## B.S. in Actuarial Science & Finance 2023-2024: Option 1- CWILT

| FIRST YEAR   |                  |   |             | •   |         |
|--|------------------|---|-------------|---|---------|
| Fall   | Credits          | January Session   | Credits     | Spring  | Credits |
| COS 100 Introduction to Programming                        | 3                | GES 160 Inquiry Seminar                                   | 3           | BIB 101 Introduction to the Bible                           | 3       |
| MAT 124M Calculus 1 *1                                     | 4                |   |             | COS 105 Object-oriented Design and Programming              | 4       |
| GES 140 Introduction to Wellbeing                          | 2                |   |             | GES 130 Christianity Western Culture                        | 4       |
| GES 125 Introduction to the Creative Arts                  | 4                |   |             | MAT 125 Calculus 2  | 4       |
|  | 13               |   | 3           |   | 15      |
| SECOND YEAR  |                  |   |             |   |         |
| Fall   |                  | January Session   | Credits     |   | Credits |
| MAT 223 Multivariable Calculus                             |                  | Contemporary Western Life and Thought (L) course          | 3           | World Cultures (U) course                                   | 3       |
| MAT 241 Discrete Mathematics                               | 3                |   |             | ECO 202 - Principles of Microeconomics                      | 2       |
| COS 212 Data Structures                                    | 4                |   |             | ECO 203 - Principles of Macroeconomics                      | 2       |
| Laboratory Science (D) course                              | 4                |   |             | COS 216 Algorithms and Advanced Data Structures             | 3       |
| BUS 220 Principles of Marketing                            | 4                |   |             | THE 201 Christian Theology                                  | 3       |
|  | 18               | _   | -           | Second Language (S) course *2                               | 4       |
| THIRD YEAR   | 18               |   | 3           |   | 17      |
| Fall   | Credite          | January Session   | Credite     | Spring  | Credits |
| COS 313 (fall, even # years) Database Systems              |                  | •   |             | BUS 317 Business Analytics                                  |         |
| MAT 330 Probability and Statistics                         | 3                | Interpreting Biblical Themes (J) course                   | 3           | MAT 300 (spring, odd # years) Numerical Analysis            | 3       |
| Science, Technology, and Society (K) course                | 3                |   |             | BUS 230 Principles of Management                            | 4       |
| Comparative Systems (G) course                             | 3                |   |             | BUS 344 Managerial Finance                                  | 4       |
| BUS 210 Financial Accounting                               | 4                |   |             | Artistic Experience (A) course                              | 0-3     |
| BUS 210 Financial Accounting                               | 4                |   |             | Artistic Experience (A) course                              | 0-3     |
|  | 16               |   | 3           |   | 14-17   |
| FOURTH YEAR  |                  |   |             |   |         |
| Fall   | Credits          | January Session   | Credits     | Spring  | Credits |
| MAT 376 (fall, odd # years) Operations Research            | 4                | Cross-Cultural Experience (Z) course                      | 0-3         | BUS 470 Finance Seminar                                     | 3       |
| MAT 309 Financial Math (Fall, odd # years)                 | 3                |   |             | COS 334 (spring, even # years) or BUS416                    | 3       |
| Contemporary Christian Issues (P) course                   | 3                |   |             | Internship  | 3-4     |
| BUS 352 Financial Valuation                                | 3                |   |             | MAT 331 (spring, even # years) Applied Statistics           | 3       |
| BUS 440 Capital Markets                                    | 4                |   |             | BUS 361 Business Law  | 3       |
|  | 17               |   | 0-3         |   | 15-16   |
| Total Credits 134-141                                      |                  |   |             |   |         |
|  |                  |   |             |   |         |
| *1. This program assumes students will use MAT 124M to     |                  |   |             |   |         |
| *2. Students must complete through the second semeste      | r of a first yea | ar language course or equivalent (check the catalog for d | details).   |   |         |
|  |                  |   |             |   | _       |
| Most financial aid packages stipulate 12 credits/term; Mir | inesota state    | grants are reduced when credit load falls below 15 credi  | its/semeste | er. January Session credits are counted as part of Spring T | Term.   |
|  |                  |   |             |   |         |
| Note that this plan only needs one of MAT300 or MAT376     | i, but they are  | e offered in different semesters                          |             |   |         |
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## B.S. in Actuarial Science & Finance 2023-2024: Option 2- Humanities

