Computer Engineering Program Catalog 2018/2019 – 128 Hours

NOTE: This flow chart is provided as a guide: the catalog is the only definitive source of requirements. Requires a 3.1 average in Calculus I & II, Physics I & II with Labs, and Composition I & II Science - 15 hours English - 6 Hours EGN 3000/3000L ENC 1101 (3 hrs) ENC 1102 (3 hrs) CHM 2045 Natural Mathematics - 17 hours (3 hrs) CHM 2045L Composition I Composition II Science Foundations of Elective (4 hrs) MAC 2281 (4 hrs) Engineering Gen. Chem **Engineering Calculus I** (3 hrs) 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) minimum grade of B based Physics I w/ Lab Programming (4 hrs) on best attempts in each Concepts course. These requirements must be met with a maximum of two attempts allowed for each course. See the EGN 4450 (2 hrs) MAC 2283 (4 hrs) PHY 2049/2049L undergraduate catalog Intro to Linear Engineering Physics II w/ Lab Systems Calculus III (4 hrs) MAP 2302 (3 hrs) Diff Equations or COT 3100 (3 hrs) CDA 3103 (3 hrs) COP 3514 (3 hrs) EGN 3433 (3 hrs) Discrete Computer Program Design Model and Organization Structures Analysis* Engineering fundamentals and core courses COP 3331 (3 hrs) Co-prereq EGN 3615 (3 hrs) Engineering Economics with Social and **Object Oriented** Global Implications Software Design 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-reg, MAP 2302 co-reg) CDA 3201/3201L COP 4530 (3 hrs) EEE 3394 (3 hrs) Electronic Materials (CHM 2045 and PHY (4 hrs) **Data Structures** 2049 pre-req) Computer Logic Design w/ Lab Additional requirements Gen Ed Social Science (3 hrs) Gen Ed Humanities (3 hrs) CDA 4205 (3 hrs) COT 4400 (3 hrs) CDA 4203/4203L ENC 3246 Communication for Engineers (3 hrs) Computer Algorithms Foreign Lang (8 hrs or 2 years high school) (4 hrs) Architecture Computer (Theory course) System Design w/ Lab **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. COP 4600 (3 hrs) CIS 4910 (2 hrs) CDA 4213/4213L Operating Comp Science (4 hrs) Systems Senior Project **CMOS VLSI** Notes Design w/ Lab 1) Unless otherwise stated, the minimum acceptable grade in all required math, science, and engineering courses is a C or CIS 4250 (3 hrs) higher (C- is insufficient). The minimum acceptable grade in Departmental Electives General Electives (9 hrs) Ethical Issues specialization courses is a C-, except as stated in the Hardware, Software, and Prof Conduct program admission and continuation requirements in the Theory (7 hrs) 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. Hardware Electives (6 hrs) 3) Department website lists elective courses by category. Should also consult with Department advisor. 4) See Department advisor for coverage for 1 hour elective. 5) Taking MAP 2302 may be best if seeking a Math minor. Should consult with Department advisor.