

Electrical Engineering Concentration Outline

()=Pre-requisites, Co=Co-requisites

Some general education courses may be taken during the summers

MPE = P5

Fall Semester

Freshman

ENGR120	Intro to Engineering & Design	2
ENGR125	Engineering Graphics	3
MATH191	Calculus I (P5, or MATH167, or MATH	4
HLED135	Wellness	3
ENGL115	College Writing I	3
		15

Sophomore

ENGR185	Engineering Statics (MATH191)	3
PHYS241	Physics for Scientists I (MATH192; Co:	4
PHYS271	Physics for Scientists Lab 1(Co: PHYS2	1
MATH240	Calculus III (MATH192)	4
CPTR152	Computer Science II (CPTR151)	3
ENGR365	Numerical Methods for Engineers	3
		18

Junior

ENGR275	Electronics I (ENGR225)	3
HIST110	Worldviews, Cultures, and God	3
ENGL215	College Writing II (ENGL115 or ENGL1	3
ENGR435*	Electromagnetic Fields (MATH240, M.	4
REL	Religion (RELB,RELG,RELT)	3
		16

Senior

ENGR385	Microprocessor Systems (ENGR335 or	4
ENGR	Elective	3
ENGR491	Review of Engineering Design(ENGR3	1
REL	Religion (RELB,RELG,RELT)	3
ENGR410	Feedback Control (ENGR275, ENGR28	4
		15

Spring Semester

ENGR181	Material Properties and Processes	3
CPTR151	Computer Science I	3
MATH192	Calculus II (MATH191 or MATH195)	4
RELT100	God & Human Life	3
COMM104	Communication Skills	3
		16

ENGR225	Circuit Analysis (MATH191)	3
ENGR285	Engineering Dynamics (ENGR185, PHYS241 , and MATH192; Co: MATH286)	3
MATH286	Differential Equations (MATH192)	3
INEN221	Intro to Innovation and Entrepreneurship	3
PHYS242	Physics for Scientists II (MATH192 and PHYS241; Co: PHYS 272)	4
PHYS272	Physics for Scientists II (PHYS242)	1
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ENGR310	Linear Systems Analysis (MATH215, MATH286, CPTR151)	3
GEN ED	Social Sciences	3
STAT340	Probability and Statistics (MATH191 or MATH195)	3
ENGR325	Electronics II (ENGR275)	4
ENGR335	Logic Circuit Design (ENGR275)	3
ENGR450	Engineering Economy (MATH145 or MATH191)	2
		18

ENGR492	Senior Design Project (ENGR491)	3
ENGR	Elective	3
REL	Religion (RELG, RELB, RELT)	3
GEN ED	Arts/Humanities	3
ENGR455	Communications Systems (ENGR310, ENGR325, STAT340)	4
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Offered every other year - EVEN years 2026, 2028*

Suggested 4-year course outline per Bulletin 2024-2025

Total Credits for Graduation

131