## Bachelor of Science in Civil Engineering Progression Flowchart (BSCE: 132 credits) 2024-2025 Lawrence Freshman Year Sophomore Year Junior Year Senior Year 16 credits 16 credits 17 credits 18 credits 18 credits 16 credits 15 credits 16 credits COM 2103 EGE 3022\* Tech & Prof. Comm Leadership & Prof. LLT/SSC/PSY 3xx3 or 4xx3 ECE 5/4xx3 HUM 1223 (A) **HUM 1213** Dev for Engr Jr/Sr Elective COM 1103 **Engaging Modern** Tech Elective (σ) **Engaging Ancient** (F, SP) (A) College Composition Texts EME 3043 Texts (A) (A) (A) SSC 2xx3 Dynamics (A) SSC Elective<sup>^</sup> (A) LLT 2xx3 LLT Elective<sup>4</sup> ECE 5/4xx3 CHM 1221 (A) Tech Elective University Chem Lab 1 EGE 3012 \* (A) FCF 3324 **Engineering Cost** Environmental GLG 1103 Analysis FCF 5/4xx3 Engineering 1 Geology Tech Elective (SP) (F, SP) CHM 1213 ++ University Chem. 1 **ENGR** EGE 2013 4/5xx3 Statics Tech Elective (A) ECE 1102 ECE 1011 +++ CE Comp. Appl. Lab. ECE 3424 ECE 3523 (Cal. 1 or Instructor's Soil Mechanics ECE 4544 Civil Eng. Perspective Hydromechanics Permission) (F) Hydraulic Engineering ECE 4761 (F) (F, SP) Structural Design & (SP) PHY 2413 \*\*\* (F) PHY 2423 Test Lab University Physics 2 ECE 3013 University Physics 1 (SP) (A) Mechanics of Materials for CE (F, SP) MCS 1414 ECE 4743 PHY 2421 PHY 2431 MCS 1424 Calculus 1 Concrete Design ECE 3011 **ECE 3723** Calculus 2 Physics 1 Lab Physics 2 Lab (A) (SP) Mechanics of Theory of Structures (A) (A) (A) Materials for CE Lab (F, SP) (F, SP) MCS 2414 Calculus 3 ECE 3213 ECE 4051 EGE 1001 (A) Construction ECE 4243 Ethics & Prof Fund. of Engineering Engineering **Project Management** Issues\*\* Design Projects MCS 2423 (F, SP) (F, SP) (F, SP) (SP) Differential Equations (A) ECE 1413 C.E. Materials ECE 3211 MCS 3403 ECE 1101 Construction (SP) Probability & C.E. Computer Engineering lab Statistics EGE 2123 Graphics Lab.(F) (F, SP) (A) ECE 4032 Entrepreneurial ECE 4022 Engineering Design CE Design Project 2 CE Design Project 1 Studio (\*\* & Dept. Chair's (\*\* & Dept. Chair's ECE 1013 (F,SP) ECE 3821 Permission) Permission) Survey & Land Meas. Transportation (SP) (F) (F) Engineering Lab (F) Key: ECE 3823 H.S. Algebra Transportation ++ H.S. Chemistry Engineering (F) H.S. Trigonometry Junior standing \*\* Senior standing \*\*\* Technical Elective (TE) Courses Criteria: PHY1154 or Placement Test required **Engineering Technical Electives** Semester Hours: **ECE Technical Electives** (a) TE courses are indicated by boxes with Rounded Corners. Pre-req COM1103, HUM1213 OR ECE 4253 Construction Safety Mgt (2) Select Four TE courses giving a total TE credits of least 12. HUM1223 Any 4000 level course offered by EAE, ECE, 0 - 20ECE 4563 Hydrology (1) Freshman EGE, EME, ERI, EIE, BME, and EEE, Crossover Sophomore 30 - 59ECE 4363 Environmental Design (σ, 3) (b) The selected Four TE courses MUST have a Total Design ECE 4343 Environmental Engr 2 (σ, 1) 60 - 89Junior Credits equal to or exceed 7. See DegreeWorks for details. ECE 4443 Foundation Design (σ, 3) Course 2 may be taken Senior => 90 concurrently with 1 (or Course 1 Student must satisfy the prerequisites ECE 4733 Adv. Structural Analysis (1) (c) The selected Four TE courses MUST include at least ONE may be taken without 2 ECE 4763 Steel Design (3) course with the symbol ( $\sigma$ ) EaJensen, Ph.D. ECE 4843 Highway Engineering (g. 3) Courses 1 & 2 must be taken Effective: August 2024 ECE 5xx3 See Advisor for approved list concurrently