

Sample Plan of Study for a Three-Year Sequence

M.S. Degree in Actuarial Science at ISU (online)

(includes notes on relevant exams associated with courses)

A cohort of students will begin in Fall of 2022. The following is an example of a course plan of study showing progress by semester and summer (3-year cohort progress). This plan requires approximately 1 course each semester and 1 course each summer. You may also adapt your own progress at a faster pace (see a Two-Year Sequence plan).

First year: (total of 12 hours)

Fall 2022 (1 course) 4 hours

- MAT 351 (4 semester hours) – Statistics and Data Analysis
 - (meets the VEE Mathematical Statistics requirement)

Spring 2023 (1 course) 4 hours

- MAT 383 (4 sem. hrs.) – Actuarial Models III (covers the mathematics of financial economics)

Summer 2023 (1 course) 4 hours

- MAT 380 (4 hrs.) – Actuarial Models I (covers the life contingencies material of the SOA Course FAM and the CAS Course MAS I, earns University Earned Credit for SOA Course FAM-L);

Second year: (total of 9 hours)

Fall 2023 (1 course) 4 hours

- MAT 483 (4 hrs.) – Mathematical Models in Finance and Investments (covers the mathematical topics from advanced actuarial examinations on finance and investments, approved for a portion of VEE Accounting and Finance requirements).

Spring 2024 (1 course) 4 hours

- MAT 337 (4 hrs.) – (advanced linear algebra) a general mathematics course

Summer 2024 (1 unit internship) 1 hour

- MAT 498 – Internship (1 hour)

Third year: (total of 12 hours)

Fall 2024 (1 course) 4 hours

- MAT 480 (4 hrs.) – Applications of Actuarial Principles
 - (covers reserving and pricing for various forms of insurance, pension funding, and some issues of insurance and pensions regulation)

Spring 2025 (1 course and 1 internship) 4 hours

- MAT 443 (3 hrs.) – Statistical Learning and Data Mining (to follow mat 351)
- MAT 498 (1 hr.) – Internship (1 hours)

Summer 2025 (1 course and 1 unit internship) 4 hours

- MAT 498 – Internship (1 hour)
- 400 level course in statistics, economics, or in the MBA program, elective

Total of 33 hours credit