

**Saint Louis University**  
**Electrical Engineering Flowchart**  
**(BIOELECTRONICS CONCENTRATION-Engineering Emphasis)**

Name \_\_\_\_\_ Student # \_\_\_\_\_ Entered EE \_\_\_\_\_

Freshman

€BIOL 1240 Biology I	3 _____	€BIOL 1260 Biology II	3 _____
€BIOL 1245 Biology I Lab	1 _____	€BIOL 1265 Biology II Lab	1 _____
€CHEM 1110 General Chemistry I	3 _____	€CHEM 1120 General Chemistry II	3 _____
€CHEM 1115 Gen Chemistry I Lab c(CHEM 1110)	1 _____	€CHEM 1125 Gen Chemistry II Lab c(CHEM 1120)	1 _____
€ECE 1001 Introduction to ECE	1 _____	€ECE 1002 Introduction to ECE II	1 _____
€ENGL 1920 Adv Writing for Professionals. <sup>1</sup>	3 _____	€MATH 1520 Calculus II (MATH 1510)	4 _____
€MATH 1510 Calculus I <sup>2</sup>	4 _____	€PHYS 1610 Eng Physics I (MATH 1510)	3 _____
		€PHYS 1620 Eng Physics Lab c(PHYS 1610)	1 _____
	16		17

Sophomore Year

€BME 2000 BME Computing	3 _____	€ECE 2102 Electrical Circuits II	3 _____
€ECE 2101 Electrical Circuits I (ECE 1001, MATH 1520, PHYS 1610)	3 _____	€ECE 2103 Electrical Circuits Lab	1 _____
€ECE 2205 Digital Design	3 _____	€MATH 1660 Discrete Math	3 _____
€ECE 2206 Digital Design Lab	1 _____	€MATH 3550 Differential Equations (MATH 2530)	3 _____
€MATH 2530 Calculus III (MATH 1520)	4 _____	€THEO 1000 Theological Foundations	3 _____
€PHYS 1630 Eng Physics II (PHYS 1610)	3 _____	€ Core: Social & Behavioral Science	3 _____
€PHYS 1640 Eng Physics II Lab c(PHYS 1630)	1 _____		16
	18		

Junior Year

€BIOL 2600 Human Physiology	3 _____	€BME 4100 Biomedical Signals	3 _____
€ECE 3225 Microprocessors	3 _____	€ECE 3131 Electronic Ckts (ECE 3130)	3 _____
€ECE 3226 Microprocessors Lab	1 _____	€ECE 3132 Electronic Ckts Lab c(ECE 3131)	1 _____
€ECE 3130 Semiconductor Devices	3 _____	€ECE 3052 Prob & Random Var for Eng (MATH 2530 & ECE3150)	3 _____
€ECE 3150/BME 3100 Linear Systems (ECE 2102, MATH 3550)	3 _____	€ECE 3090 Junior Design	1 _____
€ECE 3151 Linear Systems Lab	1 _____	€ECE 4120 Auto Control Systems	3 _____
	14		14

Senior Year

€BME 4600 BME Sensory Systems	3 _____	€ BME 4050 Biomedical Instrumentation	3 _____
€ECE 4800 Senior Design I**	3 _____	€ECE 3140 EM Fields	3 _____
€ECE/BME Elective <sup>4</sup>	3 _____	€ECE 4810 Senior Design II (ECE 4800)	3 _____
€PHIL 3400 Ethics & Engineering	3 _____	€MATH 3110 Linear Algebra	3 _____
€Core: Humanities	3 _____	€Core: Cultural Diversity <sup>3</sup>	3 _____
	15		15

**Total Hours: 125**

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

<sup>1</sup> Students needing prerequisite work in writing skills as determined by ACT or SAT scores will be required to take ENGL 1500: The Process of Composition (3) and perhaps ENGL-1040: Accelerated Reading

<sup>2</sup> Requires a proficiency exam.

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

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