

## B.S. in Mathematics and Data Science 2017-2018: Option 1- CWILT

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>COS100 Introduction to Programming</u>	3	<u>GES160 Inquiry Seminar</u>	3	<u>COS105 Computer Science 1</u>	4
<u>MAT124M Calculus 1 *1</u>	4			<u>BIB101 Introduction to the Bible</u>	3
<u>GES140 Introduction to Wellbeing</u>	3			<u>GES130 Christianity Western Culture</u>	4
<u>GES125 Introduction to the Creative Arts</u>	4			<u>MAT125 Calculus 2</u>	4
	<b>14</b>				<b>3</b>
					<b>15</b>
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT223 Multivariable Calculus</u>	3	Contemporary Western Life and Thought (L) course	3	<u>MAT211 Linear Algebra</u>	3
<u>MAT241 Discrete Mathematics</u>	3			<u>MAT222 Differential Equations</u>	3
<u>COS212 Computer Science 2</u>	4			<u>COS216 Data Structures and Algorithms</u>	3
<u>Laboratory Science (D) course</u>	4			THE201 Christian Theology	3
				Second Language (L) course <sup>2</sup>	4
	<b>14</b>				<b>3</b>
					<b>16</b>
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT330 Probability and Statistics</u>	3	Interim Off		<u>MAT310 Algebraic Structures</u>	4
<u>MAT344 Numerical Methods</u>	3			<u>MAT331 Applied Statistics</u>	3
<u>MAT376 Operations Research</u>	4			<u>COS334 Data Mining</u>	3
World Cultures (U) course	3			Science, Technology, and Society (K) course	3
Cross-Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3
	<b>13-16</b>				<b>0</b>
					<b>13-16</b>
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT422 Real Analysis</u>	3	<u>MAT499 Foundations of Mathematics</u>	3	<u>MAT425 Topics in Mathematics</u>	3
<u>COS313 Database Systems</u>	3			<u>BUS317 Business Analytics</u>	4
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
Comparative Systems (G) course	3			Leisure and Lifetime Sport (Q) course	1
Electives	3			Electives	3
	<b>15</b>				<b>3</b>
					<b>14</b>
<b>Total Credits: 123-129</b>					

\*1. This program assumes students will use MAT124M to meet the general education Mathematics requirement.

\*2. Students must complete through the second semester of a first year language course or equivalent (check the catalog for details).

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.S. in Mathematics and Data Science 2017-2018: Option 2- Humanities

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>COS100 Introduction to Programming</u>	3	<u>GES147 Humanities II: Renaissance and Reformation</u>	4	<u>BIB101 Introduction to the Bible</u>	3
<u>MAT124M Calculus 1 *1</u>	4			<u>COS105 Computer Science 1</u>	4
<u>GES140 Introduction to Wellbeing</u>	3			<u>MAT125 Calculus 2</u>	4
<u>GES145 Humanities I: Greco-Roman through Middle Ages</u>	4			<u>GES244 Humanities III: European Enlightenment and American Culture to 1877</u>	4
	<b>14</b>		<b>4</b>		<b>15</b>
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT223 Multivariable Calculus</u>	3	Laboratory Science (D) course	4	<u>MAT211 Linear Algebra</u>	3
<u>MAT241 Discrete Mathematics</u>	3			<u>MAT222 Differential Equations</u>	3
<u>COS212 Computer Science 2</u>	4			<u>COS216 Data Structures and Algorithms</u>	3
<u>GES246 Humanities IV: Modern and Contemporary Western Culture</u>	4			Second Language (S) course <sup>2</sup>	4
	<b>14</b>		<b>4</b>		<b>13</b>
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT330 Probability and Statistics</u>	3	Interim Off		<u>MAT310 Algebraic Structures</u>	4
<u>MAT344 Numerical Methods</u>	3			<u>MAT331 Applied Statistics</u>	3
<u>MAT376 Operations Research</u>	4			<u>COS334 Data Mining</u>	3
World Cultures (U) course	3			Science, Technology, and Society (K) course	3
Cross-Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3
	<b>13-16</b>		<b>0</b>		<b>13-16</b>
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT422 Real Analysis</u>	3	<u>MAT499 Foundations of Mathematics</u>	3	<u>MAT425 Topics in Mathematics</u>	3
<u>COS313 Database Systems</u>	3			<u>BUS317 Business Analytics</u>	4
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
Comparative Systems (G) course	3			Leisure and Lifetime Sports (Q) course	1
Electives	3			Electives	3
	<b>15</b>		<b>3</b>		<b>14</b>
<b>Total Credits: 122-128</b>					

\*1. This program assumes students will use MAT124M to meet the general education Mathematics requirement.

\*2. Students must complete through the second semester of a first year language course or equivalent (check the catalog for details).

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.)