NOTE: This flow chart is only 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**
- Science Elective (3 hrs)
- CHM 2045 (4 hrs) Gen. Chem w/Lab
- PHY 2048/2048L (4 hrs) Physics I w/Lab
- PHY 2049/2049L (4 hrs) Physics II w/Calc/Lab
- COP 2510 (3 hrs) Programming Concepts
- COP 3514 (3 hrs) Program Design
- COT 3100 (3 hrs) Discrete Structures

**Engineering fundamentals and core courses**
- EGN 3615 – Engineering Economy
- EGN 3443 – Engineering Statistics (Calc II pre-req)
- EGN 3373 – Electrical Systems (MAP 2302 pre-req)
- EEE 3394 – Electronic Materials

**General Education requirements**
- Social and Behavioral Sciences – 3 hrs
- Humanities – 6 hrs
- Fine Arts – 3 hrs
- Human Cultural Diversity and GC – 3 hrs
- Foreign Language – 8 hrs (or 2 years HS)

**Possible hardware electives (3 credit hours each)**
- CDA 4253 – FPGA Design
- CIS 4930 – VLSI Testing
- CIS 4930 – Digital Circuit Synthesis
- CIS 4930 – Design Automation
- CIS 4930 – Embedded Systems

See undergraduate advisor for all possible elective offerings.

**Science Electives**
- COP 3331 (3 hrs) Object Oriented Design
- COP 3201/3201L (4 hrs) Computer Logic Design & Lab
- CDA 4205 (3 hrs) Computer Architecture
- CDA 4203/4203L (4 hrs) Computer System Design & Lab
- CDA 4213/4213L (4 hrs) CMOS VLSI Design & Lab
- COP 4600 (3 hrs) Operating Systems
- CIS 4910 (2 hrs) Computer Science Senior Project

**Exit requirements**
- CIS 4250 Computer Ethics (3 hrs) - Senior Standing in Dept.
- ENC 3246 Communications for Engineers (3 hrs)

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

**Departmental Electives**
(6 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 UG advisor