

Computer Engineering Concentration Outline

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

Fall Semester

Spring Semester

Freshman

ENGR120	Intro to Engineering & Design	2	ENGR185	Engineering Statics (MATH191)	3
ENGR125	Engineering Graphics	3	ENGR180	Material Science (CHEM131; or HS Chem with Instructor permission)	4
MATH191	Calculus I (P5, MATH167 or MATH168)	4	MATH192	Calculus II (MATH 191 or MATH195)	4
ENGL115	College Writing I	3	COMM104	Communication Skills	3
HLED135	Wellness	<u>3</u>	RELT100	God & Human Life	<u>3</u>
		15			17

Sophomore

ENGR225	Circuit Analysis (MATH 191)	3	ENGR275	Electronics I (ENGR225)	3
			ENGR285	Engineering Dynamics (ENGR185, PHYS241, MATH 192; MATH286)	3
MATH215	Intro to Linear Algebra (MATH182, MATH191 or MATH195)	3	MATH286	Differential equations (MATH192)	3
PHYS241/ PHYS271	Physics for Scientists I (MATH192; Co: PHYS271)	5	PHYS242/ PHYS272	Physics for Scientists II (MATH192, PHYS241; Co: PHYS272)	5
CPTR151	Computer Science I	3	CPTR152	Computer Science II (CPTR151)	3
REL	Religion (RELB,RELG,RELT)	<u>3</u>			<u>17</u>
		17			17

Junior

ENGR325	Electronics II (ENGR275)	4	ENGR385	Microprocessor Systems (ENGR335 or CPTR276)	4
ENGR450	Engineering Economy (MATH145 or MATH 191)	2	ENGR310	Linear Systems Analysis (MATH215, MATH286, CPTR151)	3
CPTR276	Data Structures (CPTR152)	3	ENGR315	Critical Thinking (PHYS242)	3
ENGL215	College Writing II (ENGL115 or ENGL117)	3	STAT340	Probability and Statistics (MATH191 or MATH195)	3
INEN 221	Intro Innovatn&Entrepreneurshp	3	REL	Religion (RELG, RELB, RELT)	<u>3</u>
		<u>15</u>			16

Senior

ENGR491	Review of Engineering Design	1	ENGR492	Senior Design Project (ENGR 385 or ENGR390)	3
ENGR405	Digital Interfacing (ENGR385, CPTR151)	4			
CPTR	Upper Division Elective	3	CPTR	Upper Division Elective	3
			REL	Religion (RELG, RELB, RELT)	3
HIST110	Worldviews, Cultures, and God	3	GEN ED	Social Sciences	3
MATH240	Calculus III (MATH192)	4	GEN ED	Arts/Humanities Theory	3
		<u>15</u>			<u>15</u>

Offered every other year*

Suggested 4-year course outline per Bulletin 2020-2021 **Total Credits for Graduation** **127**