

**TEXAS A&M UNIVERSITY-CORPUS CHRISTI**  
**BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING- TENTATIVE DEGREE PLAN**  
**2018-19 CATALOG YEAR**

Name: \_\_\_\_\_  
 ID#: \_\_\_\_\_

**IMPORTANT NOTES:**

- Students are responsible for achieving a 2.25 GPA in their major to graduate as well as meeting all graduation minimums
- Any changes/exceptions to this Degree Plan must be filed via the Undergraduate Degree Plan Exceptions Form (see your advisor FMI)
- See your Faculty Mentor every semester (RECOMMENDED). See your Academic Advisor as needed.
- This degree plan remains an unofficial document until certified by the Dean of the College of Science & Engineering .
- Prerequisites and semesters offered are subject to change with each catalog year
- Students are responsible for taking courses in the proper sequence to ensure orderly progression of work
- You must maintain a minimum GPA of 2.0 throughout your academic career to avoid Academic Probation or Suspension
- Upper division classes are any 3xxx or 4xxx level classes, you must have 45 upper division hrs to graduate

**UNIVERSITY CORE CURRICULUM**

		Grade	Hrs	Prerequisites
COMM 1311	FOUNDATION OF COMMUNICATION		3	n/a
ENGL 1302	COMPOSITION II		3	n/a
MATH 2413	CALCULUS I		4	Math placement
CHEM 1411	GENERAL CHEMISTRY I		4	Math 1314
PHYS 2425	UNIVERSITY PHYSICS I		4	Math 2413
LANGUAGE, PHILOSOPHY & CULTURE	CHOOSE ONE: ENGL 2332,2333,2334 OR 2335 OR SPAN 3307,3308, 3309 OR 3310 OR PHIL 1301 OR 2306		3	n/a
HIST 1301	US HISTORY TO 1865		3	n/a
HIST 1302	US HISTORY SINCE 1865		3	n/a
POLS 2305	US GOVT & POLITICS		3	n/a
POLS 2306	STATE/LOCAL POLITICS		3	n/a
CREATIVE ARTS	CHOOSE ONE: ARTS 1301 OR 1303, MUSI 1306 OR 1307 OR THEA 1310 OR 1351 OR COMM 1305		3	n/a
SOC SCIENCE COMPONENT	PSYC 2301 OR SOCI 1301 OR ECON 2301 OR 2302		3	n/a
AREA OPTION	MATH 2414 CALCULUS II		4	n/a

**COMMON ENGINEERING, MATH & SCIENCE COURSES**

MATH 2413, MATH 2414, PHYS 2425, PHYS 2426	SEE ABOVE			
COSC 1330	PROGRAMMING FOR SCIENTISTS, ENGINEERS & MATHEMATICIANS		3	Math 1314 or beyond
MATH 2415	CALCULUS III		4	Math 2414
PHYS 2426	UNIVERSITY PHYSICS II		4	Phys 2425 and Math 2414
MATH 3315	DIFFERENTIAL EQUATIONS		3	Math 2414
ENGR 1211	FOUNDATIONS OF ENGINEERING I		2	n/a
ENGR 1312	ENGINEERING GRAPHICS I		3	Engr 1211
ENGR 2316	THERMODYNAMICS		3	Phys 2425, Math 2414
ENGR 2322	MATERIALS SCIENCE		3	Phys 2425
ENGR 2325	STATICS		3	Phys 2425
ENGR 2326	DYNAMICS		3	Engr 2325
ENGR 2460	CIRCUIT ANALYSIS		4	Phys 2426
ENGR 3315	FLUID MECHANICS		3	Engr 2326, Math 3315 & Math 3470
ENGR 3320	STRENGTH OF MATERIALS		3	Engr 2325 & Engr 2322
ENGR 3350	MANUFACTURING PROCESSES		3	Engr 1312, Engr 3320 and Engr 2326

**REQUIRED MECHANICAL ENGINEERING COURSES**

MEEN 3310	ENGINEERING ANALYSIS FOR MECH ENG		3	Math 3315
MEEN 3330	SOLID MECHANICS FOR MECHANICAL ENGINEERING		3	Engr 3320
MEEN 3230	SOLID MECHANICS LAB		2	Pre-req or Co-req with Meen 3330
MEEN 3345	HEAT TRANSFER		3	Engr 2316
MEEN 4240	PROJECT MANAGEMENT		2	Meen 3330 & Meen 3345
MEEN 4351	DYNAMICAL SYSTEMS ANALYSIS AND MODELING		3	Cosc 1330, Engr 2460, meen 3345
MEEN 4420	ENGINEERING LAB MEASUREMENTS		4	Engr 2460 and Senior Standing
MEEN 4360	THERMAL SYSTEM DESIGN		3	Meen 3345
MEEN 4365	MECHANICAL SYSTEM DESIGN		3	Meen 3330
MEEN 4370	CAPSTONE PROJECTS		3	Meen 4240 & coreq Meen 4360 & 4365

**TECHNICAL ELECTIVES BLOCK (FOUR COURSES FROM THE FOLLOWING LIST FOR A TOTAL OF 12 HRS.)**

**COMPLETE ONE OF THIS COURSE:**

MATH/PHYSICS/CHEM/BIOL - 3xxx or 4xxx upper level	3	
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**SELECT THREE OF THE FOLLOWING COURSES:**

MEEN 3335	INTRO TO UNMANNED AIRCRAFT SYSTEMS		3	Junior Level Standing
MEEN 3340	SOLID MODELING AND FINITE ELEMENTS		3	Meen 3310, Engr 3320
MEEN 4325	ENERGY CONVERSION		3	Engr 2316
MEEN 4330	INTR TO PLASMA ENGINEERING & APPL		3	Engr 2322 & Engr 2460 or Phys 2426
MEEN 4335	INTR TO AIRCRAFT AERODYNAMICS & PERF		3	Engr 2326 & Cosc 1330
MEEN 4345	SENSORS AND SYSTEMS		3	Math 2414, Phys 2426 & Engr 2460
MEEN 4350	CONTROLS, AUTOMATIONS AND ROBOTICS		3	Math 3315, Engr 2326 & Engr 2460
MEEN 4355	MARINE FABRICATION		3	Engr 3350
MEEN 4375	FUEL CELLS		3	Engr 2316, Meen 3345 & Chem 1411
MEEN 4380	RENEWABLE ENERGY		3	Engr 2316, Engr 2460, Meen 4325
MEEN 4385	OFFSHORE ENERGY MANAGEMENT		3	Meen 3345
MEEN 4390	INTRO TO COMPUTATIONAL FLUID DYNAMICS		3	Meen 3345
MEEN 4395	OFFSHORE WATER EXPLORATION & DESALINATION SYST		3	Engr 2316
EEEN 4333	MACHINE VISION AND IMAGE PROCESSING		3	Cosc 1330 or 1435 & Engr 2460 or 2305
ENGR 4390	SPECIAL TOPICS IN ENGINEERING	Varies	Varies	Varies
ENTC 4496	DIRECTED INDEPENDENT STUDY	Varies	Varies	Varies

**UNIVERSITY REQUIREMENTS**

FOREIGN LANGUAGE (2 SEMESTERS)		Met via HS Transcript or College-level course
UCCP 1101	FIRST-YEAR SEMINAR	1 n/a
UCCP 1102	FIRST-YEAR SEMINAR	1 n/a

**GENERAL ELECTIVES**

none required

**TOTALS FOR DEGREE PLAN**

TOTAL HOURS:	<b>130</b>	128 WITH NO UCCP
TOTAL UPPER DIVISION HOURS (MIN 45)	<b>53</b>	