

Minimum Hours: 134

Engineering (B.S.E.)

Mechanical Engineering option

2019-2020 Catalog

FRESHMAN – Fall Semester		Hours	FRESHMAN – Spring Semester		Hours
ENG 109 College Writing I <u>OR</u> ENG 111 Freshman English*		3	MATH 221 Calculus II		4
CT 209 CLF: Missional Engineering		1	EGR 124 Intro to Engineering Design-Art of Engineering		3
COLL 100 Bryan Gateway Seminar		1	EGR 122 Engineering Service		1
MATH elective**		3	CT 113 Critical Survey of Worldviews		3
CHEM 131 General Chemistry I		4	PHYS 245 College Physics I		4
EGR 121 Introduction to Engineering the Great Commission		3	CSCI 116 Programming I		3
			(ENG 110 College Writing II)*		
TOTAL HOURS		15	TOTAL HOURS		18

SOPHOMORE – Fall Semester		SOPHOMORE – Spring Semester	
PHYS 246 College Physics II	4	MATH 326 Differential Equations	4
MATH 222 Calculus III	4	EGR 222 Circuits and Instrumentation	3
EGR 223 Engineering Mechanics - Statics	3	EGR 224 Engineering Mechanics - Dynamics	3
EGR 221 Computational Methods	3	EGR 226 Mechanics of Materials	3
CT CLF elective	1	CT 210 CLF: Biblical Environmentalism	1
HIS general survey course (100/200 level)	3	Choose ONE of the following: SS 211, PSGS 315, PSY 111, 228, 334	3
TOTAL HOURS	18	TOTAL HOURS	17

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

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