

Bachelor of Science: Chemistry Education (grades 9-12)

Course	Title	Credits	Sem.
Admission to Teacher Education Program Requirements			
COMM 110	Essentials of Speaking & Listening	3	B
ENG 151	Academic Writing	4	B
MATH 110 OR MATH 140/150	College Algebra OR Calculus: Short Course or Calculus I	3 5	B B
Professional Secondary Education Sequence			
ED 101	Introduction to Education & Lab	3	B
ED 102	Tech: Classroom Applications & Portfolio	2	B
HLTH 225	Alcohol, Narcotics & Tobacco Not Required, but Strongly Encouraged	2	F
PSYC 341	Child & Adolescent Psychology <i>*Pre-Requisite: PSYC 101</i>	3	S
SOCI 331 OR ED 312	Race & Ethnic Relations in America <i>(meets LEP Goal 7)</i> OR Human Relations for Teachers	3	B, Su B
SPED 290	Introduction to Special Needs & Lab <i>*Pre-Requisite: ED 101 & Sophomore Status</i>	3	B
ED 301	The Teaching & Learning Process & Lab	3	F
ED 304	Professional Development & Classroom Applications	1	S
ED 304L	Pre-Student Teaching Experience Practicum	0	S
ED 407	Secondary Methods: Science	3	S
ED 430	Reading in the Content Areas	2	S
Required Content Classes			
CHEM 231/CHEM 231L	General Chemistry I & Lab (CHEM 231L)	4	F
CHEM 232/CHEM 232L	General Chemistry II & Lab (CHEM 232L)	5	S
CHEM 243	Analytical Chemistry I	5	se
CHEM 351/CHEM 351L	Organic Chemistry I & Lab (CHEM 351L)	5	F
CHEM 352/CHEM 352L	Organic Chemistry II & Lab (CHEM 352L)	5	S
CHEM 364	Chemical Thermodynamics & Kinetics	3	se
CHEM 420	Chemistry Seminar	1-2	S
MATH 140 OR MATH 150	Calculus: A Short Course OR Calculus I	3 5	Varies B
PHYS 141 & PHYS 142 OR PHYS 181 & PHYS 182	College Physics I & Lab and College Physics II & Lab OR University Physics I & Lab and University Physics II & Lab	4 4 5 5	F S F S
Student Teaching			
ED 469	Secondary Student Teaching: Grade 5-12	12	B
ED 473	Teacher Licensure	0	B
Degree & Major Requirements			
	LEP/MnTC requirements	45	
	Chemistry Education major	35-38	
	Education courses	29	
	Total credits required for this degree	109-112	
	Total credits required for graduation	120	

Courses in the shaded area can be taken prior to admission to the Teacher Education Program

F = Fall S = Spring B = Both F & S Su = Summer fo = fall odd so = spring odd fe = fall even se = spring even
For example – fo = Fall 2019; se = Spring 2020; fe = Fall 2020; so = Spring 2021

NES Essential Academic Skills tests required for this major: Reading/Writing/Math prior to admission to the Teacher Education Program;
MTLE test required for licensure: Chemistry Gr. 9-12 Content test (2 subtests) and Secondary Pedagogy test (2 subtests) prior to licensure.

You are responsible to keep informed of any changes in requirements which may affect your academic career.

This information is provided for advising. Official curriculum is published in the SMSU academic catalog: www.SMSU.edu/catalog/
Students should refer to the online catalog or their DARS report for current curriculum. **This advising guide was printed: 12/06/2019**