MAP 2302 co-req)
- EEE 3394 – Electronic Materials (PHY 2049 pre-req)

**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.

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