Prepare for exams

Preliminary Exams

Each exam is offered several times a year. Application forms for the preliminary exams are available on BeAnActuary.org. In particular, the preliminary exams are:

- Probability Exam (SOA Exam P): May be used to obtain Exam 1 credit with the CAS. The exam consists of three hours of multiple-choice questions. The purpose of this exam is to develop knowledge of probability. The application of these tools to problems encountered by actuaries is emphasized. A thorough command of calculus and probability topics is assumed. Additionally, a very basic knowledge of insurance and risk management is assumed.
- Financial Mathematics Exam (SOA Exam FM): May be used to obtain Exam 2 credit with the CAS. The exam consists of three hours of multiple-choice questions. This exam covers interest theory (discrete and continuous) and an introduction to derivative securities. It assumes a basic knowledge of calculus and probability.
- Investment and Financial Markets (SOA Exam IFM): May be used to obtain Exam 3F credit with the CAS. The exam consists of three hours of multiple-choice questions. The syllabus for Exam IFM develops the candidate's knowledge of the theoretical basis of corporate finance and financial models and the application of those models to insurance and other financial risks. A thorough knowledge of calculus, probability (as covered in Exam P), basic corporate finance (as covered in VEE Accounting and Corporate Finance) and interest theory (as covered in Exam FM) is assumed.
- Long-Term Actuarial Mathematics Exam (SOA Exam LTAM): The syllabus for Exam LTAM develops the candidate's knowledge of the theoretical basis of contingent payment models and the application of those models to insurance and other financial risks. A thorough knowledge of calculus, probability (as covered in Exam P), mathematical statistics (as covered in VEE Mathematical Statistics) and interest theory (as covered in Exam FM) is assumed.
- Modern Actuarial Statistics I Exam (CAS Exam MAS-I): This exam is administered by the CAS. There is not a waiver or SOA equivalent for this exam. MAS-I is a four-hour exam. This examination covers Probability Models (Stochastic Processes and Survival Models), Statistics, Extended Linear Models, and Time series with Constant Variance.
- Modern Actuarial Statistic II Exam (CAS Exam MAS-II): This exam is administered by the CAS. There is not a waiver or SOA equivalent for this exam. MAS-II is a four-hour exam. This examination covers Introduction to Credibility, Linear Mixed Models, Bayesian Analysis and Markov Chain Monte Carlo, and Statistical Learning.

Some of these exam can be taken locally at Binghamton and Vestal. Binghamton University is an examination center for Exam MLC. There is also an exam center near campus that is not affiliated to the university which administers Exam P/1 and Exam FM/2. The university itself has nothing to do with the design of the exam questions; it is merely an agent of SOA / CAS, administering the exams for the convenience of the Binghamton students. Please contact the actuarial societies and BeAnActuary.org for information about registering for an exam.

The Order of Course and Exam Taking

The fastest way for a student to pass four to five exams in college is to

1. take (224,225)-(226,227,304)-(323,346) in the first three semesters and pass Exam FM in the fourth semester;
2. take (447,330,329) in the fourth semesters and pass Exam P in the following summer;
3. take 448-455-457 in the subsequent semesters to prepare for SOA Exams on Statistics for Risk Modeling and Predictive Analytics and CAS exams on statistics.
4. take 450, 452 in the junior or senior years and pass Exams LTEM before graduation.

If everything goes as planned, the student can pass two exams before his/her junior year. Then in the fifth semester (Fall of the junior year), he/she can have a better chance to be hired as a summer intern. Permanent position offers are often derived from summer internships.