Computer Engineering Program
Catalog 2019/2020 – 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)
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
Natural Science Elective (3 hrs)
CHM 2045
Chemistry Fundamentals
CHM 2045L (4 hrs)
Gen. Chem w/ Lab
PHY 2048/2048L
Physics I w/ Lab (4 hrs)
PHY 2049/2049L
Physics II w/ Lab (4 hrs)

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

Science – 15 hours
PHY 2048/2048L
Physics I w/ Lab (4 hrs)
PHY 2049/2049L
Physics II w/ Lab (4 hrs)

EGN 3000/3000L
Foundation of Engineering

Note: COP 2510, CDA 3103, and COP 3514 with a minimum grade of B based on best attempts in each course. These requirements must be met with a maximum of two attempts allowed for each course. See the undergraduate catalog.

CDA 3103 (3 hrs)
Computer Organization
COP 3514 (3 hrs)
Program Design
COT 3100 (3 hrs)
Discrete Structures

CDA 3201/3201L (4 hrs)
Computer Logic Design w/ Lab
CDA 3205 (3 hrs)
Computer Architecture
COP 3331 (3 hrs)
Object Oriented Software Design

CDA 4203/4203L (4 hrs)
CMOS VLSI Design w/ Lab
CDA 4203/4203L
Computer System Design w/ Lab
COP 4530 (3 hrs)
Data Structures
COP 4600 (3 hrs)
Operating Systems
CIS 4910 (3 hrs)
Comp Science and Eng Project

CIS 4250 (3 hrs)
Ethical Issues and Prof Conduct

COT 4400 (3 hrs)
Analysis of Algorithms

Additional requirements
EGN 3615 (3 hrs) Engineering Economics with Social and Global Implications
EGN 3443 (3 hrs) Probability and Statistics for Engineers (MAC 2282 pre-req)
EGN 3373 (3 hrs) Electrical Systems (PHY 2049 and PHY 2049L pre-req, MAP 2302 co-req)
EEE 3394 (3 hrs) Electronic Materials (CHM 2045 and PHY 2049 pre-req)

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 COT 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.

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