

# COLLEGE OF ENGINEERING

## Bachelor of Science, Industrial Engineering

### Four-Year Academic Map 2026-2027

| YEAR 1 | Semester 1 Fall |                                    |                | Semester 2 Spring |                         |   | Total |
|--------|-----------------|------------------------------------|----------------|-------------------|-------------------------|---|-------|
|        | ENGI 1100       | Introduction to Engineering        | 1              | ENGI 1331         | Computing for Engineers | 3 |       |
|        | CHEM 1311       | Fundamentals of Chemistry*         | 3              | MATH 2414         | Calculus II*            | 4 |       |
|        | CHEM 1111       | Fundamentals of Chemistry Lab      | 1              | PHYS 2325         | University Physics I*   | 3 |       |
|        | ENGL 1301       | First Year Writing I*              | 3              | ENGL 1302         | First Year Writing II*  | 3 |       |
|        | MATH 2413       | Calculus I*                        | 4              | CORE              | American History *      | 3 |       |
|        | GOVT 2306       | U.S. & TX Constitution & Politics* | 3              |                   |                         |   |       |
|        | Semester Hours  | 15                                 | Semester Hours | 16                | 31                      |   |       |

| YEAR 2 | Semester 1 Fall |  |                | Semester 2 Spring |                               |   | Total |
|--------|-----------------|--|----------------|-------------------|-------------------------------|---|-------|
|        | INDE 2331       | Computer Applications for Industrial Engineering | 3              | INDE 3333         | Engineering Economy I         | 3 |       |
|        | GOVT 2305       | U.S. Government*                                 | 3              | MECE 3400         | Introduction to Mechanics     | 4 |       |
|        | INDE 2333       | Engineering Statistics I                         | 3              | CORE              | Social & Behavioral Sciences* | 3 |       |
|        | MATH 2415       | Calculus III                                     | 4              | ENGI 2304         | Technical Communications*     | 3 |       |
|        | PHYS 2326       | University Physics II                            | 3              | MATH 3321         | Engineering Mathematics       | 3 |       |
|        | Semester Hours  | 16   | Semester Hours | 16                | 32                            |   |       |

| YEAR 3 | Semester 1 Fall |                                 |                | Semester 2 Spring |                                   |   | Total |
|--------|-----------------|---------------------------------|----------------|-------------------|-----------------------------------|---|-------|
|        | INDE 3330       | Financial & Cost Management     | 3              | INDE 4364         | Big Data and Analytics            | 3 |       |
|        | INDE 3382       | Stochastic Models               | 3              | INDE 3381         | Linear Optimization               | 3 |       |
|        | INDE 3364       | Engineering Statistics II       | 3              | INDE 4331         | Analysis of Industrial Activities | 3 |       |
|        | INDE 3310       | Quality Control and Improvement | 3              | INDE 4369         | Facility Planning and Design      | 3 |       |
|        | INDE 3432       | Manufacturing Processes         | 4              | INDE 3362         | CAD/CAM                           | 3 |       |
|        | Semester Hours  | 16                              | Semester Hours | 15                | 31                                |   |       |

| YEAR 4 | Semester 1 Fall |                                 |                | Semester 2 Spring |                            |   | Total |
|--------|-----------------|---------------------------------|----------------|-------------------|----------------------------|---|-------|
|        | INDE 4111       | Industrial Engineering Seminar  | 3              | INDE 4315         | Supply Chain Management    | 3 |       |
|        | INDE 4320       | Computer-Integrated Mfg.        | 1              | INDE 4334         | IE Capstone Design         | 3 |       |
|        | INDE 4370       | Discrete Event Simulation       | 3              | INDE 4337         | Human Factors & Ergonomics | 3 |       |
|        | Tech Elect      | Technical Elective              | 3              | INDE 4372         | Operation Control          | 3 |       |
|        | CORE            | Language, Philosophy & Culture* | 3              | CORE              | Creative Arts*             | 3 |       |
|        | CORE            | American History*               | 3              |                   |                            |   |       |
|        | Semester Hours  | 16                              | Semester Hours | 15                | 31                         |   |       |
|        |                 |                                 |                |                   | 125                        |   |       |

\*State of Texas Core Curriculum

Students should meet with their academic advisor to formulate their own plan.