

Minimum Hours: 134

# Engineering (B.S.E.)

## Computing 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	
CT CLF elective	1		<b>MATH 221 Calculus II</b>	4	
MATH elective**	3		<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	CT 210 CLF: Biblical Environmentalism	1
<b>MATH 222 Calculus III</b>	4	<b>MATH 326 Differential Equations</b>	4
<b>EGR 223 Engineering Mechanics - Statics</b>	3	<b>EGR 222 Circuits and Instrumentation</b>	3
<b>EGR 331 Data Visualization</b>	3	<b>EGR 224 Engineering Mechanics - Dynamics</b>	3
<b>CSCI 241 Intro to Database Development***</b>	3	<b>EGR 226 Mechanics of Materials</b>	3
		<b>CSCI 251 Operating Systems***</b>	3
<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
<b>EGR 321 Design of Experiments</b>	3	<b>EGR 322 Fluid Mechanics</b>	4
<b>EGR 323 Engineering Thermodynamics</b>	3	<b>MATH 242 Statistics for Scientists &amp; Engineers</b>	3
<b>CSCI 324 Computer Organization***</b>	3	<b>EGR 422 Heat Transfer</b>	3
<b>CSCI 328 Data Structures***</b>	3	<b>CSCI 422 Networking***</b>	3
<b>EGR 347 Engineering Professional Development I</b>	1	<b>EGR 349 Engineering Professional Development II</b>	1
<b>TOTAL HOURS</b>	<b>16</b>	<b>TOTAL HOURS</b>	<b>17</b>

SENIOR – Fall Semester		SENIOR – Spring Semester	
HIS general survey course (100/200 level)	3	Choose <b>ONE</b> of the following: SS 211, PSGS 315, PSY 111, 228, 334	3
COMM 111 Intro to Communication	3	<b>EGR 424 Engineering Ethics</b>	3
Choose <b>ONE</b> of the following: ENG 211, FA 211, MUS 210, THT 111, or FLM 210	3	<b>EGR 492 Capstone Senior Design II</b>	3
<b>EGR 225 Engineering Economics</b>	3	<b>CSCI 472 Computer Science Practicum</b>	3
<b>EGR 491 Capstone Senior Design I</b>	3	<b>EGR elective</b>	3
<b>CSCI 325 Programming II***</b>	3		
<b>TOTAL HOURS</b>	<b>18</b>	<b>TOTAL HOURS</b>	<b>15</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.

\*\*\* 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.