| Fall  | Credits                | January Session   | Credits | Spring  | Credit |
|---|------------------------|---|---------|---|--------|
| COS 100 Introduction to Programming   |                        | GES 147 Humanities II: Renaissance and Reformation      |         | BIB 101 Introduction to the Bible   |        |
| MAT 124M Calculus 1 *1  | 4                      |   |         | COS 105 Object-oriented Design and Programming  |        |
| GES 140 Introduction to Wellbeing   | 2                      |   |         | MAT 125 Calculus 2  |        |
| GES 145 Humanities I: Greco-Roman through Middle Ages   | 4                      |   |         | GES 244 Humanities III: European Enlightenment and  |        |
|   | 7                      |   |         | American Culture to 1877  |        |
|   |                        |   |         |   |        |
|   | 13                     |   | 4       |   | 1      |
| SECOND YEAR   |                        |   |         |   |        |
| Fall  |                        | January Session   | Credits | Spring  | Credit |
| MAT 223 Multivariable Calculus  |                        | Laboratory Science (D) course                           | 4       | ECO 202 - Principles of Microeconomics  |        |
| MAT 241 Discrete Mathematics  | 3                      |   |         | ECO 203 - Principles of Macroeconomics  |        |
| COS 212 Data Structures   | 4                      |   |         | World Cultures (U) course   |        |
| GES 246 Humanities IV: Modern and Contemporary  | 4                      |   |         | COS 216 Algorithms and Advanced Data Structures   |        |
| BUS 220 Principles of Marketing   | 4                      |   |         | Second Language (S) course *2   |        |
|   | 18                     |   | 4       |   | 1      |
| THIRD YEAR  |                        |   |         |   |        |
| Fall  |                        | January Session   | Credits |   | Credi  |
| COS 313 (fall, even # years) Database Systems   |                        | Interpreting Biblical Themes (J) course                 | 3       | BUS 317 Business Analytics  |        |
| MAT 330 Probability and Statistics  | 3                      |   |         | MAT 300 (spring, odd # years) Numerical Analysis  |        |
| Science, Technology, and Society (K) course   | 3                      |   |         | Internship  | 3-     |
| Comparative Systems (G) course  | 3                      |   |         | BUS 230 Principles of Management  |        |
| BUS 210 Financial Accounting  | 4                      |   |         | Artistic Experience (A) course  | 0-     |
| BOS 210 Financial Accounting  | 40                     |   | 3       |   | 13-1   |
| v   | 16                     |   | -       |   | 10-1   |
| FOURTH YEAR   | 1                      |   |         |   |        |
|   | 1                      | January Session   | Credits | Spring  | Credit |
| FOURTH YEAR<br>Fall   | Credits                | January Session<br>Cross-Cultural Experience (Z) course |         | Spring<br>BUS 352 Financial Valuation   | Credit |
| FOURTH YEAR<br>Fall<br>MAT 376 (fall, odd # years) Operations Research  | Credits                |   |         |   |        |
| FOURTH YEAR   | Credits<br>4           |   |         | BUS 352 Financial Valuation   |        |
| FOURTH YEAR<br>Fall<br>MAT 376 (fall, odd # years) Operations Research<br>MAT 309 Financial Math (Fall, odd # years)  | Credits<br>4           |   |         | BUS 352 Financial Valuation<br>BUS 470 Finance Seminar  |        |
| FOURTH YEAR<br>Fall<br>MAT 376 (fall, odd # years) Operations Research<br>MAT 309 Financial Math (Fall, odd # years)<br>Contemporary Christian Issues (P) course                            | Credits<br>4<br>3<br>3 |   |         | BUS 352 Financial Valuation<br>BUS 470 Finance Seminar<br>COS 334 (spring, even # years) or BUS416  |        |
| FOURTH YEAR<br>Fall<br>MAT 376 (fall. odd # years) Operations Research<br>MAT 309 Financial Math (Fall. odd # years)<br>Contemporary Christian Issues (P) course<br>BUS 440 Capital Markets | Credits<br>4<br>3<br>3 |   |         | BUS 352 Financial Valuation<br>BUS 470 Finance Seminar<br>COS 334 (spring, even # years) or BUS416<br>MAT 331 (spring, even # years) Applied Statistics | Credit |

