## **ACTUARIAL SCIENCE MINOR**

## Learning Goals and Outcomes

**Goal 1:** Students will master the quantitative and analytical skills required to obtain an entry level position in the actuarial science profession.

**Objective 1.1:** Students will be able to apply and use the fundamentals tools of calculus and the principles of mathematical proofs to solve applied and theoretical mathematical problems.

**Objective 1.2:** Students will be able to demonstrate mastery of the computational skills used in probability theory as well as the use of discrete and continuous probability distributions to model various applications in the natural sciences, engineering, finance, insurance and the social sciences.

**Goal 2:** Students will have the knowledge to qualify for professional credentials awarded by the Society of Actuaries and the Casualty Actuary Society.

**Objective 2.1:** Students will be able to demonstrate their knowledge of macro and micro economics and obtain VEE (Validation by Educational Experience) credit from professional actuarial societies.

**Objective 2.2:** Students will know the content covered in the first professional actuarial science examination.

**Goal 3:** Students will attain proficiency in research methodology and computer technology.

**Objective 3.1:** Students will be able to conduct quantitative research using appropriate statistical methodology.

**Objective 3.2:** Students will be able to demonstrate proficiency in the use of computer software such as EXCEL and statistical software.

Code	Title	Hours
ACC 101	Concepts of Financial Acct	3
ECN 101	Introductory Economics Micro	3
ECN 102	Introductory Economics Macro	3
MAT 161	Calculus I	4
MAT 162	Calculus II	4
MAT 213	Calculus III	4
MAT 321	Probability	3
MAT 322	Mathematical Statistics	3
ASC 201	Financial Methods in Act Sci	3
ASC 301	Actuarial Probability	3
Total Hours		33