

Saint Louis University
Electrical and Computer Engineering Department
ELECTRICAL ENGINEERING FLOW CHART

(HSM) 5-12

Name _____

Student # _____

Entered EE _____

Freshman

<input type="checkbox"/> CHEM 163 Chemistry I	3 _____	<input type="checkbox"/> CSCI 145 Scientific Programming	3 _____
<input type="checkbox"/> CHEM 165 Chemistry Lab	1 _____	<input type="checkbox"/> ECE 102 Introduction to ECE II	1 _____
<input type="checkbox"/> ECE 101 Introduction to ECE I	1 _____	<input type="checkbox"/> MATH 135 Discrete Math	3 _____
<input type="checkbox"/> ENGL 190 Adv Strategies of Rhetoric & Res ²	3 _____	<input type="checkbox"/> MATH 143 Calculus II (MATH142)	4 _____
<input type="checkbox"/> MATH 142 Calculus I ¹	4 _____	<input type="checkbox"/> PHYS 161 Eng Physics I (MATH142)	3 _____
<input type="checkbox"/> THEO 100 Theological Foundations	3 _____	<input type="checkbox"/> PHYS 162 Eng Physics Lab c(PHYS161)	1 _____
	15		15

Sophomore Year

<input type="checkbox"/> ECE 202 Electrical Circuits I (ECE 102, MATH 143, PHYS 161)	3 _____	<input type="checkbox"/> ECE 203 Electrical Circuits II (ECE 202)	3 _____
<input type="checkbox"/> ECE 205 Digital Design	3 _____	<input type="checkbox"/> ECE 204 Electrical Science Lab c(ECE203)	1 _____
<input type="checkbox"/> ECE 206 Digital Design Lab c(ECE 205)	1 _____	<input type="checkbox"/> MATH 311 Linear Algebra (MATH 244)	3 _____
<input type="checkbox"/> MATH 244 Calculus III (MATH 143)	4 _____	<input type="checkbox"/> MATH 355 Differential Equations	3 _____
<input type="checkbox"/> PHYS 163 Eng Physics II	3 _____	<input type="checkbox"/> MATH 403 Prob. & Statistics	3 _____
<input type="checkbox"/> PHYS 164 Eng Physics II Lab c(PHYS163)	1 _____	<input type="checkbox"/> Core: Humanities	3 _____
	15		16

Junior Year

<input type="checkbox"/> ECE 310 Energy Conversion (ECE 203, MATH 355)	3 _____	<input type="checkbox"/> ECE 331 Electronic Ckt (ECE 330)	3 _____
<input type="checkbox"/> ECE 325 Microprocessors (ECE-205)	3 _____	<input type="checkbox"/> ECE 332 Electronics Ckt Lab c(ECE 331)	1 _____
<input type="checkbox"/> ECE 326 Micro Lab c(ECE-325)	1 _____	<input type="checkbox"/> ECE 340 EM Fields (ECE 203, MATH 355)	3 _____
<input type="checkbox"/> ECE 330 Semiconductor Devices (ECE 203, MATH 355)	3 _____	<input type="checkbox"/> ECE 390 Junior Design (ECE 350, cMATH 311)	1 _____
<input type="checkbox"/> ECE 350 Sig & Sys (ECE203,MATH355)	3 _____	<input type="checkbox"/> ECE 420 Auto Controls (ECE 350)	3 _____
<input type="checkbox"/> ECE 351 Sig & Sys Lab	1 _____	<input type="checkbox"/> ENGL 400 Business & Professional Writing	3 _____
<input type="checkbox"/> Open Elective ⁷	3 _____	<input type="checkbox"/> Core: Social & Behavioral Science ⁵	3 _____
	17		17

Senior Year

<input type="checkbox"/> ECE 440 Electromagnetic Waves (ECE-340)	3 _____	<input type="checkbox"/> ECE 460 Communications (ECE 350, MATH 403)	3 _____
<input type="checkbox"/> ECE 490 Design I (Senior Level)**	3 _____	<input type="checkbox"/> ECE 491 Senior Design II (ECE490)	3 _____
<input type="checkbox"/> ECE: ECE Elective ⁶	3 _____	<input type="checkbox"/> ECE: ECE Elective ⁶	3 _____
<input type="checkbox"/> PHIL 340 Ethics & Engineering	3 _____	<input type="checkbox"/> Technical Elective ⁴	3 _____
<input type="checkbox"/> Technical Elective ⁴	3 _____	<input type="checkbox"/> Core: Cultural Diversity ³	3 _____
	15		15

Total Hours: 125

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

¹ Requires a proficiency exam.

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

³Must not be used to satisfy another core requirement.

⁴Must be selected from courses in science, math, or engineering at 200 level or higher, or Computer Science at 180 or higher.

⁵Must be taken from a list of approved courses in Social and Behavioral Science including Economics.

⁶Must be taken from the approved list of ECE elective courses.

⁷Course satisfying another minor or major or should be treated as technical elective