

# Mathematics Minors

- Actuarial Science
- Mathematics Minor: Students must complete requirements in one of the following areas of emphasis:
  - Mathematics
  - Applied Mathematics
  - Statistics

## Actuarial Science Minor

| Code                       | Title                              | Credits   |
|----------------------------|------------------------------------|-----------|
| <b>Supporting Courses</b>  |                                    | <b>25</b> |
| ACCTG 201                  | Principles of Financial Accounting |           |
| ECON 202                   | Macro Economic Analysis            |           |
| ECON 203                   | Micro Economic Analysis            |           |
| MATH 202                   | Calculus and Analytic Geometry I   |           |
| MATH 203                   | Calculus and Analytic Geometry II  |           |
| MATH 209                   | Multivariate Calculus              |           |
| MATH 260                   | Introductory Statistics            |           |
| <b>Upper-Level Courses</b> |                                    | <b>12</b> |
| FIN 343                    | Corporation Finance                |           |
| MATH 306                   | Statistical Programming            |           |
| MATH 360                   | Theory of Probability              |           |
| MATH 361                   | Mathematical Statistics            |           |
| <b>Total Credits</b>       |                                    | <b>37</b> |

## Mathematics

| Code                                                                  | Title                                | Credits      |
|-----------------------------------------------------------------------|--------------------------------------|--------------|
| <b>Supporting Courses</b>                                             |                                      | <b>16</b>    |
| MATH 202                                                              | Calculus and Analytic Geometry I     |              |
| MATH 203                                                              | Calculus and Analytic Geometry II    |              |
| MATH 209                                                              | Multivariate Calculus                |              |
| MATH 260                                                              | Introductory Statistics              |              |
| <b>Upper-Level Courses</b>                                            |                                      | <b>10-11</b> |
| MATH 314                                                              | Proofs in Number Theory and Topology |              |
| MATH 320                                                              | Linear Algebra and Matrix Theory     |              |
| <b>Elective Courses (choose at least 1 courses of the following):</b> |                                      |              |
| MATH 323                                                              | Analysis                             |              |
| MATH 328                                                              | Abstract Algebra                     |              |
| MATH 385                                                              | Foundations of Geometry              |              |
| MATH 410                                                              | Complex Analysis                     |              |
| MATH 492                                                              | Special Topics in Mathematics        |              |
| <b>Total Credits</b>                                                  |                                      | <b>26-27</b> |

### Applied Mathematics

| Code                       | Title                             | Credits   |
|----------------------------|-----------------------------------|-----------|
| <b>Supporting Courses</b>  |                                   | <b>16</b> |
| MATH 202                   | Calculus and Analytic Geometry I  |           |
| MATH 203                   | Calculus and Analytic Geometry II |           |
| MATH 209                   | Multivariate Calculus             |           |
| MATH 260                   | Introductory Statistics           |           |
| <b>Upper-Level Courses</b> |                                   | <b>11</b> |

|                                                               |                                   |
|---------------------------------------------------------------|-----------------------------------|
| MATH 305                                                      | Ordinary Differential Equations   |
| MATH 320                                                      | Linear Algebra and Matrix Theory  |
| <b>Elective Courses (choose at least 1 of the following):</b> |                                   |
| MATH 355                                                      | Applied Mathematical Optimization |
| MATH 406                                                      | Partial Differential Equations    |
| MATH 410                                                      | Complex Analysis                  |
| MATH 492                                                      | Special Topics in Mathematics     |
| <b>Total Credits</b>                                          |                                   |
| <b>27</b>                                                     |                                   |

## Statistics

| Code                                                                    | Title                             | Credits      |
|-------------------------------------------------------------------------|-----------------------------------|--------------|
| <b>Supporting Courses</b>                                               |                                   | <b>16</b>    |
| MATH 202                                                                | Calculus and Analytic Geometry I  |              |
| MATH 203                                                                | Calculus and Analytic Geometry II |              |
| MATH 209                                                                | Multivariate Calculus             |              |
| MATH 260                                                                | Introductory Statistics           |              |
| <b>Upper-Level Courses</b>                                              |                                   | <b>13-15</b> |
| MATH 306                                                                | Statistical Programming           |              |
| MATH 320                                                                | Linear Algebra and Matrix Theory  |              |
| <b>Elective Courses (choose at least 2 courses from the following):</b> |                                   |              |
| MATH 329                                                                | Applied Regression Analysis       |              |
| MATH 360                                                                | Theory of Probability             |              |
| MATH 361                                                                | Mathematical Statistics           |              |
| MATH 430                                                                | Design of Experiments             |              |
| MATH 431                                                                | Multivariate Statistical Analysis |              |
| <b>Total Credits</b>                                                    |                                   | <b>29-31</b> |