

Chemistry B.S. - Teacher Certification Option

Teacher Certification, 7-12 Science

Core Curriculum Courses

See the Core Curriculum Requirements (<http://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/>) 42

Required courses in the major

PHYS 2425	University Physics I	4
PHYS 2426	University Physics II	4
CHEM 1111	General and Quantitative Chemistry Laboratory I *	1
CHEM 1112	General and Quantitative Chemistry Laboratory II *	1
CHEM 1311	General and Quantitative Chemistry I *	
CHEM 1312	General and Quantitative Chemistry II *	
CHEM 101	General Chemistry Tutorial I	1
CHEM 102	General Chemistry Tutorial II	1
CHEM 201	Organic Chemistry Tutorial I	1
CHEM 2123	Organic Chemistry Laboratory I	1
CHEM 2323	Organic Chemistry I	3
CHEM 401	GLB/Chemical Sci & Profession	1
CHEM 418	Undergraduate Research (1-2 sh required)	1-2
CHEM 421	Chemistry Lab Design I	4
CHEM 202	Organic Chemistry Tutorial II	1
CHEM 2125	Organic Chemistry Laboratory II	1
CHEM 2325	Organic Chemistry II	3
CHEM 371	Science and Math Education Theory and Practice (take 3 times)	3

Teacher Education courses

SED 330	Roles and Responsibilities of Professional STEM Educators	3
SED 331	Instructional Design for Student Engagement in STEM	3
SED 332	Project Based Learning in STEM	3
SED 400	Pedagogy and Classroom Management in Field-based Environments	3
SED 401	Technology Infused Curriculum and Assessment in Field-based Environments	3
SED 404	Secondary Teaching Practicum	3
SED 405	Secondary Residency in Teaching	3
RDG 380	Comprehension and Vocabulary in Middle and High Schools	3
PSY 300	Learning Processes and Development	3

Required support courses

MATH 2413	Calculus I *	
MATH 2414	Calculus II *	

Electives required to meet minimum program hours 16-18

CHEM 415	Advanced Inorganic Chemistry	4
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Total Hours 120-123

* This course fulfills the Core Curriculum Requirements.
A grade of "C" or higher must be earned in all courses in this Major.