

Educational Requirements in Lieu of EA-1 Exam

This is an explanation of the standards the Joint Board for the Enrollment of Actuaries will follow in determining whether a record of having successfully completed an academic program involving courses in actuarial mathematics will satisfy the basic actuarial knowledge requirement of section 901.12(c) of the Joint Board regulations. According to these regulations, this requirement will be met by a college or university graduate with either a major in actuarial mathematics or with sufficient courses in actuarial mathematics and related subjects to be equivalent to such a major.

In general, the overall academic program itself must meet two conditions:

1. The program must culminate in a degree from a regionally accredited college or university.
2. The required courses must be part of the regular program of instruction of the college or university where they were taken. Special reading or individual tutorial courses may not be used to satisfy this requirement.

Note that current Society of Actuaries examination requirements for an ASA designation include exam FAM and either exam ALTAM or exam ASTAM. The life contingencies topics covered on the EA-1 exam are included in exam FAM and exam ALTAM, which are two of the three current exams one must pass for an EA-1 exam waiver. (A candidate who chooses to take exam ASTAM instead of exam ALTAM does not qualify for an EA-1 waiver.) Several universities have redesigned their required course offerings for a major in actuarial mathematics to align with these SOA exams. Students who have a choice to take a course that helps them to pass exam ALTAM or a course to help them to pass exam ASTAM must take the course covering the exam ALTAM material to qualify for an EA-1 exam waiver for a degree with a major in actuarial mathematics.

For an academic program to be deemed by the Joint Board for these purposes to constitute a major or its equivalent in actuarial mathematics, it must contain as a minimum the following four elements.

1. General Mathematics

12 semester hours or 18 quarter hours of analytic geometry and calculus. No more than 4 of these semester hours or 6 of these quarter hours are to be in analytic geometry. Courses in advanced calculus, differential equations, and linear algebra may be applied toward this total, but courses in intermediate algebra, college algebra, trigonometry, and general quantitative methods may not be so applied.

2. Probability and Statistics

6 semester hours or 9 quarter hours in a course or courses which must have as a prerequisite at least 6 semester hours or 9 quarter hours of analytic geometry and calculus, but no more than 2 of these semester hours or 3 of these quarter hours are to be in analytic geometry.

3. Compound Interest and Annuities Certain

2 semester hours or 3 quarter hours in a course which must have as a prerequisite at least 6 semester hours or 9 quarter hours of analytic geometry and calculus, but no more than 2 of these semester hours or 3 of these quarter hours are to be in analytic geometry.

4. Mathematics of Life Contingencies

6 semester hours or 9 quarter hours in a course or courses which must have as a prerequisite at least 6 semester hours or 9 quarter hours of analytic geometry and calculus and as a prerequisite or co-requisite at least 2 semester hours or 3 quarter hours of compound interest and annuities certain. In the prerequisite of 6 semester hours or 9 quarter hours of analytic geometry and calculus, no more than 2 of these semester hours or 3 of these quarter hours are to be in analytic geometry. A significant portion of the course or courses in the mathematics of life contingencies must be devoted to multiple life functions and multiple decrement theory and applications.

It is the responsibility of any candidate for enrollment who believes he/she satisfies the basic actuarial knowledge requirements on the basis of the above rules to submit, along with the application for enrollment, all necessary academic transcripts and course descriptions for review by the Joint Board.