

Minimum Hours: 133

# Engineering (B.S.E.)

## Business Management option

2021-2022 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         |       |
| MATH elective**   | 3         |       | PHYS 245 College Physics I w/Lab                       | 3/1       |       |
| BUS 121 Introduction to Business                              | 3         |       | MATH 221 Calculus II                                   | 4         |       |
| CHEM 131 General Chemistry I                                  | 4         |       | EGR 124 Intro to Engineering Design-Art of Engineering | 3         |       |
| EGR 121 Introduction to Engineering                           | 2         |       |  |           |       |
|   |           |       | (ENG 110 College Writing II)*                          |           |       |
|   |           |       |  |           |       |
| <b>TOTAL HOURS</b>  | <b>16</b> |       | <b>TOTAL HOURS</b>                                     | <b>17</b> |       |

| 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 <b>ONE</b> 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         |
|   |           |  |           |
| <b>TOTAL HOURS</b>                            | <b>17</b> | <b>TOTAL HOURS</b>   | <b>17</b> |

| JUNIOR – Fall Semester                    |           | JUNIOR – Spring Semester                          |           |
|---|-----------|---|-----------|
| HIS general survey course (100/200 level) | 3         | BIB 224 New Testament Literature & Interpretation | 3         |
| ACCT 231 Principles of Accounting I       | 3         | CT 105 CLF: Engineering Service                   | 1         |
| EGR 321 Design of Experiments             | 3         | ACCT 232 Principles of Accounting II              | 3         |
| EGR 323 Engineering Thermodynamics w/Lab  | 3/1       | EGR 322 Fluid Mechanics                           | 4         |
| MATH 326 Differential Equations           | 4         | EGR 422 Heat Transfer                             | 3         |
|   |           | MGT 237 Principles of Management                  | 3         |
|   |           |   |           |
| <b>TOTAL HOURS</b>                        | <b>17</b> | <b>TOTAL HOURS</b>                                | <b>17</b> |

| SENIOR – Fall Semester   |           | SENIOR – Spring Semester           |           |
|--|-----------|------------------------------------|-----------|
| Choose <b>ONE</b> of the following:<br>ENG 100/200, FA 211, FLM 210, MUS 100/200, or THT 100/200<br>(excludes ENG 245, lessons, ensembles, practicums) | 3         | PHIL 424 Engineering Ethics        | 3         |
| BIB 222 Old Testament Literature & Interpretation  | 3         | EGR 492 Capstone Senior Design II  | 4         |
| COMM 111 Intro to Communication  | 3         | Option Elective (300/400 level)*** | 3         |
| EGR 225 Engineering Economics  | 2         | EGR Elective (300/400 level)       | 3         |
| EGR 491 Capstone Senior Design I   | 2         | MGT 329 Project Management         | 3         |
| Option Elective***   | 3         |                                    |           |
|  |           |                                    |           |
| <b>TOTAL HOURS</b>   | <b>16</b> | <b>TOTAL HOURS</b>                 | <b>16</b> |

\*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.

\*\*\* Two option electives chosen from (one must be 300/400 level): ACCT 335, 336, 338; BUS 326; ECFN 221, 325, 439; MGT 343, 415, 492; MKT 237

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.