

Minimum Hours: 134

Engineering (B.S.E.)

Mechanical Engineering option

2020-2021 Catalog

FRESHMAN – Fall Semester		FRESHMAN – Spring Semester	
	Hours		Hours
COL 100 Bryan Gateway Seminar	1	PHYS 245 College Physics I	4
ENG 109 College Writing I <u>OR</u> ENG 111 Freshman English*	3	CSCI 116 Programming I	3
CT 209 CLF: Missional Engineering	1	CT 113 Critical Survey of Worldviews	3
MATH elective**	3	MATH 221 Calculus II	4
CT CLF elective	1	EGR 124 Intro to Engineering Design-Art of Engineering	3
CHEM 131 General Chemistry I	4	EGR 122 Engineering Service	1
EGR 121 Introduction to Engineering	3	(ENG 110 College Writing II)*	
TOTAL HOURS	16	TOTAL HOURS	18

SOPHOMORE – Fall Semester		SOPHOMORE – Spring Semester	
PHYS 246 College Physics II	4	Choose ONE of the following: SS 211, PSGS 315, PSY 111, 228, 334	3
HIS general survey course (100/200 level)	3	CT 210 CLF: Biblical Environmentalism	1
MATH 222 Calculus III	4	EGR 222 Circuits and Instrumentation	3
EGR 223 Engineering Mechanics - Statics	3	EGR 224 Engineering Mechanics - Dynamics	3
EGR 331 Data Visualization	3	EGR 226 Mechanics of Materials	3
		MATH 326 Differential Equations	4
TOTAL HOURS	17	TOTAL HOURS	17

JUNIOR – Fall Semester		JUNIOR – Spring Semester	
BIB 222 Old Testament Literature & Interpretation	3	BIB 224 New Testament Literature & Interpretation	3
EGR 321 Design of Experiments	3	EGR 322 Fluid Mechanics	4
EGR 323 Engineering Thermodynamics	3	EGR 422 Heat Transfer	3
EGR 347 Engineering Professional Development I	1	EGME 424 Machine Component Design	3
EGME 321 Engineering Materials	3	MATH 242 Statistics for Scientists & Engineers	3
EGME 323 Manufacturing Engineering	3		
TOTAL HOURS	16	TOTAL HOURS	16

SENIOR – Fall Semester		SENIOR – Spring Semester	
COMM 111 Intro to Communication	3	Choose ONE of the following: ENG 211, FA 211, MUS 210, THT 111, or FLM 210	3
EGR 225 Engineering Economics	3	EGR 424 Engineering Ethics	3
EGR 491 Capstone Senior Design I	3	EGR 492 Capstone Senior Design II	3
EGR 349 Engineering Professional Development II	1	EGME 422 Kinematics & Robotics	3
EGME elective	3	EGME elective	3
EGME 423 Quality Engineering	3	EGR Elective	3
TOTAL HOURS	16	TOTAL HOURS	18

*Depending on standardized test scores, students are required to take either ENG 109-110 College Writing I and II (6 credits) OR ENG 111 Freshman English (3 credits). Students who are placed in the ENG 109-110 sequence will need to take ENG 110 in the spring semester of the freshman year.

** Choice of MATH elective should prepare student to enroll in MATH 221 Calculus II which is required in the major.

This document is to be used for planning purposes only. Please refer to the academic catalog for complete information. Course planning should be completed in consultation with your academic adviser. Not all courses are offered every semester or every year.