

ELECTRICAL ENGINEERING (Suggested 8 Semester Plan)

20-21 Catalog

Suggested Four Year Plan

1st Year	Session	Course	Course Title	SH	GRD	Pre-Requisite or Co-Requisite
1st Semester (includes triad)	ALL	COMM 1311	Foundation of Communication	3		n/a
	ALL	HIST 1301	US History to 1865 (Core Curriculum)	3		n/a
	F	UCCP 1101	First Year Seminar	1		n/a
	ALL	MATH 2413	Calculus I	4		Placement
	ALL	CHEM 1411	General Chemistry I	4		MATH 1314 College Algebra or beyond
	F/S	ENGR 1211	Foundations of Engineering I	2		n/a
				TOTAL HRS	17	
2nd Semester	ALL	ENGL 1302	Writing and Rhetoric	3		n/a
	ALL	HIST 1302	US History since 1865 (Core Curriculum)	3		n/a
	S	UCCP 1102	First Year Seminar	1		n/a
	ALL	MATH 2414	Calculus II	4		MATH 2413 Calculus I
	F/S	MATH 2305	Discrete Math I	3		MATH 1316 Trigonometry or Math 2312 Precalculus or beyond
	F/S	PHYS 2425	University Physics I	4		MATH 2413 Calculus I
				TOTAL HRS	18	
2nd Year	Session	Course	Course Title	SH		Pre-Requisite or Co-Requisite
1st Semester	F/S	ENGR 2306	Digital Systems I	3		MATH 1314 Col Algebra or beyond, co-req ENGR 2106 & co-req or pre-req COSC 1320 C Programming
	F/S	ENGR 2106	Digital Systems I Lab	1		corequisite ENGR 2306
	F/S	COSC 1320	C Programming	3		MATH 1314 College Algebra or beyond
	F/S	MATH 2415	Calculus III	4		MATH 2414 Calculus II
	F/S	PHYS 2426	University Physics II	4		PHYS 2425 Univ Phys I
	ALL	CREATIVE ARTS CORE	Choose one Arts 1301 or 1303 or Musi 1306 or 1307 or Thea 1310 or 1351 or Comm 1305	3		n/a
				TOTAL HRS	18	
2nd Semester	F/S	ENGR 2325	Statics	3		PHYS 2425 Univ Phys I
	F/S	ENGR 3316	Thermodynamics	3		MATH 2414 Calculus II, PHYS 2425 Univ Physics I, *MATH 2415 Cal III Ideal
	F/S	MATH 3315*	Differential Equations	3		MATH 2414 Calculus II
	F/S	ENGR 3322	Materials Science	3		CHEM 1411 Gen Chem I, PHYS 2425 Phys I
	F/S	ENGR 2460	Circuit Analysis	4		Pre-requisite Phys 2426 University Physics II
				TOTAL HRS	16	
3rd Year	Session	Course	Course Title	SH		Pre-Requisite or Co-Requisite
1st Semester	F	EEEN 3315*	Electrical Circuits II	3		ENGR2460 Circuit Analysis I
	F/S	MATH 3311*	Linear Algebra	3		MATH 2413 Calculus I
	F	EEEN 3418*	Microprocessors and Microcontrollers	4		COSC 1320 C Programming, EEEN 2306 Digital Systems and lab
	ALL	MATH 3345*	Statistical Modeling and Data Analysis	3		MATH 2413 Calculus I
	ALL	POLS 2305	U.S. Government and Politics	3		n/a
				TOTAL HRS	16	
2nd Semester	S	EEEN 3310*	Electromagnetic Theory	3		PHYS 2426 Univ Phys II, MATH 3470 Cal III, MATH 3315 Diff EQ, EEEN 3315 Elect. Circuits II
	S	EEEN 3330*	Control Systems I	3		ENGR 2460 Circuit Analysis
	S	EEEN 3350*	Electronic Systems Design	3		ENGR 2460 Circuit Analysis & Engr 2305/2301 Digital Systems
	S	EEEN 3320*	Introduction to Communication Theory & Systems	3		ENGR 2460 Circuit Analysis
		TECHNICAL ELECTIVE*	Varies	3		Varies
	ALL	SOCIAL SCIENCE	Choose one: Econ 2301 or 2302 or Soci 1301 or Psyc 2301 (Core Curriculum)	3		Economics is recommended for Engineering
				TOTAL HRS	18	
4th Year	Session	Course	Course Title	SH		Pre-Requisite or Co-Requisite
1st Semester	F	ENGR 4420*	Engineering Lab Measurements	4		Engr Circuit Analysis or equivalents
	F/S	ENGR 4240*	Project Management	2		EEEN 3330 Control Systems I, EEEN 3310 EM Theory, & EEEN 3350 Elect Sys Design. Permission from Dept.
	F	EEEN 4310*	Signal Processing	3		EEEN 3330 Control Systems I
	ALL	LANGUAGE, PHILOSOPHY, CULTURE	Choose one ENGL 2322,2333,2334 or 2335 or SPAN 3307, 3308, 3309 or 3310 or PHIL 1301 or 2306 (Core Curriculum)	3		PHIL 2306 Introduction to Ethics recommended for engineering
		TECHNICAL ELECTIVE*	Varies	3		Varies
				TOTAL HRS	15	
2nd Semester	F/S	ENGR 4370*	Capstone Project	3		ENGR 4240 Project Mgmt.
	S	EEEN 4333*	Machine Vision and Image Processing Applications	3		COSC 1320 C Programming, ENGR 2460 Circuit Analysis
		TECHNICAL ELECTIVE*	Varies	3		Varies
	ALL	POLS 2306	State & Local Government	3		n/a
				TOTAL HRS	12	
	*Upper division credit	FOREIGN LANGUAGE				Met if had 2 years in HS or 2 college level courses
		TOTAL HOURS FOR DEGREE PLAN		130		(128 if no UCCP required)
		TOTAL UPPER DIVISION HOURS*		52*		