Computer Engineering Program Catalog 2024-25 - 120 Hours See the USF 2024-25 undergraduate catalog for NOTE: This flowchart is provided as a guide; the information on progression into the upper level. catalog is the only definitive source of requirements. Progression into the upper level is required in order to take CDA 3103 and COP 3514. Science - 15 hours English - 6 Hours EGN 3000/3000L CHM 2045 Natural (3 hrs) Mathematics - 20 hours ENC 1101 (3 hrs) ENC 1102 (3 hrs) CHM 2045L Science Foundations of Composition I Composition II MAC 2281 (4 hrs) (4 hrs) Elective Engineering Gen. Chem (3 hrs) Engineering Calculus I w/ Lab Note: COP 2510, CDA 3103, and COP 3514 with a MAC 2282 (4 hrs) PHY 2048/2048L minimum grade of "B" based Engineering Calculus II COP 2510 (3 hrs) (4 hrs) on best attempts in each Programming Physics I w/ Lab course. These requirements Concepts must be met with a maximum of two attempts allowed for each course. COT 3100 (3 hrs) MAC 2283 (4 hrs) PHY 2049/2049L Discrete Engineering (4 hrs) Structures Calculus III Physics II w/ Lab EGN 3433 (3 hrs) Modeling and CDA 3103 (3 hrs) COP 3514 (3 hrs) EGN 4450 (2 hrs) Analysis or MAP Computer **Program Design** Intro to Linear 2302 (3 hrs) Organization Systems Diff Equations COT 3100 Engineering fundamentals and core courses EGN 3615 (3 hrs) Engineering Economics with Social and Global Implications (no coreqs or prereqs) (HCDGC Gen Ed) CDA 3201/3201L COP 4530 (3 hrs) EGN 3443 (3 hrs) Probability and Statistics for Engineers (MAC (4 hrs) **Data Structures** 2282 prereq) Computer Logic EGN 3373 (3 hrs) Electrical Systems I (EGN 3433 or MAP 2302 Design w/ Lab with "B" coprered) EEE 3394 (3 hrs) Electronic Materials (CHM 2045, PHY 2048 or PHY 2060 pre-req. MAC 2283 or MAC 2313 coprereq) Additional requirements CDA 4205/4205L CDA 4203/4203L COT 4400 (3 hrs) Gen Ed Social Science (3 hrs) (4 hrs) (4 hrs) Analysis of Computer Computer Gen Ed Humanities (3 hrs) Algorithms Architecture ENC 3246 Communication for Engineers (3 hrs) 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. Operating Comp Science (4 hrs) 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 current USF undergraduate catalog. 2) COP 4530 is the minimum prered 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 preregs for most theory electives. . 3) Department website lists elective courses by category. Should also consult with Department advisor. 4) The maximum number of credit hours for CIS 4900, CIS 4915, and CIS 4940 in any combination is 6 credit hours. 5) Students may be required to complete both an approved General Electives (3 hrs) civic literacy course and a passing score on a designated civic literacy assessment before graduation from the USF. Consult the current USF undergraduate catalog.