

# Texas A&M University-Corpus Christi

## Curriculum Sheet for 2020 Catalog

This Curriculum expires after 6 years

Degree: **Bachelor of Science**

Major: **Physics**

### COMMON UNIVERSITY CORE CURRICULUM

COMM 1311	Foundations of Communication
ENGL 1302	Writing and Rhetoric
See Catalog	Language, Philosophy & Culture
HIST 1301	US History I
HIST 1302	US History II
POLS 2305	US GOVT
POLS 2306	TX GOVT
See Catalog	Creative Arts
See Catalog	Social Science

### SCH PREREQUISITES

3	or ENGL 1301
3	
3	
3	*May take HIST 2301 instead
3	
3	
3	
3	

### UNIVERSITY CORE CURRICULUM Specific to this major (SEE NOTE BELOW)

MATH 2413	Calculus I	(-3)	Math 1314+1316 or Math 2312 or beyond
PHYS 2425	UNIVERSITY PHYSICS I	(-3)	Math 2413
PHYS 2426	UNIVERSITY PHYSICS II	(-3)	Math 2414
CAO OPTION I	Labs from MATH 2413, PHYS 2425, PHYS 2426	(-3)	
CAO OPTION II	MATH 2414	(-3)	Math 2413

**NOTE:** Taking core curriculum classes other than those listed in the major specific university core classes section above will result in you taking additional courses that may not be required to complete your degree. Please consult your major academic advisor for more details.

### PHYSICS SUPPORTING COURSES 19 HOURS

COSC 1435	PROBLEM SOLVING I	4	Math 1314 or beyond
MATH 2413	CALCULUS I	4	Math 1314+1316 or Math 2312 or beyond
MATH 2414	CALCULUS II	4	Math 2413
*MATH 3315	DIFF EQUATIONS	3	Math 2414
MATH 2415	CALCULUS III	4	Math 2414

### PHYSICS MAJOR 34 HOURS

PHYS 2425	UNIVERSITY PHYSICS I	4	Math 2413
PHYS 2426	UNIVERSITY PHYSICS II	4	Math 2414
*PHYS 3331	MECHANICS I	3	PHYS 2426, Co-requisite MATH 3315
*PHYS 3332	ELECTROMAGNETISM	3	PHYS 2426, Co-req MATH 3315 or MATH 2415
*PHYS 3333	THERMODYNAMICS	3	PHYS 2426, Co-requisite MATH 2415
*PHYS 3334	MODERN PHYSICS I	3	PHYS 2426, Corequisite MATH 3315
*PHYS 3490	Selected Topics	3	Varies
*PHYS 4161	PHYSICS RESEARCH PROJECT	1	PHYS 3334
*PHYS 4162	PHYSICS RESEARCH SEMINAR	1	PHYS 4161
*PHYS 4330	MATH METHODS FOR PHYSICISTS	3	Co-requisite MATH 3315
*PHYS 4335	QUANTUM PHYSICS	3	PHYS 3334, co-req MATH 3315 or MATH 2415
*PHYS 4337	NUCLEAR PHYSICS	3	PHYS 3334, co-req MATH 3315 or MATH 2415
*PHYS 4340	PHYSICS ADVANCED LAB	3	PHYS 3334

### ADVANCED PHYSICS ELECTIVES 6 HOURS

Must be 2 upper levels physics courses chosen from available consortium offerings.

Offerings available for viewing at: ([www.tarleton.edu/tpc/](http://www.tarleton.edu/tpc/))

### SUPPORT FIELD 18 HOURS

These courses must be chosen in conjunction with assigned physics faculty mentor. See University catalog for more information  
Support field can be chosen from: COSC 1436; ENGR 3315; ESCI 3351, 4335, 4360; MATH 3311; MEEN 3345

### General Electives

Most may need to be upper division  
This will depend on level of support field courses and transfer classes (est UD need = 12 hours)

### University Requirements

Minimum Total Hours for degree:	120	Foreign Language Requirement (see catalog)	2.00
*Upper Division minimum total hours: 31-34 on plan before minor	45	Cumulative TAMU-CC minimum GPA:	2.25
*Upper Division minimum residency hours:	36	Minimum Major GPA:	2