

Minimum Hours: 134

# Engineering (B.S.E.)

## Environmental option

2020-2021 Catalog

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

SOPHOMORE – Fall Semester			SOPHOMORE – Spring Semester		
PHYS 246 College Physics II		4	<b>MATH 326 Differential Equations</b>		4
<b>MATH 222 Calculus III</b>		4	<b>EGR 222 Circuits and Instrumentation</b>		3
<b>EGR 223 Engineering Mechanics - Statics</b>		3	<b>EGR 224 Engineering Mechanics - Dynamics</b>		3
<b>EGR 331 Data Visualization</b>		3	<b>EGR 226 Mechanics of Materials</b>		3
<b>BIO 111 Introduction to Biology</b>		3	<b>CHEM 132 General Chemistry II</b>		4
<b>TOTAL HOURS</b>		<b>17</b>	<b>TOTAL HOURS</b>		<b>17</b>

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	<b>EGR 322 Fluid Mechanics</b>		4
<b>EGR 321 Design of Experiments</b>		3	<b>EGR 422 Heat Transfer</b>		3
<b>EGR 323 Engineering Thermodynamics</b>		3	<b>MATH 242 Statistics for Scientists &amp; Engineers</b>		3
<b>EGR 347 Engineering Professional Development I</b>		1	<b>EGCI 424 Environmental Engineering</b>		3
<b>Environmental Elective***</b>		4			
<b>TOTAL HOURS</b>		<b>17</b>	<b>TOTAL HOURS</b>		<b>16</b>

SENIOR – Fall Semester			SENIOR – Spring Semester		
COMM 111 Intro to Communication		3	CT 210 CLF: Biblical Environmentalism		1
Choose <b>ONE</b> of the following: ENG 211, FA 211, MUS 210, THT 111, or FLM 210		3	Choose <b>ONE</b> of the following: SS 211, PSGS 315, PSY 111, 228, 334		3
<b>EGR 349 Engineering Professional Development II</b>		1	<b>EGR 424 Engineering Ethics</b>		3
<b>EGR 225 Engineering Economics</b>		3	<b>EGR 492 Capstone Senior Design II</b>		3
<b>EGR 491 Capstone Senior Design I</b>		3	<b>BIO 328 Advanced Microbiology (has prereq)</b>		4
<b>Environmental elective***</b>		3	<b>EGR elective</b>		3
<b>TOTAL HOURS</b>		<b>16</b>	<b>TOTAL HOURS</b>		<b>17</b>

\*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.

\*\*\* Environmental electives- chosen from CHEM 241, 242, EGCI 321, EGCI 426, EGCI 428

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.