



# COLLEGE OF ENGINEERING

## Bachelor of Science, Chemical Engineering

### Four-Year Academic Map 2023-2024

| 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  | CHEM 1312         | Fundamentals of Chemistry 2*  | 3  |       |
|        | CHEM 1111       | Fundamentals of Chemistry Lab    | 1  | CHEM 1112         | Fundamentals of Chemistry Lab | 1  |       |
|        | ENGL 1301       | First Year Writing I*            | 3  | ENGL 1302         | First Year Writing II*        | 3  |       |
|        | MATH 2413       | Calculus I*                      | 4  | MATH 2414         | Calculus II*                  | 4  |       |
|        | GOVT 2306       | U.S. & TX Constitution/Politics* | 3  | PHYS 2325         | University Physics I          | 3  |       |
|        | Semester Hours  |                                  | 15 | Semester Hours    |                               | 17 | 32    |

| YEAR 2 | Semester 1 Fall |                            |    | Semester 2 Spring |                                  |    | Total |
|--------|-----------------|----------------------------|----|-------------------|----------------------------------|----|-------|
|        | CHEE 2331       | Chemical Processes         | 3  | CHEE 2332         | Thermodynamics I                 | 3  |       |
|        | CHEM 2323       | Organic Chemistry I        | 3  | CHEE 3300         | Materials Science & Engineering  | 3  |       |
|        | MATH 2415       | Calculus III               | 4  | CHEM 2123         | Organic Chemistry Lab            | 1  |       |
|        | PHYS 2326       | University Physics II      | 3  | CHEM 2325         | Organic Chemistry II             | 3  |       |
|        | HIST 1301       | The United States to 1877* | 3  | ENGI 2304         | Technical Communications*        | 3  |       |
|        |                 |                            |    | CHEE 3321         | Analytical Methods for Chem Engr | 3  |       |
|        | Semester Hours  |                            | 16 | Semester Hours    |                                  | 16 | 32    |

| YEAR 3 | Semester 1 Fall |                                  |    | Semester 2 Spring |                                   |    | Total |
|--------|-----------------|----------------------------------|----|-------------------|-----------------------------------|----|-------|
|        | CHEE 3333       | Thermodynamics II                | 3  | CHEE 3367         | Process Modeling & Control        | 3  |       |
|        | CHEE 3334       | Statistical/Numerical Techniques | 3  | CHEE 3369         | Chemical Engr Transport Processes | 3  |       |
|        | CHEE 3363       | Fluid Mechanics                  | 3  | CHEE 3462         | Unit Operations                   | 4  |       |
|        | GOVT 2305       | U.S. Government*                 | 3  | CHEE 3466         | Biological & Physical Chemistry   | 4  |       |
|        | ECON 2302       | Principles of Microeconomics *   | 3  |                   |                                   |    |       |
|        | CHEM Elect      | Chemistry Elective               | 3  |                   |                                   |    |       |
|        | Semester Hours  |                                  | 18 | Semester Hours    |                                   | 14 | 32    |

| YEAR 4 | Semester 1 Fall |                               |    | Semester 2 Spring |                                 |    | Total |
|--------|-----------------|-------------------------------|----|-------------------|---------------------------------|----|-------|
|        | CHEE 4321       | Chemical Engr Design I        | 3  | Science Elect     | Advanced Science Elective       | 3  |       |
|        | CHEE 4361       | Chemical Engr Practices       | 3  | CHEE 4322         | Chemical Engr Design II         | 3  |       |
|        | CHEE 4367       | Chemical Reaction Engr        | 3  | CORE              | Language, Philosophy & Culture* | 3  |       |
|        | HIST 1302       | The United States Since 1877* | 3  | CHEE 4366         | Biomolecular Engr Fundamentals  | 3  |       |
|        | Tech Elective   | Technical Elective            | 3  | Tech Elective     | Technical Elective              | 3  |       |
|        | CORE            | Creative Arts*                | 3  |                   |                                 |    |       |
|        | Semester Hours  |                               | 18 | Semester Hours    |                                 | 15 | 33    |
|        |                 |                               |    |                   |                                 |    | 129   |

\*State of Texas Core Curriculum

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