

Computer Engineering Concentration Outline

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

MPE = P5

Some general education courses may be taken during the summers

Fall Semester

Freshman

ENGR120	Intro to Engineering & Design	2
ENGR125	Engineering Graphics	3
MATH191	Calculus I (P5, MATH167 or MATH168)	4
ENGL115	College Writing I	3
CPTR151	Computer Science I	3
		15

Spring Semester

ENGR181	Material Properties and Processes	3
HLED135	Wellness	3
MATH192	Calculus II (MATH 191 or MATH195)	4
CPTR152	Computer Science II (CPTR151)	3
RELT100	God & Human Life	3
		16

Sophomore

ENGR185	Engineering Statics (MATH191)	3
ENGR365	Numerical Methods for Engineers	3
PHYS241	Physics for Scientists I (MATH192; Co: PHYS271)	4
PHYS271	Physics for Scientists Lab I (Co: PHYS241)	1
INEN221	Intro to Innovation	3
HIST110	Worldviews, Cultures, and God	3
		17

ENGR225	Circuit Analysis (MATH 191)	3
ENGR285	Engineering Dynamics (ENGR185, PHYS241, MATH 192; MATH286)	3
MATH286	Differential equations (MATH192)	3
PHYS242	Physics for Scientists II (MATH192, PHYS241; Co: PHYS272)	4
PHYS272	Physics for Scientists Lab II (Co: PHYS242)	1
COMM104	Communication Skills	3
		17

Junior

ENGR275	Electronics I (ENGR225)	3
MATH240	Calculus III (MATH192)	4
ENGL215	College Writing II (ENGL115 or ENGL117)	3
CPTR276	Data Structures (CPTR152)	3
REL	Religion (RELG, RELB, RELT)	3
		16

ENGR325	Electronics II (ENGR275)	4
STAT340	Probability and Statistics (MATH191 or MATH195)	3
ENGR310	Linear Systems Analysis (MATH215, MATH286, CPTR151)	3
CPTR	Elective	3
ENGR335	Logic Circuit Design (ENGR275)	3
		16

Senior

ENGR385	Microprocessor Systems (ENGR335 or CPTR276)	4
GEN ED	Arts/Humanities	3
ENGR491	Review of Engineering Design(ENGR355, 385 or 390)	1
CPTR	Upper Division Elective	3
REL	Religion (RELB,RELG,RELT)	3
GEN ED	Social Sciences	3
		17

ENGR492	Senior Design Project (ENGR491)	3
CPTR	Upper Division Elective	3
REL	Religion (RELG, RELB, RELT)	3
ENGR 455	Communication Systems (ENGR310, ENGR325, STAT340)	4
ENGR450	Engineering Economy (MATH145 or MATH 191)	2
		15

Suggested 4-year course outline per Bulletin 2024-2025

Total Credits for Graduation

129

Suggested elective ENGR435 is offered every other year - EVEN years 2026, 2028