

STATISTICS IN INSURANCE, UNDERGRADUATE CERTIFICATE

Program Code: UGCT-AS

Cert Code: STI

Mathematics Department

SAMC 159

(716) 878-5621

mathematics.buffalostate.edu/ ([http://](http://mathematics.buffalostate.edu/)

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Actuarial science is a multidisciplinary topic including statistics, mathematics and some social science such as economics and finance, sociology and public health. As the main branch of actuarial science, insurance statistics applies statistical and mathematical models to perform data analyses, in order to assess risks and uncertainty in insurance, finance and other industries. This certificate program is designed to prepare students to enter the actuarial professions. Upon the completion of this program, students will be better prepared to take the professional examinations such as EXAM P: Probability and EXAM S: Statistics and Probabilistic Models, given by Society of Actuaries (SOA) and Casualty Actuarial Society (CAS).

Program Requirements

Code	Title	Credit Hours
Required Courses (12 cr hrs)		
MAT 270	DISCRETE MATHEMATICS	3
MAT 381	PROBABILITY THEORY	3
MAT 382	TOPICS IN MATHEMATICAL STATISTICS	3
MAT 486	MODELS AND METHODS OF ACTUARIAL MATHEMATICS	3
Elective Courses (3 cr hrs)		3
Choose one from the following:		
MAT 202	INTRODUCTION TO LINEAR ALGEBRA	
MAT 383	APPLIED STATISTICS I	
Total Credit Hours		15