Computer Engineering Program
Catalog 2021/2022 – 120 Hours

NOTE: This flowchart 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
- 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/ Lab

Natural Science Elective (3 hrs)
- MAC 2283 (4 hrs) Engineering Calculus III
- PHY 2048/2048L (4 hrs) Physics I w/ Lab
- PHY 2049/2049L (4 hrs) Physics II w/ Lab

Engineering fundamentals and core courses
- EGN 3615 (3 hrs) Engineering Economics with Social and Global Implications (no coreqs or prereqs) (HCDGC Gen Ed)
- EGN 3443 (3 hrs) Probability and Statistics for Engineers (MAC 2282 prereq)
- EGN 3373 (3 hrs) Electrical Systems (EGN 3433 or MAP 2302 with "B" coprereq)
- EEE 3394 (3 hrs) Electronic Materials (CHM 2045, PHY 2048 or PHY 2060 pre-req, MAC 2283 or MAC 2313 coprereq)

Additional requirements
- Gen Ed Social Science (3 hrs)
- Gen Ed Humanities (3 hrs)
- ENC 3246 Communication for Engineers (3 hrs)
- Foreign Lang (8 hrs or 2 years high school)

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.
2) COP 4530 is the minimum prereq for most software electives. CDA 3201 with lab is the minimum prereq for most hardware electives. COP 4530 and COT 3100 are the minimum prereqs for theory electives.
3) Department website lists elective courses by category. Should also consult with Department advisor.
4) Taking MAP 2302 may be best if seeking a Math minor. Should also consult with Department advisor.
5) The maximum number of credit hours for CIS 4900, CIS 4915, and CIS 4940 in any combination is 6 credit hours.

CDA 3103 (3 hrs) Computer Organization
COP 3514 (3 hrs) Program Design
CDA 3201/3201L (4 hrs) Computer Architecture w/Lab
CDA 4205/4205L (4 hrs) Computer System Design w/Lab
CDA 4213/4213L (4 hrs) CMOS VLSI Design w/ Lab
CDA 4203/4203L (4 hrs) Operating Systems
COT 4400 (3 hrs) Analysis of Algorithms
COT 3100 (3 hrs) Discrete Structures
CIS 4910 (3 hrs) Comp Science and Eng Project
CIS 4250 (3 hrs) Ethical Issues and Prof Conduct

CSE Electives (6 hrs)
CSE Hardware Electives (6 hrs)
General Electives (3 hrs)