

## B.A. in Science Education 9-12 (Physics Emphasis) 2019-2020: Option 1 - CWILT

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">PHY 292</a> & <a href="#">PHY 292D</a> General Physics I and General Physics I Lab	4	<a href="#">GES 125</a> Introduction to the Creative Arts	4	<a href="#">PHY 296</a> & <a href="#">PHY 297</a> General Physics II and General Physics II Lab	4
<a href="#">MAT 124M</a> Calculus 1	4			<a href="#">MAT 125</a> Calculus 2	4
<a href="#">GES 130</a> Christianity Western Culture	4			<a href="#">BIB 101</a> Introduction to the Bible	3
<a href="#">GES 160</a> Inquiry Seminar	3			<a href="#">GES 140</a> Introduction to Wellbeing	3
	<b>15</b>		<b>4</b>		<b>14</b>
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">CHE 113</a> & <a href="#">CHE 113D</a> General Chemistry I and General Chemistry I Lab	4	Interim Off		<a href="#">CHE 214</a> & <a href="#">CHE 215</a> General Chemistry II and General Chemistry II Lab	4
<a href="#">MAT 223</a> Multivariable Calculus	3			<a href="#">EDU 200</a> Introduction to Education	3
<a href="#">PHY 302</a> & <a href="#">PHY 303</a> Electronics and Electronics Lab	4			<a href="#">EDU 201</a> Introduction to Education Field Experience	1
<a href="#">PHY 260</a> Careers in Engineering and Physics Seminar	1			<a href="#">PHY 312</a> & <a href="#">PHY 313</a> Modern Physics and Modern Physics Lab	4
Second Language (S) course <sup>1</sup>	4			<a href="#">THE 201</a> Christian Theology	3
	<b>16</b>		<b>0</b>		<b>15</b>
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">PHY 112</a> & <a href="#">PHY 112D</a> Introduction to Astronomy and Introduction to Astronomy Lab	4	World Cultures (U) course <sup>2</sup>	3	<a href="#">EDU 203</a> School Health and Drugs	2
Interpreting Biblical Themes (J) course	3			<a href="#">EDU 241</a> Educational Psychology Field Experience	1
Science, Technology & Society (K) course	3			<a href="#">EDU 240</a> Educational Psychology	3
Leisure and Lifetime sports (Q) course	1			<a href="#">PHY 352</a> & <a href="#">PHY 353</a> Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
Elective	2			Contemporary Western Life and Thought (L) course	3
	<b>13</b>		<b>3</b>		<b>13</b>
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">EDU 317GZ</a> Educational Equity	3	Contemporary Christian Issues (P) course	3	<a href="#">EDU 490</a> Student Teaching Block	14
<a href="#">EDU 320</a> Pedagogy and the Young Adolescent Learner	1				
<a href="#">EDU 321</a> Integrated Literacy in the Content Areas	1				
<a href="#">EDU 420</a> Methods in Teaching 5-12 Science	3				
<a href="#">EDU 429</a> Science Education Practicum in Grades 5-8 or 5-12	1				
Artistic Experience (A) course	0-3				
Elective	3				
	<b>12-15</b>		<b>3</b>		<b>14</b>
<b>Total Credits 122-125</b>					

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

2. The Education Department offers an interim trip that meets the U requirement - EDU236UZ. See Education Abroad Options.

This program assumes a student will use PHY292/292D, EDU317GZ, and MAT124M to meet the general education Laboratory Science, Comparative Systems, and Math requirements.

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 (Physics Emphasis) 2019-2020: Option 2 - Humanities

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">PHY 292</a> & <a href="#">PHY 292D</a> General Physics I and General Physics I Lab	4	<a href="#">GES 147Humanities II: Renaissance and Reformation</a>	4	<a href="#">PHY 296</a> & <a href="#">PHY 297</a> General Physics II and General Physics II Lab	4
<a href="#">MAT 124MCalculus 1</a>	4			<a href="#">MAT 125 Calculus 2</a>	4
<a href="#">GES 145Humanities I: Greco-Roman through Middle Ages</a>	4			<a href="#">GES 244Humanities III: European Enlightenment and American Culture to 1877</a>	4
<a href="#">BIB 101Introduction to the Bible</a>	3			<a href="#">GES 140Introduction to Wellbeing</a>	3
	<b>15</b>		<b>4</b>		<b>15</b>
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">CHE 113</a> & <a href="#">CHE 113D</a> General Chemistry I and General Chemistry I Lab	4	<a href="#">EDU 200Introduction to Education</a>	3	<a href="#">CHE 214</a> & <a href="#">CHE 215</a> General Chemistry II and General Chemistry II Lab	4
<a href="#">MAT 223Multivariable Calculus</a>	3	<a href="#">EDU 201Introduction to Education Field Experience</a>	1	<a href="#">EDU 200Introduction to Education</a>	3
<a href="#">PHY 302</a> & <a href="#">PHY 303</a> Electronics and Electronics Lab	4			<a href="#">EDU 201Introduction to Education Field Experience</a>	1
<a href="#">GES 246Humanities IV: Modern and Contemporary Western Culture</a>	4			<a href="#">PHY 312</a> & <a href="#">PHY 313</a> Modern Physics and Modern Physics Lab	4
<a href="#">PHY 260 Careers in Engineering and Physics Seminar</a>	1			Secondary Language (S) Course <sup>1</sup>	4
	<b>16</b>		<b>4</b>		<b>16</b>
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">PHY 112</a> & <a href="#">PHY 112D</a> Introduction to Astronomy and Introduction to Astronomy Lab	4	World Cultures (U) course <sup>2</sup>	3	<a href="#">EDU 203 School Health and Drugs</a>	2
Interpreting Biblical themes (J) course	3			<a href="#">EDU 220Introduction to Middle Level Education</a>	3
Science, Technology and Society (K) course	3			<a href="#">EDU 240Educational Psychology</a>	3
Leisure and Lifetime Sports (Q) course	1			<a href="#">EDU 241Educational Psychology Field Experience</a>	1
Elective	3			<a href="#">PHY 352</a> & <a href="#">PHY 353</a> Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
	<b>14</b>		<b>3</b>		<b>13</b>
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">EDU 317GZEducational Equity</a>	3	Contemporary Christian Issues (P) course	3	<a href="#">EDU 490 Student Teaching Block</a>	14
<a href="#">EDU 320Pedagogy and the Young Adolescent Learner</a>	1				
<a href="#">EDU 321Integrated Literacy in the Content Areas</a>	1				
<a href="#">EDU 420 Methods in Teaching 5-12 Science</a>	3				
<a href="#">EDU 429 Science Education Practicum in Grades 5-8 or 5-12</a>	1				
Artistic Experience (A) course	0-3				
Electives	3-6				
	<b>12-18</b>		<b>3</b>		<b>14</b>
<b>Total Credits 129-135</b>					

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

2. The Education Department offers an interim trip that meets the U requirement - EDU236UZ. See Education Abroad Options.

This program assumes a student will use PHY292/292D, EDU317GZ, and MAT124M to meet the general education Laboratory Science, Comparative Systems, and Math requirements.

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.)