CURRICULUM SHEET   2023-2024
Electrical Engineering Concentration

Degree requirements - 126 credits

FIRST YEAR

Fall - 13-14 credits		Credits	Spring - 16-17 credits		Credits
ECE102 or ECE103	Digital Circuit Logic *(F,S)* or DC Circuit Analysis *(F,S; MATH159 with a C or higher or MATH160 with a C or higher)*	3-4	ECE102 or ECE103	Digital Circuit Logic *(F,S)* or DC Circuit Analysis *(F,S; MATH159 with a C or higher or MATH160 with a C or higher)*	3-4
MATH160 Fulfills AUCC Category 1B	Calculus for Physical Scientists I *(F,S,SS; MATH124 with a B or higher; MATH126 with a B or higher or MATH127 with a B or higher)*	4	MATH161	Calculus for Physical Scientists II *(F,S,SS; MATH124 or MATH127; MATH159 or MATH160)*	4
CS150B[1] Fulfills AUCC Category 3B	Culture and Coding: Python *(F,S)*	3	PH141 Fulfills AUCC Category 3A	Physics for Scientists and Engineers I *(F,S,SS; MATH159, may be taken concurrently or MATH160, may be taken concurrently)*	5
CO150[2] Fulfills AUCC Category 1A	College Composition *(F,S,SS; CO130 or Placement)*	3	CS164[1]	CS1 - Computational Thinking with Java *(F,S; CS150B with a B or higher or CS152 with a B or higher B or CS163)*	4

SECOND YEAR

Fall - 16 credits		Credits	Spring - 16 credits		Credits
ECE251	Introduction to Microcontrollers and IoT *(F,S; ECE102 with a C or higher)*	4	ECE202	Circuit Theory Applications *(S,SS; ECE103 with a C or higher; MATH161 with a C or higher)*	4
SME Electives[3]	Science/Math/Engineering Elective *(F,S,SS)*	3	ECE232	Introduction to Project Practices *(F,S; ECE202, may be enrolled concurrently or ECE395B, may be enrolled concurrently or ECE495B, may be enrolled concurrently)*	1
PH142 Fulfills AUCC Category 3A	Physics for Scientists and Engineers II *(F,S,SS; PH141; MATH161, may be taken concurrently)*	5	ECE303	Introduction to Communications Principles *(S; MATH261 with a C or higher; MATH340, may be taken concurrently)*	3
MATH261	Calculus for Physical Scientists III *(F,S,SS; MATH161)*	4	MATH340	Introduction to Ordinary Differential Equations *(F,S,SS; MATH261)*	4
			CHEM111	General Chemistry I *(F,S,SS; MATH118 or MATH127 MATH160 or MATH161 or MATH229 or MATH261)*	4

THIRD YEAR

Fall - 15 credits		Credits	Spring - 16 credits		Credits
ECE311	Linear Systems Analysis I *(F; ECE202 with a C or higher ; MATH340 with a C or higher; ECE331, may be taken concurrently; ECE341, may be taken concurrently)*	3	ECE312	Linear Systems Analysis II *(S; ECE311 with a C or higher)*	3
ECE331	Electronics Principles I *(F; ECE202 with a C or higher; MATH340 with a C or higher; PH142 with a C or higher; ECE311, may be taken concurrently; ECE341, may be taken concurrently)*	4	ECE332 Fulfills AUCC Category 4	Electronic Principles II *(S; ECE331 with a C or higher)*	4
ECE341	Electromagnetic Fields & Devices I *(F; ECE202 with a C or higher; MATH340 with a C or higher; PH142 with a C or higher; ECE311, may be taken concurrently; ECE331, may be taken concurrently)*	3	ECE342	Electromagnetic Fields & Devices II *(S; ECE341 with a C or higher)*	3
SME Electives[3]	Science/Math/Engineering Elective *(F,S,SS)*	2	SME Electives[3]	Science/Math/Engineering Elective *(F,S,SS)*	3
CO301B or JTC300 Fulfills AUCC Category 2	Writing in the Disciplines-Sciences *(F,S; CO150 or HONR193)* or Strategic Writing and Communication *(F,S,SS; CO150 or HONR193)*	3	University Core	AUCC Category 1C, 3B, 3D *(F,S,SS)*	3

FOURTH YEAR

Fall - 18 credits		Credits	Spring - 15 credits		Credits
ECE401 Fulfills AUCC Category 4	Senior Design Project I *(F,S; ECE311 and ECE312 with a C or higher; ECE331 and ECE332 with a C or higher; ECE341 and ECE342 with a C or higher)*	3	ECE402 Fulfills AUCC Category 4	Senior Design Project II *(F,S; ECE401)*	3
Technical Electives[3]	See Approved List *(F,S)*	9	Technical Electives[3]	See Approved List *(F,S)*	9
University Core	AUCC Category 1C, 3B, 3D *(F,S,SS)*	6	ECON202 Fulfills AUCC Category 3C	Microeconomics *(F,S,SS; MATH117 or MATH118 or MATH160)*	3

[1] Students may also choose one of the following: 1) Arts/Humanities AUCC + CS152 + CS162; or 2) Arts/Humanities AUCC + CS163

[2] College Composition must be completed within the first 60 credits taken (CSU and transfer credits)

[3] See list of approved courses on the ECE website: https://www.engr.colostate.edu/ece/undergraduates/degree-programs/electrical-engineering-undergrad/

ECE courses required for the major at the 100, 200, and 300 level must be passed with a minimum grade of C; grades below a C will require the student to retake the course. ECE courses designated as an elective are exempt from the C or higher minimum grade requirement.