

B.A. in Science Education 9-12 (Chemistry Emphasis) 2016-2017: Option 1 - CWILT

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE113 & 113D General Chemistry I and General Chemistry 1 Lab (or CHE 208/208D Accelerated General Chemistry/Lab) *2	4	BIB101 Introduction to the Bible	3	CHE214 & CHE215 General Chemistry II and General Chemistry II Lab (or elective if CHE 208/208D was taken in fall) *2	4
MAT124M Calculus *1	4		MAT125 Calculus *2		4
GES106 Introduction to Liberal Arts	1		GES110 College Writing		3
GES130 Christianity Western Culture	4		Nature of Persons (N) course		3
PEA100 Physical Wellness for Life	1		Leisure and Lifetime Sports (Q) course		1
	14		3		15
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE200 Laboratory Safety and Chemical Hygiene	1	Contemporary western Life and Thought (L) course	3	CHE226 & CHE227 Organic Chemistry II and Organic Chemistry II Lab	4
CHE224 & CHE225 Organic Chemistry I and Organic Chemistry I Lab	4		PHY296 & PHY297 General Physics II and General Physics II Lab		4
PHY292 & 292D General Physics I and General Physics I Lab	4		EDU200 Introduction to Education		3
Second Language (S) course *1	4		EDU201 Introduction to Education Field Experience		1
			GES125 Introduction to the Creative Arts		4
	13		3		16
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE395 Chemistry Seminar: Research and Professional Development	1	World Culture (U) course 3	3	CHE494 Chemistry Seminar: Research Presentation	1
THE201 Christian Theology	3		CHE312 & CHE313 Quantitative Analysis and Quantitative Analysis Lab		4
Science, Technology and Society (K) course	3		EDU240 Educational Psychology		3
Cross Cultural Experience (Z) course	0-3		EDU241 Educational Psychology Field Experience		1
Electives	6-8		Interpreting Biblical Themes (J) course		3
			Artistic Experience (A) course		0-3
	13-18		3		12-15
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE494 Chemistry Seminar: Research Presentation	1	Contemporary Christian Issues (P) course	3	EDU490 Student Teaching Block	14
CHE344 Thermodynamics, Kinetics, and Statistical Mechanics	3		CHE494 Chemistry Seminar: Research Presentation		1
CHE345 Thermodynamics, Kinetics, and Statistical Mechanics Lab	1				
EDU203 School Health and Drugs	2				
EDU320 Pedagogy and the Young Adolescent Learner	1				
EDU321 Integrated Literacy in the Content Areas	1				
EDU420 Methods in Teaching Secondary Science	3				
EDU429 Science Education Practicum in grades 5-8 or 5-12	1				
EDU317GZ Educational Equity	3				
	16		3		15

Total Credits: 126-134

*1 Students must complete through the second semester of a first year language course or equivalent.

*2 CHE208/CHE208D is a one-semester course that meets the requirements of CHE113/CHE113D and CHE214/CHE215. Students taking CHE208/CHE208D may choose an elective in the spring semester of their freshman year.

*3 The Education Department offers interim trips that meet the U requirement - EDU236UZ or EDU204UZ. See Education Abroad Options.

MN basic skills tests (MTLE) required for full admission to the Education Department.

This program assumes student will use BIO118/BIO118D, EDU317GZ, and math course to meet the general education Laboratory Science, Comparative Systems, and Math requirements.

Because of possible double counting between General Education and the major, the actual total can be reduced to 122.

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)

B.A. in Science Education 9-12 (Chemistry Emphasis) 2016-2017: Option 2 - Humanities

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE113 & 113D General Chemistry I and General Chemistry 1 Lab (or CHE 208/208D Accelerated General Chemistry/Lab) *2	4	<u>GES147 Humanities II: Renaissance and Reformation</u>	4	CHE214 & CHE215 General Chemistry II and General Chemistry II Lab (or elective if CHE 208/208D was taken in fall) *2	4
MAT124M Calculus *1	4			MAT125 Calculus *2	4
<u>GES106 Introduction to Liberal Arts</u>	1			<u>GES244 Humanities III: European Enlightenment and American Culture to 1877</u>	4
<u>GES145 Humanities I: Greco-Roman through Middle Ages</u>	4			<u>BIB101 Introduction to the Bible</u>	3
Nature of Persons (N) course	3			Leisure and Lifetime Sports (Q) course	1
Electives	6-8				
	22-24		4		16
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE200 Laboratory Safety and Chemical Hygiene	1	<u>EDU200 Introduction to Education</u>	3	CHE226 & CHE227 Organic Chemistry II and Organic Chemistry II Lab	4
CHE224 & CHE225 Organic Chemistry I and Organic Chemistry I Lab	4	<u>EDU201 Introduction to Education Field Experience</u>	1	PHY296 & PHY297 General Physics II and General Physics II Lab	4
PHY292 & 292D General Physics I and General Physics I Lab	4			<u>EDU203 School Health and Drugs</u>	2
PHY112 & 112D Introduction to Astronomy and Introduction to Astronomy Lab	4			<u>PEA100 Physical Wellness for Life</u>	1
<u>GES246 Humanities IV: Modern and Contemporary Western Culture</u>	4			Second Language (S) course *1	4
	17		4		15
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>CHE494 Chemistry Seminar: Research Presentation</u>	1	Interim Off		<u>CHE494 Chemistry Seminar: Research Presentation</u>	1
World cultures (U) course *3	3			CHE312 & CHE313 Quantitative Analysis and Quantitative Analysis Lab	4
Science, technology and Society (K) course	3			<u>EDU240 Educational Psychology</u>	3
Cross Cultural Experience (Z) course	0-3			<u>EDU241 Educational Psychology Field Experience</u>	1
				Interpreting Biblical Themes (J) course	3
				Artistic Experience (A) course	0-3
	7-10		0		12-15
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE344 & CHE345	4	Contemporary Christian Issues (P) course		3 <u>EDU490 Student Teaching Block</u>	14
<u>CHE494 Chemistry Seminar: Research Presentation</u>	1			<u>CHE494 Chemistry Seminar: Research Presentation</u>	1
<u>EDU320 Pedagogy and the Young Adolescent Learner</u>	1				
<u>EDU321 Integrated Literacy in the Content Areas</u>	1				
<u>EDU420 Methods in Teaching Secondary Science</u>	3				
<u>EDU429 Science Education Practicum in grades 5-8 or 5-12</u>	1				
<u>EDU317GZ Educational Equity</u>	3				
	14			3	15

Total Credits: 129-137

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MN basic skills tests (MTLE) required for full admission to the Education Department.

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