CURRICULUM SHEET 2025-2026

Electrical Engineering - Electrical Engineering Concentration

Degree requirements - 126 credits

	Fall - 15 credits		Credits	Spring - 15 credits		Credits
FIRST YEAR	ENGR111	Fundamentals of Engineering ***(F,S)***	3	ENGR114	Engineering for Grand Challenges ***(F,S; ENGR 111 or CBE104A or CIVE101A or CIVE102 or MECH103 or MECH104A)***	3
	MATH160	Calculus for Physical Scientists I ***(F,S,SU; 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,SU; MATH124 or MATH127; MATH159 or MATH160)***	4
	CHEM111 **and** CHEM112 Fulfills AUCC Category 3A	General Chemistry I ***(F,S,SU; MATH118 or MATH127 or MATH160 or MATH161 or MATH229 or MATH261***) **and** General Chemistry Lab I ***(F,S,SU; CHEM111 or concurrent registration or CHEM120 or concurrent registration***)	5	PH141 Fulfills AUCC Category 3A	Physics for Scientists and Engineers I ***(F,S,SU; MATH159 or concurrent registration or MATH160 or concurrent registration)***	5
	University Core	AUCC Category 1C, 3B, 3C, 3D ***(F,S,SU)*** ******Recommend CS150B[1] - Culture and Coding: Python (AUCC 3B)***	3	CO150[2] Fulfills AUCC Category 1A	College Composition ***(F,S,SU; CO130 or Placement)***	3

	Fall - 16 credits		Credits	Spring - 16 credits		Credits
SECOND YEAR	ECE205	Analog Circuits I ***(F,S; ENGR114 or concurrent registration or ENGR123 or concurrent registration; MATH159 with a C or higher or MATH160 with a C or higher)***	2	ECE206	Analog Circuits II ***(S,SU; ECE103 with a C or higher or ECE205 with a C or higher; MATH161 with a C or higher)***	3
	ECE252	Intro to Digital Circuits ***(F,S; ENGR114 or concurrent registration or ENGR123 or concurrent registration)***	3	ECE253	Microcontrollers and C for Internet-of-Things ***(F,S; ECE102 with a C or higher or ECE252 with a C or higher)***	3
	CS164[1]	CS1 - Computational Thinking with Java ***(F,S; CS150B with a B or higher or CS152 with a B or higher or ENGR111 with a B or higher or ENGR123 with a B or higher or CS163)***	4	ECE232	Introduction to Project Practices ***(F,S; ECE202 or concurrent registration or ECE206 or concurrent registration or ECE395B or concurrent registration)***	1
	MATH261	Calculus for Physical Scientists III ***(F,S,SU; MATH161)***	4	MATH340	Intro to Ordinary Differential Equations ***(F,S,SU; MATH261)***	4
	University Core	AUCC Category 1C, 3B, 3C, 3D ***(F,S,SU)***	3	PH142	Physics for Scientists and Engineers II ***(F,S,SU; PH141; MATH161 or concurrent registration)***	5

	Fall - 16 credits		Credits	Spring - 17 credits		Credits
THIRD YEAR	ECE311	Linear Systems Analysis I ***(F; ECE202 with a C or higher or ECE206 with a C or higher ; MATH340 with a C or higher; ECE331 or concurrent registration; ECE341 or concurrent registration)***	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 or ECE206 with a C or higher; MATH340 with a C or higher; PH142 with a C or higher; ECE311 or concurrent registration; ECE341 or concurrent registration)***	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 or ECE206 with a C or higher; MATH340 with a C or higher; PH142 with a C or higher; ECE311 or concurrent registration; ECE331 or concurrent registration)***	3	ECE342	Electromagnetic Fields & Devices II ***(S; ECE341 with a C or higher)***	3
	ECE303	Introduction to Communications Principles ***(S; MATH261 with a C or higher; MATH340 or concurrent registration)***	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,SU; CO150 or HONR193)***	3
	SME Electives[3]	Science/Math/Engineering Elective ***(F,S,SU)***	3	SME Electives[3]	Science/Math/Engineering Elective ***(F,S,SU)***	4

	Fall - 17 credits		Credits	Spring - 14 credits		Credits
FOURTH YEAR	ECE401 Fulfills AUCC Category 4	Senior Design Project I ***(F,S; ECE232 with a C or higher; 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)***	8	Technical Electives[3]	See Approved List ***(F,S)***	8
	University Core	AUCC Category 1C, 3B, 3C, 3D ***(F,S,SU)***	6	University Core	AUCC Category 1C, 3B, 3C, 3D ***(F,S,SU)***	3

[1] Students may also choose one of the following: 1) CS150B + CS164; or 2) CS152 + CS162; or 3) 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 prefix 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.