

Statistics and Actuarial Science

1. General Overview

Almost all segments of society produce a continuous stream of data. Statistics aims at effectively collecting and analyzing those data to help form rational decisions. Actuarial science deals with numerical theories and analysis methods related with insurance. The Department is one of a kind in Korea, systematically offering curricula in statistics and actuarial science.

- Dual Degree Program: Soongsil University has recently signed an agreement with Towson University, USA, to run a dual degree program for actuarial and risk management. Students of the Department can benefit from the program. Those who are selected will study for two years at Soongsil and another two at Towson and earn degrees from both schools.

2. Educational Goals/Objectives

The Department runs a computer lab with 50 state-of-the-art computers complete with new software and audio-visual equipment. We also run other labs that are always open for the students to practice what they learn in the class. We also support those students who are preparing for the actuarial license by arranging study groups and supplying video materials.

3. Areas of Specialization and/or Course Titles

Statistics, Calculus, Computer Programming and Practice, Statistical Methods, Mathematics for Statistics, Mathematical Statistics, Regression Analysis, Numerical Analysis, Financial Mathematics, Statistical Computing, Life Actuarial Mathematics, Principles of Insurance, Statistical Inference, Experimental Design, Sampling Theory, Multivariate Analysis, Simulation, Operations Research, Loss Models, Non-Life Actuarial Mathematics, Seminar in Actuarial Science, Analysis of Categorical Data, Time Series Analysis, Quality Control, Stochastic Processes, Decision Analysis, Data Mining, Special Topics in Actuarial Science

4. Career Opportunities/Job Situation

As our graduates are good at analyzing large amount of data in a systematic way, they find jobs in a wide array of business opportunities. Some of the examples are as follows:

- data analysis specialist in banks, corporations, and research companies
- professional analyst in insurance and finance fields