

SUGGESTED FOUR-YEAR SCHEDULE: 2019-20

B.S. in Physics - Secondary Certification



COLLEGE OF
**Science and
Engineering**
A&M-COMMERCE

First Year Fall Semester

*ENG 1301, College Reading & Writing	3
*HIST 1301, US History to 1877	3
*MATH 2413, Calculus I	4
*PHYS 2425, University Physics I	4
PHYS 101, Physics & ASTR Seminar	1
Total Hours	15

First Year Spring Semester

*ENG 1302, Written Argument/Research	3
*HIST 1302, US History from 1865	3
*Component Area	3
*MATH 2414, Calculus II	4
*PHYS 2426, University Physics II	4
Total Hours	17

Second Year Fall Semester

*PSCI 2305, US Government & Politics	3
MATH 2415, Calculus III	4
CHEM 1311, Gen & Quant Chemistry I	3
CHEM 1111, Gen & Quant Chemistry I Lab	1
PHYS 317, Math Methods for PHYS & ENGR	3
PHYS 333, Wave Motion, Acoustics & Optics	4
Total Hours	18

Second Year Spring Semester

*PSCI 2306, TX Government & Politics	3
PSY 300, Learning Processes & Development	3
CHEM 1312, Gen & Quant Chemistry I	3
CHEM 1112, Gen & Quant Chemistry I Lab	1
PHYS 321, Modern Physics	3
PHYS 345, Teaching & Learning Physics	3
Total Hours	16

Third Year Fall Semester

*Literature, Philosophy, & Culture	3
SED 330, Roles of STEM Educators	3
CHEM 2323, Organic Chemistry I	3
CHEM 2123, Organic Chemistry I Lab	1
**PHYS 335, Advanced Physics Lab or PHYS 319, Computational Physics	3
**PHYS 411, Classical Mechanics	3
Total Hours	16

Third Year Spring Semester

*Social & Behavioral Science	3
RDG 380, Compr & Voch in MLED/HS	3
SED 331, Instructional Design in STEM	3
PHYS 371, Sci & Math Educ Theory & Pract or PHYS 401, Current Topics	1
**PHYS 412, Electricity & Magnetism	3
Total Hours	13

Fourth Year Fall Semester

*Creative Arts	3
SED 332, Project Based Learning in STEM	3
PHYS 371, Sci & Math Educ Theory & Pract or PHYS 401, Current Topics	1
**PHYS 420, Quantum Mechanics	3
Advanced Physics Elective	4
Total Hours	14

Fourth Year Spring Semester

<i>Student Teaching</i>	
SED 400, Pedagogy & Classroom Mgt	3
SED 401, Technology Infused Curriculum	3
SED 404, Secondary Teaching Practicum	3
SED 405, Secondary Residency in Teaching	6
Total Hours	15

Degree Total 124

* This course should be used to satisfy the Core Curriculum Requirements

IMPORTANT: Courses marked with a double asterisk () are generally only taught on an every-other-year basis. Take when able and offered. If you are not able to take Calculus I & Physics I until your second semester, you should take Gen & Quant Chem I during your first semester

The suggested plan shown is subject to change. Please check the current Undergraduate Catalog (catalog.tamuc.edu) for required courses in your program.