

Minimum Hours: 134

Engineering (B.S.E.)

Civil Engineering option

2020-2021 Catalog

FRESHMAN – Fall Semester		Hours	FRESHMAN – Spring Semester		Hours
ENG 109 College Writing I <u>OR</u> ENG 111 Freshman English*	3		CT 210 CLF: Biblical Environmentalism	1	
CT 209 CLF: Missional Engineering	1		PHYS 245 College Physics I	4	
COLL 100 Bryan Gateway Seminar	1		CSCI 116 Programming I	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	16	
SOPHOMORE – Fall Semester			SOPHOMORE – Spring Semester		
CT 113 Critical Survey of Worldviews	3		MATH 326 Differential Equations	4	
PHYS 246 College Physics II	4		EGR 222 Circuits and Instrumentation	3	
MATH 222 Calculus III	4		EGR 224 Engineering Mechanics - Dynamics	3	
EGR 223 Engineering Mechanics - Statics	3		EGR 226 Mechanics of Materials	3	
EGR 331 Data Visualization	3		EGCI elective	3	
TOTAL HOURS	17		TOTAL HOURS	16	
JUNIOR – Fall Semester			JUNIOR – Spring Semester		
BIB 222 Old Testament Literature & Interpretation	3		BIB 224 New Testament Literature & Interpretation	3	
HIS general survey course (100/200 level)	3		EGR 322 Fluid Mechanics	4	
EGR 321 Design of Experiments	3		EGR 422 Heat Transfer	3	
EGR 323 Engineering Thermodynamics	3		EGCI 424 Environmental Engineering	3	
EGR 347 Engineering Professional Development I	1		MATH 242 Statistics for Scientists & Engineers	3	
EGCI 323 Structural Analysis	3				
EGCI 321 Geomatics Engineering	3				
TOTAL HOURS	19		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	
Choose ONE of the following: SS 211, PSGS 315, PSY 111, 228, 334	3		EGR elective	3	
EGR 225 Engineering Economics	3		EGR 424 Engineering Ethics	3	
EGR 349 Engineering Professional Development II	1		EGR 492 Capstone Senior Design II	3	
EGR 491 Capstone Senior Design I	3		EGCI elective	3	
EGCI 421 Engineering Project Management	3		EGCI 426 Geotechnical Engineering	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.