

Minimum Hours: 133

Engineering (B.S.E.)

Computing option

2022-2023 Catalog

FRESHMAN – Fall Semester		Hours	FRESHMAN – Spring Semester		Hours
COL 100 Bryan Gateway Seminar	1		CSCI 116 Programming I	3	
ENG 109 College Writing I <u>OR</u> ENG 111 Freshman English*	3		CT 113 Critical Survey of Worldviews	3	
HIS general survey course (100/200 level)	3		PHYS 245 College Physics I w/Lab	3/1	
MATH elective**	3		EGR 124 Intro to Engineering Design-Art of Engineering	3	
CHEM 131 General Chemistry I	4		MATH 221 Calculus II	4	
EGR 121 Introduction to Engineering	2		(ENG 110 College Writing II)*		
TOTAL HOURS	16		TOTAL HOURS	17	

SOPHOMORE – Fall Semester		SOPHOMORE – Spring Semester	
CT 209 CLF: Missional Engineering	1	CT 210 CLF: Biblical Environmentalism	1
EGR 223 Engineering Mechanics – Statics w/Lab	3/1	Choose ONE of the following: PSY 111, 228, 330, or 334	3
EGR 331 Data Visualization	3	EGR 222 Circuits and Instrumentation	3
EGR 347 Engineering Professional Development	1	EGR 224 Engineering Mechanics - Dynamics	3
MATH 222 Calculus III	4	EGR 226 Mechanics of Materials w/Lab	3/1
PHYS 246 College Physics II w/Lab	3/1	MATH 242 Statistics for Scientists & Engineers	3
TOTAL HOURS	17	TOTAL HOURS	17

JUNIOR – Fall Semester		JUNIOR – Spring Semester	
CSCI 241 Intro to Database Development***	3	BIB 224 New Testament Literature & Interpretation	3
CSCI 251 Operating Systems***	3	CT 105 CLF Engineering Service	1
EGR 321 Design of Experiments	3	Choose ONE of the following: ENG 100/200, FA 211, FLM 210, MUS 100/200, or THT 100/200 (excludes ENG 245, lessons, ensembles, practicums)	3
EGR 323 Engineering Thermodynamics w/Lab	3/1	CSCI 324 Computer Organization***	3
MATH 326 Differential Equations	4	EGR 322 Fluid Mechanics	4
		EGR 422 Heat Transfer	3
TOTAL HOURS	17	TOTAL HOURS	17

SENIOR – Fall Semester		SENIOR – Spring Semester	
BIB 222 Old Testament Literature & Interpretation	3	PHIL 424 Engineering Ethics	3
COMM 111 Intro to Communication	3	CSCI 328 Data Structures***	3
CSCI 325 Programming II***	3	CSCI 472 Computer Science Practicum	3
CSCI 422 Networking***	3	EGR 492 Capstone Senior Design II	4
EGR 225 Engineering Economics	2	EGR Elective (300/400 level))	3
EGR 491 Capstone Senior Design I	2		
TOTAL HOURS	16	TOTAL HOURS	16

*Students are required to take either ENG 109/110 College Writing I and II (6 credits) OR ENG 111 Freshman English (3 credits). Placement in ENG 111 requires an ACT English score of at least 21 OR an SAT Evidence-Based Reading & Writing score of at least 530 OR CLT score of at least 68. 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. Students taking Math 117 Precalculus will start the calculus sequence with Math 122 Calculus I in the second semester.

*** Offered alternate years

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.