Name:	BASED ON	CREDITS

<u>CHEMISTRY, B.S.</u> 4 + 1 Teacher Certification ME.D. PROGRAM

4 + 1 Teacher Certification ME.D. PROGRAM

Minimum of 135 credits and Three 1-credit PE courses for B.S. in Chemistry (Teacher Certification Track)

22 Credits for M.ED. beyond Chemistry B.S. Teacher Certification Track

GENERAL EDUCATION CORE	MAJOR (Minimum of 72 credits)	
BASIC REQUIREMENTS	☐ CH 101: General Chemistry I	
(6 credits and three 1-credit PE courses)	☐ CH 102: General Chemistry II	
Composition and Rhetoric	☐ CH 203: Inorganic and Material Chemistry	
☐ EN 103 Composition and Rhetoric I	☐ CH 231: Organic Chemistry I	
☐ EN 104 Composition and Rhetoric II	☐ CH 232: Organic Chemistry II	
Physical Education Courses	☐ CH 304: Inorganic Chemistry	
□ PE 100	☐ CH 351: Physical Chemistry I	
\square PE	☐ CH 352: Physical Chemistry II	
□ PE □ PE	☐ CH 361: Analytical Chemistry	
	☐ CH 362: Instrumental Analytic Chemistry	
MODES OF THINKING (6 credits)	☐ CH 435: Biochemistry I	
Literature (Select one)	☐ CH 455: Research Seminar	
□ EN 110, EN 112, EN 115	☐ CH 461: Research or CH 396-399; Internship	
Mathematics (Satisfied by Major)	☐ MA 121: Calculus I	
Natural Science (Satisfied by Major)	☐ MA 122: Calculus II	
Philosophy	☐ PH 201: Gen. Phys. I: Mechanics and Heat	
□ PL 109	☐ PH 202: Gen. Phys. II: Wave Phenomena and	
Social Sciences: (Satisfied by STEP	Electromagnetism	
Requirements)	C	
,	REQUIRED EDUCATION COURSES	
CULTURAL LITERACY (18 credits)		
Humanities I and II. <i>Preferably</i> select a set (e.g.,	(15 credits)	
HI 201/202). However, a combination (e.g., PO	☐ ED 109: The Educative Process	
201 + HI 214) is acceptable.	☐ ED 209: Cognition and learning	
☐ Hum. I: HI 201, PO 201, HI 213	☐ ED 218: Introduction to Exceptionality	
☐ Hum. II: HI 201, FO 201, HI 214, HI 262	☐ ED 366: Literacy Interventions 4-12	
Humanities III: Great Works of Art & Music	☐ ED 373: Teaching English Learners	
Humanities IV: Great Works of Literature	FREE ELECTIVES (Minimum of 9 credits)	
	· · · · · · · · · · · · · · · · · · ·	
Foreign Language/World Cultures	Recommended Courses: BI 151, CH 436,	
(Select either two of the same language, any	CH 475, or additional STEM courses	
two WC, or one WC and one approved		
course with international study)		
	ODTIONAL MINOD	
	OPTIONAL MINOR	
		
CHRISTIAN VALUES AND THEOLOGY (9	<u></u>	
credits)	□ □	
Catholic Theology		
□ TH 109	Four Plus One Admission Requirements:	
Intermediate Theology (200/300 level TH)	-Completion of 5 courses above	
	-3.0 GPA	
Values Seminar: CH 475: Recommended	-Passing score on PRAXIS Chemistry	
	test	

DE SALES UNIVERSITY Example Plan: CHEMISTRY (Teacher Certification), B.S.

FIRST YEAR

FALL SEMESTER (17 credits and 1-credit PE)

General Chemistry I (CH 101+101L+101P) Calculus I (MA 121) Composition and Rhetoric I (EN 103) Foreign Language/World Cultures I The Educative Process (ED 109) Fitness and Wellness (PE 100)

SPRING SEMESTER (17 credits and 1-credit PE)

General Chemistry II (CH 102+102L+102P) Calculus II (MA 122) Composition and Rhetoric II (EN 104) Foreign Language/World Cultures II Catholic Theology (TH 109) Physical Education (Activity)

SECOND YEAR

FALL SEMESTER (18 credits)

Organic Chemistry I (CH 231+231L) General Physics I (PH 201+201L) Literature MOT Humanities I (HI 201 Recommended) Cognition and learning (ED 209)

SPRING SEMESTER (18 credits)

Organic Chemistry II (CH 232+232L) General Physics II (PH 202+202L) Inorganic Chemistry and Material Chemistry (CH 203) Humanities II (HI 202 Recommended) Philosophy MOT (PL 109)

THIRD YEAR

FALL SEMESTER (16 or 18 credits)

Analytical Chemistry (CH 361+361L) <u>AND</u> Inorganic Chemistry (CH 304+304L)

<u>OR</u>

Physical Chemistry I (CH 351+351L)* <u>AND</u> Biochemistry (CH 435+435L) <u>AND</u> Humanities III Research Seminar (CH 455) Literacy Interventions (ED 366)

SPRING SEMESTER (14 credits and 1 credit PE)

Instrumental Analytical Chem. (CH362+362L)

OR Physical Chemistry II (CH 352+352L) *
Introduction to Exceptionality (ED 218)
Chemistry Research (CH 461) OR Internship (396-399)
Intermediate Theology
Physical Education (Activity)

FOURTH YEAR

FALL SEMESTER (16 or 18 credits)

Physical Chemistry I (CH 351+351L)* <u>AND</u> Biochemistry I (CH 435+435L) <u>AND</u> Humanities III

<u>OR</u>

Analytical Chemistry (CH 361+361L) <u>AND</u> Inorganic Chemistry (CH 304+304L) Values Seminar Teaching English Learners (ED 373)

SPRING SEMESTER (17 credits)

Instrumental Analytical Chemistry (CH362+362L) *

OR Physical Chemistry II (CH 352+352L)

Humanities IV

Free Elective

Free Elective

Free Elective

* Physical Chemistry I and II are offered on alternate years with Analytical Chemistry, Instrumental Chemistry and Inorganic Chemistry.

Students pursuing Secondary Education Teacher Certification should follow the STEP Chemistry Graduation Requirement Forms.

A Koefer, Director of Academic Success Center Effective fall, 2022

<u>DE SALES UNIVERSITY</u> <u>CHEMISTRY (Teacher Certification), GRADUATE M.ED. PHASE **</u>

GRADUATE PHASE OF PROGRAM – Additional Tuition Based on Current Rates

Summer Semester

SC518 Middle and Secondary Learner and Curriculum (3 credits)

SC519 Secondary Education Principles and Pedagogy (3 credits)

SC524 Secondary Education in Subject Area (3 credits)

SC522 Secondary Education Clinical Field Experience 1 (1 credit)

* Intern Teaching Certificate issued and students apply for Full-Time Teaching Position

Fall Semester

SC525 Secondary Education Clinical Field 2 (while employed) - (3 credits)

SE522 Remedial Techniques in Reading and Writing - (3 credits)

Spring Semester

EE551 Student Teaching (while employed) - (3 credits)

* Instructional I certification issued

Summer Semester

ED600 Research Capstone - (3 credits)

** Additional Tuition Based on Current M.ED. Rates

M.ED. Awarded after Successful Completion of Graduate Phase of Program