

**SAINT LOUIS UNIVERSITY**  
**Electrical and Computer Engineering Department**  
**COMPUTER ENGINEERING FLOW CHART**

Name \_\_\_\_\_ Student # \_\_\_\_\_ Entered CpE \_\_\_\_\_

Freshman

|   |         |   |         |
|---|---------|---|---------|
| <input type="checkbox"/> CHEM 163 Chemistry I                                   | 3 _____ | <input type="checkbox"/> ECE 102 Introduction to ECE II       | 1 _____ |
| <input type="checkbox"/> CHEM 165 Chemistry Lab                                 | 1 _____ | <input type="checkbox"/> CSCI 150 Intro to OOP                | 4 _____ |
| <input type="checkbox"/> ENGL 190 Adv Strategies of Rhetoric & Res <sup>2</sup> | 3 _____ | <input type="checkbox"/> MATH 135 Discrete Math               | 3 _____ |
| <input type="checkbox"/> ECE 101 Introduction to ECE I                          | 1 _____ | <input type="checkbox"/> MATH 143 Calculus II (MATH 142)      | 4 _____ |
| <input type="checkbox"/> MATH 142 Calculus I <sup>1</sup>                       | 4 _____ | <input type="checkbox"/> PHYS 161 Eng Physics I (MATH 142)    | 3 _____ |
| <input type="checkbox"/> THEO 100 Theological Foundations                       | 3 _____ | <input type="checkbox"/> PHYS 162 Eng Physics Lab c(PHYS 161) | 1 _____ |
|   | 15      |   | 16      |

Sophomore Year

|   |         |  |         |
|---|---------|--|---------|
| <input type="checkbox"/> ECE 202 Electrical Circuits I<br>(ECE 102, MATH 143, PHYS 161) | 3 _____ | <input type="checkbox"/> CSCI 180 Data Structures (CSCI 150, Math 135) | 4 _____ |
| <input type="checkbox"/> ECE 205 Digital Design   | 3 _____ | <input type="checkbox"/> ECE 203 Electrical Circuits II (ECE 202)      | 3 _____ |
| <input type="checkbox"/> ECE 206 Digital Design Lab                                     | 1 _____ | <input type="checkbox"/> ECE 204 Electrical Science Lab c(ECE203)      | 1 _____ |
| <input type="checkbox"/> MATH 244 Calculus III (MATH 143)                               | 4 _____ | <input type="checkbox"/> MATH 311 Linear Algebra (MATH 244)            | 3 _____ |
| <input type="checkbox"/> PHYS 163 Eng Physics II (PHYS 161)                             | 3 _____ | <input type="checkbox"/> MATH 355 Differential Equations               | 3 _____ |
| <input type="checkbox"/> PHYS 164 Eng Physics II Lab c(PHYS 163)                        | 1 _____ | <input type="checkbox"/> Core: Humanities                              | 3 _____ |
|   | 15      |  | 17      |

Junior Year

|  |         |   |         |
|--|---------|---|---------|
| <input type="checkbox"/> CSCI 290 OO Software Design (CSCI 180)                | 3 _____ | <input type="checkbox"/> ECE 315 Computer Sys Design                          | 3 _____ |
| <input type="checkbox"/> ECE 305 Adv Digital Design (ECE205)                   | 3 _____ | <input type="checkbox"/> ECE 316 Computer Sys Design Lab                      | 1 _____ |
| <input type="checkbox"/> ECE 325 Microprocessors (ECE 205)                     | 3 _____ | <input type="checkbox"/> ECE 317 Computer Architecture (CSCI 150,<br>MATH135) | 3 _____ |
| <input type="checkbox"/> ECE 326 Micro Lab c(ECE 325)                          | 1 _____ | <input type="checkbox"/> ECE 390 Junior Design<br>(ECE 350, cMATH 311)        | 1 _____ |
| <input type="checkbox"/> ECE 330 Semiconductors Devices<br>(ECE 203, MATH 355) | 3 _____ | <input type="checkbox"/> ENGL 400 Business & Professional Writing             | 3 _____ |
| <input type="checkbox"/> ECE 350 Sig & Sys(ECE 203, MATH 355)                  | 3 _____ | <input type="checkbox"/> MATH 403 Prob. & Statistics (MATH 244)               | 3 _____ |
| <input type="checkbox"/> ECE 351 Sig & Sys Lab c(ECE 350)                      | 1 _____ | <input type="checkbox"/> Core: Social and Behavioral Science <sup>5</sup>     | 3 _____ |
|  | 17      |   | 17      |

Senior Year

|  |         |   |         |
|--|---------|---|---------|
| <input type="checkbox"/> CSCI 324 Operating Systems<br>(CSCI 180, ECE 315) | 3 _____ | <input type="checkbox"/> ECE 445/CSCI 334 Computer Networks<br>(CSCI 324) | 3 _____ |
| <input type="checkbox"/> ECE 490 Design I (Senior Level)**                 | 3 _____ | <input type="checkbox"/> ECE 491 Senior Design II (ECE 490)               | 3 _____ |
| <input type="checkbox"/> ECE: ECE Elective <sup>4</sup>                    | 3 _____ | <input type="checkbox"/> ECE: ECE Elective <sup>4</sup>                   | 3 _____ |
| <input type="checkbox"/> PHIL 340 Ethics & Engineering                     | 3 _____ | <input type="checkbox"/> Technical Elective <sup>6</sup>                  | 3 _____ |
| <input type="checkbox"/> Technical Elective <sup>6</sup>                   | 3 _____ | <input type="checkbox"/> Core: Cultural Diversity <sup>3</sup>            | 3 _____ |
|  | 15      |   | 15      |

Total Hours: 127

\*\*MUST BE AT SENIOR STANDING (pass all junior level ECE and CSCI requirements)

<sup>1</sup> Requires a proficiency exam.

<sup>2</sup> Students needing prerequisite work in writing skills as determined by ACT or SAT scores will be required to take ENG-150: The Process of Composition (3) and perhaps ENGL-094: Intro to College Reading (offered as Pass/Fail).

<sup>3</sup> Must not be used to satisfy another core requirement.

<sup>4</sup> Must be taken from the approved list of approved ECE or CSCI elective courses.

<sup>5</sup> Must be taken from a list of approved courses (including Economics).

<sup>6</sup> Must be selected from courses in science (CSCI at 300 level or higher), math, or engineering at 200 level or higher.