

Actuarial Track – 24 credits

| COURSE | CREDITS | COURSE DESCRIPTION/PRE-REQUISITES | SEMESTER TYPICALLY OFFERED |
|-------------------|---------|---|----------------------------------|
| Econ S 101 | 3 | [SSCI] Fundamentals of Microeconomics. Course Prerequisite: MATH 101, MATH 103 (or higher) or concurrent enrollment, MGTOP 215, STAT 205, STAT 212 or concurrent enrollment, or a minimum ALEKS score of 40%. Enrollment not allowed if credit for ECONS 198 with a C or higher and ECONS 102. Theory and policy of human responses to scarcity; how this affects business competition, international trade, industrial organization, investment, and income distribution. | Fall/Spring (Summer-PU, GLBL) |
| Econ S 102 | 3 | [SSCI] Fundamentals of Macroeconomics. Course Prerequisite: MATH 101, MATH 103 (or higher) or concurrent enrollment, MGTOP 215, STAT 205, STAT 212 or concurrent enrollment, or a minimum ALEKS score of 40%. Enrollment not allowed if credit earned for ECONS 198 with a C or higher and ECONS 101. Theory and policy related to unemployment, inflation, foreign trade, government spending, taxation, and banking. | Fall/Spring (Summer-PU, GLBL) |
| B LAW 210 | 3 | Law and the Legal Environment of Business. Fundamentals of business law; the legal system, legal reasoning, public, commercial, managerial and property law, and government regulation | Fall/Spring (Summer-PU, GLBL) |
| Math 300 | 3 | Mathematical Computing. Course Prerequisite: MATH 220 or MATH 230. Examination of some current computer software for solving mathematical problems. <i>Recommended preparation: MATH 315.</i> | Fall (Summer-PU) |
| FIN 350 | 3 | Risk and Insurance. Course Prerequisite: B LAW 210; ECONS 102 or 198; certified major or minor in the College of Business, or certified major in Data Analytics. Concepts in risk management and insurance; personal risks and treatment methods; legal principles in risk and insurance; overview of the insurance industry, company operations, and insurance regulation. | Fall/Spring |
| Math 405 | 3 | Introduction to Financial Mathematics. Course Prerequisite: MATH 172 or 182. Introduction to financial mathematics including the basics of annuities, stocks, bonds, and financial derivatives. | Fall |
| STAT 443 | 3 | Applied Probability. Course Prerequisite: MATH 172 or MATH 182; MATH 220 or MATH 230. Axioms of probability theory; random variables; expectation; generating function; law of large numbers; central limit theorem; Markov chains | Fall |
| STAT 446 | 3 | Statistical Applications in Insurance. Course Prerequisite: STAT 443. Introduction to the application of mathematics and statistics to the insurance field with a focus on actuarial science. Typically offered Spring. | Spring |