Computer Engineering Program
Catalog 2020/2021 – 128 Hours

NOTE: This flow chart is provided as a guide; the catalog is the only definitive source of requirements.

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
CHM 2045L (4 hrs) Gen. Chem w/ Lab
Natural Science Elective (3 hrs)

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

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

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. See the undergraduate catalog.
2) COP 4530 is the minimum prerequisite for most software electives, some software electives have COP 3331 as the prerequisite. CDA 3201 with lab is the minimum prerequisite for most hardware electives. COP 4530 and COP 3100 are the minimum prerequisites for theory electives. See the undergraduate catalog.
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
COT 3100 (3 hrs) Discrete Structures
CIS 4910 (3 hrs) Comp Science and Eng Project
CIS 4250 (3 hrs) Ethical Issues and Prof Conduct
CDA 3201/3201L (4 hrs) Computer Logic Design w/ Lab
CDA 3205 (3 hrs) Computer Architecture
CDA 4203/4203L (4 hrs) Computer System Design w/ Lab
CDA 4213/4213L (4 hrs) CMOS VLSI Design w/ Lab
CDA Electives (6 hrs)
CSE Hardware Electives (6 hrs)
General Elective (9 hour)

EGN 3000/3000L (3 hrs) Foundations of Engineering
COP 2510 (3 hrs) Programming Concepts
COP 3331 (3 hrs) Object Oriented Software Design
COP 4300 (3 hrs) Data Structures

CIS 4900 (3 hrs) Analysis of Algorithms
COP 4600 (3 hrs) Operating Systems
CIS 4250 (3 hrs) Ethical Issues and Prof Conduct

EGN 1101 (3 hrs) Composition I
EGN 1102 (3 hrs) Composition II

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