Most financial aid packages stipulate 12 credits/term; Minnesota state grants are reduced when credit load falls below 15 credits/semester. January Session credits are counted as part of Spring Term.

Note that this plan only needs one of MAT300 or MAT376, but they are offered in different semesters

## B.S. in Actuarial Science and Finance 2023-2024: Sample plan entering with AA Degree

| FIRST YEAR  |         |  |         |  |        |
|---|---------|--|---------|--|--------|
| Fall  | Credits | January Session                          | Credits | Spring   | Credit |
| MAT124M Calculus 1                                    | 4       | GES 130 Christianity Western Culture     | 4       | BUS210 Financial Accounting                    |        |
| ECO202 Principles of Microeconomics                   | 2       |  |         | COS105 Object-oriented Design and Programming  |        |
| ECO203 Principles of Macroeconomics                   | 2       |  |         | MAT125 Calculus 2                              |        |
| BIB 101 Introduction to the Bible                     | 3       |  |         | BUS230 Principles of Management                |        |
| COS100 Introduction to Programming                    | 3       |  |         |  |        |
| BUS220 Principles of Marketing                        | 4       |  |         |  |        |
|   | 18      |  | 4       |  | 1      |
| SECOND YEAR   |         |  |         |  |        |
| Fall  | Credits | January Session                          | Credits | Spring   | Credit |
| MAT309 Financial Mathematics                          | 3       | Contemporary Christian Issues (P) Course | 3       | BUS317 Business Analytics                      |        |
| MAT241 Discrete Mathematics                           | 3       |  |         | COS216 Algorithms and Advanced Data Structures |        |
| COS212 Data Structures                                | 4       |  |         | BUS352 Financial Modeling & Valuation          |        |
| MAT330 Probability and Statistics                     | 3       |  |         | BUS361 Business Law                            |        |
| BUS344 Managerial Finance                             | 4       |  |         | BUS440 Capital Markets                         |        |
|   | 17      |  | 3       |  | 1      |
| THIRD YEAR  |         |  |         |  |        |
| Fall  | Credits | January Session                          | Credits | Spring   | Credit |
| MAT223 Multivariable Calculus                         | 3       |  |         | MAT331 Applied Statistics                      |        |
| MAT376 Operations Research                            | 4       |  |         | BUS416 Business Forecasting and Data Mining    |        |
|   |         |  |         | Internship                                     | 3-     |
|   | 7       |  |         |  | 9-1    |
| FOURTH YEAR   |         |  |         |  |        |
| Fall  | Credits | January Session                          | Credits | Spring   | Credit |
| COS313 Database Systems                               | 3       |  |         |  |        |
|   | 3 [1]   |  |         |  |        |
| Total Credits 93-94 at Bethel + 60 in AA degree = 153 | -154    |  |         |  |        |
|   |         |  |         |  |        |

Most financial aid packages stipulate 12 credits/term; Minnesota state grants are reduced when credit load falls below 15 credits/semester. January Session credits are counted as part of Spring Term.

[1] see \*6