

Actuarial Studies at **UMSL**

How UMSL Economics Coursework Fits In

CAREER INFORMATION

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 job outlook for actuaries is excellent in terms of pay and employment outlook, as indicated by the Bureau of Labor Statistics: <http://www.bls.gov/ooh/math/actuaries.htm>.

BECOMING AN ACTUARY

To become an actuary, you must meet specific requirements of the professional organization called the Society of Actuaries (SOA). You must 1) *pass exams* administered by the SOA); 2) *fulfill VEE* (Validated Educational Experience courses offered outside of the SOA); and 3) undertake additional professional training provided by the SOA.

To learn more, visit the SOA's website: <http://www.soa.org/Education/Exam-Req/edu-asa-req.aspx>

Or visit this website: <http://www.beanactuary.org/>

UNDERGRADUATE CERTIFICATE IN ACTUARIAL STUDIES

This Certificate prepares students for the first two required exams: Exam P-Probability and Exam FM-Financial Mathematics. You can be hired after passing these two exams. Requirements:

MATH 4200, Mathematical Statistics I
MATH 4210, Mathematical Statistics II
MATH 4010, Financial Mathematics I
MATH 4020, Financial Mathematics II
FINANCE 3500, Financial Management
FINANCE 3521, Financial Engineering: Applying Derivatives

FOR MORE INFORMATION

- Regarding the Certificate, contact Prof. Ron Dotzel in mathematics: dotzel@arch.cs.ums.edu or (314) 516-6337.
- Regarding how economics coursework fits in, contact Prof. Michael Allison: allison@ums.edu or (314) 516-5306.

ROLE OF UMSL DEPARTMENT OF ECONOMICS

Coursework in the UMSL Department of Economics helps satisfy the prerequisites for the courses included in the Certificate and helps fulfill the VEE requirements in Economics and Applied Statistics.

VEE – Corporate Finance: **FINANCE 3500** is approved by the SOA to meet this VEE. (Completion of the Certificate fulfills this requirement.)

VEE – Economics: **ECON 1001 & ECON 1002** (or ECON 3001 & ECON 3002) are approved by the SOA to fulfill this VEE. (Completion of the Certificate likely meets this requirement since FINANCE 3500 requires ECON 1002 and ECON 1002 has a prerequisite of ECON 1001.)

VEE – Applied Statistical Methods: **ECON 4100** (approved by the SOA) fulfills the regression analysis requirement.

ECON 4120/5120 or **ECON 4130/5130** (both approved by the SOA) fulfill the time series requirement.