To:     Students  
From:  Lawrence Smolinsky  
       Professor of Mathematics and Director of Actuarial Science  
Re:   Society of Actuaries requirements and LSU courses.  

Introduction. The two largest professional organizations of actuaries in the USA are the Society of Actuaries (SOA with 30,000 members), Casualty Actuarial Society (CAS with 9,000 members), and the American Academy of Actuaries. The LSU program is modeled on the curriculum of the SOA, but the beginning requirements are common to both SOA and CAS.  

The first two CAS exams allow for credit based on SOA two exams (P and FM). The next two CAS exams Modern Actuarial Statistics I and II (MAS-I and MAS-II) do not match with single SOA exams or individual LSU courses. Rather the material for MAS-I and MAS-II are spread throughout MATH 4040, MATH 4041, MATH 4045, MATH 4056, MATH 4058, and EXST 4241. The CAS Exam 3F is largely covered in FIN 3826 and FIN 4850.  

In recent years, students who have passed three exams, fulfilled their VEE requirements, have a good gpa, and have had a summer internship have gotten good jobs. Note that a good gpa may be important to get in the door. Even if you would make an impressive candidate to the actuarial group of an organization, you may not advance past the company’s HRM without meeting HRM’s gpa requirement.  

Short summary of LSU preparation. Here is a guide to the available courses for exams and VEE requirements based on the new Society of Actuaries exam structure to begin in fall 2020 and 2023.  

Exams  
Exam P:     LSU preparation is MATH 3355.  

Exam FM:     LSU preparation is MATH 3050 (prior to January 2019, called MATH 4050).  

1 The American Academy of Actuaries membership requires membership in one of the other professional societies first. The Academy sets standards of practice for the profession.  

2 Membership estimates are drawn from the societies’ material as of 2021.
Exam SRM: LSU preparation is in EXST 4142 and MATH 4056 (4 hours with time series).

Exam ALTAM: LSU preparation is MATH 4045 and MATH 4046. The one-year sequence is offered every other year: 2020-2021, 2022-2023, 2024-2025, etc.

Exam ASTAM: LSU preparation is MATH 4040 and MATH 4041. The one-year sequence is offered every other year: 2019-2020, 2021-2022, 2023-2024, etc.

Exam FAM: This exam covers the elementary portion of LTAM and STAM courses and some additional finance material on options. MATH 4040, MATH 4041, MATH 4045, and MATH 4046 will cover 90% of the material, but not the anticipated 7.5-10% on “option pricing fundamentals” on the SOA draft syllabus.

Predictive Analytics I and II. LSU does not offer exam preparation for these two exams. There are courses in computer science that provide background but not examination preparation. Statistics at the level of EXAM SRM is a prerequisite for these EXAM PA I.

*Validation through Educational Experience (VEE)*

Finance and Accounting: ACCT 2001 and FIN 3716.

Mathematical Statistics: MATH 4056.

Economics: ECON 2030 or both of ECON 2000 and ECON 2010.