ACTUARIAL SCIENCE, B.S.

Begin Campus: Abington, Altoona, Berks, Beaver, Brandywine, DuBois, Erie, Fayette, Greater Allegheny, Harrisburg, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Shenango, Schuylkill, University Park, Wilkes-Barre, Scranton, York

End Campus: University Park

Program Description

An actuary is a business professional who uses mathematical skills to define, analyze, and solve complex business and social problems. The Actuarial Science major stresses the application of mathematical and statistical concepts to the measurement of life, health, pensions, and other contingencies, while at the same time giving the student a broad understanding of the business environment. Students in the Actuarial Science major will be prepared to begin the series of professional examinations leading to Associateship and Fellowship in either the Society of Actuaries (A.S.A./F.S.A.) or the Casualty Actuarial Society (A.C.A.S./F.C.A.S.) while enrolled in the program.

What is Actuarial Science?

The Actuarial Science major provides background in the wide range of knowledge needed to be a professional actuary including calculus, probability and statistics, financial and actuarial mathematics, economics, finance, risk management, pensions, and insurance. Excellent skills in mathematics and statistics is a critical component of this major.

Actuaries are vital to corporate and government agencies, calculating the costs of life or health insurance, or how much an insurance company can expect to pay in claims due to natural disasters, car accidents, and other situations. The curriculum is designed to prepare students for the series of professional examinations needed in order to be a practicing actuary. Students are encouraged to complete several of these exams prior to graduation with employers providing assistance to complete the remaining exams.