Computer Engineering Program Catalog 2021/2022 - 120 Hours Requires a 3.5 grade average in Calculus I & II, Physics I with Lab, and Composition I & II for NOTE: This flowchart is provided as a guide: the progression to upper-level. All grades "C" or catalog is the only definitive source of requirements. better ("C-" is not acceptable). No more than two courses in upper-level pre-progression Science - 15 hours English - 6 Hours EGN 3000/3000L CHM 2045 Natural (3 hrs) Mathematics - 17 hours ENC 1101 (3 hrs) ENC 1102 (3 hrs) CHM 2045L Foundations of Science Composition I Composition II (4 hrs) Elective Engineering MAC 2281 (4 hrs) Gen. Chem (3 hrs) **Engineering Calculus I** w/ Lab Note: COP 2510, CDA 3103, MAC 2282 (4 hrs) PHY 2048/2048L and COP 3514 with a **Engineering Calculus II** COP 2510 (3 hrs) (4 hrs) minimum grade of B based **Programming** Physics I w/ Lab on best attempts in each Concepts course. These requirements must be met with a maximum of two attempts allowed for EGN 4450 (2 hrs) MAC 2283 (4 hrs) each course. PHY 2049/2049L Intro to Linear Engineering (4 hrs) Systems Calculus III Physics II w/ Lab MAP 2302 (3 hrs) Diff Equations or CDA 3103 (3 hrs) COP 3514 (3 hrs) COT 3100 (3 hrs) EGN 3433 (3 hrs) Program Design Discrete Computer Model and Organization Structures Analysis* Engineering fundamentals and core courses EGN 3615 (3 hrs) Engineering Economics with Social and Global Implications (no coregs or preregs) (HCDGC Gen Ed) COP 4530 (3 hrs) CDA 3201/3201L EGN 3443 (3 hrs) Probability and Statistics for Engineers (MAC **Data Structures** (4 hrs) 2282 prereq) Computer Logic EGN 3373 (3 hrs) Electrical Systems (EGN 3433 or MAP 2302 Design w/ Lab with "B" coprereq) EEE 3394 (3 hrs) Electronic Materials (CHM 2045, PHY 2048 or PHY 2060 pre-req. MAC 2283 or MAC 2313 coprereg) COT 4400 (3 hrs) CDA 4205/4205L CDA 4203/4203L Additional requirements Analysis of Algorithms (4 hrs) (4 hrs) Gen Ed Social Science (3 hrs) Computer Computer Gen Ed Humanities (3 hrs) ENC 3246 Communication for Engineers (3 hrs) Architecture System Design w/Lab Foreign Lang (8 hrs or 2 years high school) w/ Lab Industry internship COP 4600 (3 hrs) CIS 4910 (3 hrs) CDA 4213/4213L An industry internship is recommended for the third summer. (4 hrs) Operating Comp Science Credit can be earned as CIS 4940 Industry Internship. See the CMOS VLSI Systems and Eng Project Department Advisor for more information. Design w/ Lab CIS 4250 (3 hrs) **Notes** Ethical Issues CSE Electives (6 hrs) 1) Unless otherwise stated, the minimum acceptable grade in and Prof Conduct 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 CSE Hardware Electives (6 hrs) 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 General Electives (3 hrs) 4915, and CIS 4940 in any combination is 6 credit hours.