

Actuarial Science Requirements

Part A: Required Prerequisites

| | | |
|----------------------|------------------------------|-----|
| Math 1151, Math 1152 | Calculus I, Calculus II | 5,5 |
| AcctMIS 2000 | Foundations of Accounting | 3 |
| Econ 2001 | Principles of Microeconomics | 3 |
| Econ 2002 | Principles of Macroeconomics | 3 |

Choose one of the following four:

| | | |
|----------|--|---|
| CSE 1222 | Introduction to Computer Programming in C++ for Engineers and Scientists | 3 |
| CSE 1223 | Introduction to Computer Programming in Java | 3 |
| CSE 1224 | Introduction to Computer Programming in Python | 3 |
| CSE 2111 | Modeling and Problem Solving with Spreadsheets and Databases | 3 |

Choose one of the following three:

| | | |
|-----------|---|---|
| Comm 2367 | Persuasive Communication | 3 |
| Comm 2110 | Principles of Effective Public Speaking | 3 |
| Comm 2131 | Business and Professional Speaking | 3 |

Part B: Major Program (Minimum grade of C- and GPA of 2.0)**

| | | |
|-----------|----------------|------------------------|
| Math 2153 | Calculus III | 4 |
| Math 2568 | Linear Algebra | Prereq: Math 2153 3 |

Choose one of the following two:

| | | |
|------------|--|------------------------|
| Math 4530* | Probability ¹ | Prereq: Math 2153 3 |
| Stat 4201* | Introduction to Mathematical Statistics I ¹ | Prereq: Math 2153 4 |

Complete the following five:

| | | |
|----------------------|--|--|
| Stat 4202 | Introduction to Mathematical Statistics II | Prereq: Stat 4201 or Math 4530 4 |
| Math 3588 | Practicum in Actuarial Science | Prereq: Junior Standing and two writing courses 3 |
| Math 3618 | Theory of Interest ² | Prereq: Math 1152 3 |
| BusFin 3120 | Foundations of Finance | Prereq: AcctMIS 2000, Econ 2001, CSE 3 |
| English 3304 or 3305 | Business and Professional Writing or Technical Writing | 3 |

Choose three of the following Actuarial Electives:

| | | | |
|-----------|--|---|--------------|
| Math 5630 | Life Contingencies I ^{3-a} | Prereq: Math 3618 and Stat 4201 or Math 4530 3 | |
| Math 5631 | Life Contingencies II ⁴ | Prereq: Math 5630 3 | |
| Math 5632 | Financial Economics for Actuaries | Prereq: Math 3618 and Stat 4201 or Math 4530 3 | |
| Math 5633 | Loss Models I ^{3-b} | Prereq: Stat 4202 3 | |
| Math 5634 | Loss Models II ⁵ | Prereq: Math 5633 3 | |
| Math 5637 | Topics from Risk Modeling ⁶ | Prereq: Stat 4202 and Math 2568 3 | |
| | | Total Hours | 35-36 |

Actuarial Exams: ¹SOA P/CAS 1 ²SOA FM/CAS 2 ^{3-a}SOA FAM-L ^{3-b}SOA FAM-S ⁴SOA ALTAM ⁵SOA ASTAM ⁶SOA SRM

*Entry into the Actuarial Science Major requires a 3.0 GPA and a B- or better in Math 4530 or Stat 4201.

Honors Degree: Students completing an honors degree must complete at least 5 honors eligible courses selected in consultation with a faculty advisor. (e.g. 5630, 5631, 5633, 5634, 5637) Note: At most 2 courses can count from (2182H, 2568H, 3345H) and at least 3 courses must be at the 5000 level.

Actuarial Science Sample Schedule

| | Autumn | | Spring | |
|--------|------------------------------|----|--|------|
| Year 1 | Math 1151 | 5 | Math 1152 | 5 |
| | CSE 1222, 1223, 1224 or 2111 | 3 | AcctMIS 2000 | 3 |
| | Econ 2001 or 2002 | 3 | Econ 2001 or 2002 | 3 |
| | ARTSSCI 1100.01 | 1 | English 1110 | 3 |
| | GE | 3 | GE | 3 |
| | | 15 | | 17 |
| Year 2 | Math 2153 | 4 | Math 2568 | 3 |
| | Math 3618 ² | 3 | Stat 4201 ¹ or Math 4530 ¹ | 3-4 |
| | | | Comm 2367, 2110 or 2131 | 3 |
| | | 7 | | 9-10 |
| Year 3 | Stat 4202 | 4 | Math 3588 | 3 |
| | BusFin 3120 | 3 | Actuarial Elective | 3 |
| | | | English 3304 or 3305 | 3 |
| | | 7 | | 9 |
| Year 4 | Actuarial Elective | 3 | Actuarial Elective | 3 |
| | | 3 | | 3 |

Actuarial Exams: ¹SOA P/CAS 1 ²SOA FM/CAS 2 ^{3-a}SOA FAM-L ^{3-b}SOA FAM-S ⁴SOA ALTAM ⁵SOA ASTAM ⁶SOA SRM

Additional hours may be necessary depending on course selection.