Actuarial Studies Undergraduate Certificate

Actuaries use the tools of economics, finance, and mathematics to evaluate and price risk. They are employed by insurance companies, pension funds, consulting firms, and a variety of other financial institutions. The actuarial profession has consistently been ranked as one of the most desirable professions in which to be employed. To become an actuary one must satisfy certain educational requirements, pass exams offered by the Society of Actuaries, and complete professional courses.

The Certificate in Actuarial Studies is designed to provide the education needed for entry level employment in the actuarial profession. Those who complete the certificate will satisfy some of the Validation by Educational Experience requirement of the Society of Actuaries and be prepared to take the first two actuarial examinations (P and FM).

Completion of the certificate requires the following courses. Please note that many of these courses have prerequisites so anyone pursuing the certificate should work carefully with an academic advisor.

Required Courses

Total Hours		18
MATH 4210	Mathematical Statistics II	3
MATH 4200	Mathematical Statistics I	3
MATH 4020	Financial Mathematics II	3
MATH 4010	Financial Mathematics I	3
FINANCE 3521	Financial Engineering: Applying Derivatives	3
FINANCE 3500	Financial Management	3

Residency Requirement: Of the above required six courses at least five must be taken at the University of Missouri-St. Louis.

Learning Outcomes

Upon completion of the program, certificate earners will be able to:

- Interpret, formulate and solve applied problems in probability and statistics.
- Interpret, formulate and solve applied problems in mathematics relating to annuities, bonds and derivative investments.