

ACADEMIC MAP

INDUSTRIAL ENGINEERING

Bachelor of Science



START HERE

1

SEMESTER 1 - FALL	CREDITS	COMPLETED
UNIV 1101 UNIVERSITY SEMINAR I	1	✓
MATH 2413 CALCULUS I	4	
ENGL 1301 WRITING AND RHETORIC I	3	
HIST 1301 U.S. HISTORY TO 1865	3	
CHEM 1411 GENERAL CHEMISTRY I	4	
ENGR 1201 INTRODUCTION TO ENGINEERING	2	

TOTAL CREDITS: 17

2

SEMESTER 2 - SPRING	CREDITS	COMPLETED
UNIV 1102 UNIVERSITY SEMINAR II	1	
ENGL 1302 OR COMM 1311 WRITING AND RHETORIC II OR FOUNDATION OF COMMUNICATION	3	
MATH 2414 CALCULUS II	4	
HIST 1302 U.S. HISTORY SINCE 1865	3	
PHYS 2425 UNIVERSITY PHYSICS I	4	
ENGR 1312 ENGINEERING GRAPHICS I	3	

TOTAL CREDITS: 18

YEAR 1

3

SEMESTER 3 - FALL	CREDITS	COMPLETED
ENGR 2325 STATICS	3	
MATH 2415 CALCULUS III	4	
PHYS 2426 UNIVERSITY PHYSICS II	4	
COSC 1330 PROGRAMMING FOR SCIENTISTS, ENGINEERS, AND MATHEMATICIANS	3	
CREATIVE ARTS CORE REQUIREMENT	3	

TOTAL CREDITS: 17

4

SEMESTER 4 - SPRING	CREDITS	COMPLETED
POLS 2305 U.S. GOVERNMENT AND POLITICS	3	
ENGR 2326 DYNAMICS	4	
ENGR 3316 THERMODYNAMICS	4	
ENGR 3322 MATERIALS SCIENCE	3	
MATH 3315 DIFFERENTIAL EQUATIONS	3	

TOTAL CREDITS: 13

YEAR 2

5

SEMESTER 5 - FALL	CREDITS	COMPLETED
POLS 2306 STATE AND LOCAL GOVERNMENT	3	
ENGR 2460 CIRCUIT ANALYSIS	4	
ENGR 3315 FLUID MECHANICS	3	
ENGR 3320 STRENGTH OF MATERIALS	3	
UPPER DIVISIONAL MATH/PHYSICS/CHEMISTRY/BIOLOGY ELECTIVE	3	

TOTAL CREDITS: 15

6

SEMESTER 6 - SPRING	CREDITS	COMPLETED
ENGR 3350 MANUFACTURING PROCESSES	3	
MEEN 3330 DESIGN OF MACHINE ELEMENTS	3	
MEEN 3230 SOLID MECHANICS LABORATORY	2	
MEEN 3345 HEAT TRANSFER	3	
MEEN 3310 ENGINEERING ANALYSIS FOR MECHANICAL ENGINEERING	3	
LANGUAGE, PHILOSOPHY & CULTURE CORE REQUIREMENT	3	

TOTAL CREDITS: 18

YEAR 3

7

SEMESTER 7 - FALL	CREDITS	COMPLETED
ENGR 4420 ENGINEERING LAB MEASUREMENTS	4	
ENGR 4240 PROJECT MANAGEMENT	2	
MEEN 4360 THERMAL SYSTEMS DESIGN	3	
MEEN 4365 MECHANICAL SYSTEMS DESIGN	3	
MEEN TECHNICAL ELECTIVE	3	

TOTAL CREDITS: 15

8

SEMESTER 8 - SPRING	CREDITS	COMPLETED
ENGR 4370 CAPSTONE PROJECTS	3	
MEEN 4351 DYNAMICAL SYSTEMS ANALYSIS AND MODELING	3	
MEEN TECHNICAL ELECTIVE	3	
MEEN TECHNICAL ELECTIVE	3	
SOCIAL AND BEHAVIORAL SCIENCES CORE REQUIREMENT	3	

TOTAL CREDITS: 15

YEAR 4

This is not an official degree plan. It is a guideline for planning your courses. To access a copy of this academic map please visit tamucc.edu/academics/planning/academic-advising/

130 CREDITS | FINISHED!



CAREER MAP

INDUSTRIAL ENGINEERING

Bachelor of Science



The Industrial Engineering curriculum prepares graduates to design, develop, implement, and improve integrated systems that include people, materials, information, equipment and energy. The curriculum includes in-depth instruction to accomplish the integration of systems using appropriate analytical, computational, and experimental practices.

Industrial Engineers apply science, mathematics, and engineering methods to complex system integration and operations. Because these systems are so large and complex, IEs need to have knowledge and skills in a wide variety of disciplines, the ability to work well with people, and a broad, systems perspective. Industrial engineers use their knowledge and skills to improve systematic processes through the use of statistical analysis, interpersonal communication, design, planning, quality control, operations management, computer simulation, and problem solving.

CONTACT INFORMATION

Career Counselor:

Career and Professional Development Center
UC 304 | 361.825.2628
career.center@tamucc.edu

Internship Coordinator:

Mayra Alvarado
RFEB 215 | 361.825.6025
mayra.alvarado@tamucc.edu

Department Contact:

Department of Engineering
RFEB 222 | 361.825.5849
david.bridges@tamucc.edu

ADDITIONAL PROGRAM REQUIREMENTS

All engineering students are encouraged to take the Fundamentals of Engineering (FE) exam. This exam is an important step toward licensure as a Professional Engineer (P.E.), which many engineers find useful and necessary in their careers. Close to the end of the B.S. degree program is an excellent time to take the exam, because the student has the best preparation for the exam at that point in the student's academic career. For all students admitted into a pre-engineering program at TAMU-CC who wish to transfer into one of the TAMU-CC engineering programs (CEEN, EEEN, IEEN, MEEN), the cumulative GPA for all MATH, CHEM, PHYS, ENGR, COSC, CEEN, EEEN, IEEN, or MEEN courses that appear in the CEEN, EEEN, IEEN, or MEEN program curricula, plus any ENTC courses, taken at TAMU-CC, or their equivalents taken at other institutions, should be 2.5 or greater to be admitted into the CEEN, EEEN, IEEN, or MEEN programs at TAMU-CC. There should be a minimum of at least 12 hours of such courses taken at TAMU-CC or elsewhere before a transfer / admission to CEEN, EEEN, IEEN, or MEEN may be considered. All such students must also meet the requirements to take MATH 2413 Calculus I (4 sch) if they have not already done so.

ADDITIONAL SOURCES OF INFORMATION

1. National Society of Professional Engineers
2. Society of Women Engineers
3. National Society of Black Engineers
4. Institute of Industrial and Systems Engineers

CAREER OPTIONS

• Agricultural Engineer	• Distribution Planning Engineer
• Business Analyst	• Ergonomist
• Chemical Engineer	• Facilities Engineer
• Cost Estimator	• Industrial Engineer
• Maintenance Engineer	

STUDENT ORGANIZATIONS

- Society of Hispanic Professional Engineers
- Math Club
- SACNAS Chapter at Texas A&M University - Corpus Christi

SKILLS/ATTRIBUTES

- Critical Thinking/Problem Solving
- Teamwork/Collaboration
- Professionalism/Work Ethic
- Oral/Written Communication
- Digital Technology
- Math
- Creativity
- Statistical Analysis