ACTUARIAL MATHEMATICS (AM)

Courses

AM 540. Actuarial Mathematical Models and Stochastic Calculus. 3 Credit Hours.
The primary goal of this course is to provide the student a background in the mathematics of stochastic processes, risk, and financial economics as it relates to actuarial models. The underlying foundation of this course is the mathematics and economics of the pricing of financial options. As part of providing the framework for this field of study, advanced concepts such as Brownian Motion, the Black-Scholes Model, and the modeling of stochastic interest rates will be investigated. Taking this course will make it possible for the student to prepare for Society of Actuaries Exam MFE and the Casualty Actuarial Society Exam 3F.
Prerequisites: AM 342 or FIN 465.