BACHELOR OF SCIENCE
With a Major in
ECONOMICS
Minor in Mathematics

Actuarial Science Track

Background of Actuarial Science

Annual surveys of job satisfaction consistently rank actuaries as having one of the top jobs in America. Those rankings are based on such factors as salaries, prestige, and work environment. But what do actuaries do? How does one become an actuary?

Being an actuary

Simply stated, actuaries put a price tag on future risks. In business and personal worlds, we desire to manage the financial consequences of future adverse outcomes. This desire has led to the development of a range of financial instruments that shift and pool risks. Early instruments were insurance contracts; more recent innovations include derivative contracts, including catastrophic bonds and catastrophe options. Actuaries price these contracts.

Becoming an actuary

You must pass a series of exams to become an actuary. The most common path is to prepare for the first two exams while in college. Then, while working in an actuarial department of a consulting firm or insurance company, you continue to study for the remaining exams. It commonly takes five years to complete the examination series.

The series of exams leading to the Fellow of the Casualty Actuarial Society (FCAS) and the Fellow of the Society of Actuaries (FSA) designations were revised significantly in 2000. The exams now include an increased emphasis on concepts from economics, finance, and risk management while maintaining the traditional focus on mathematical skills. The BS degree in Economics provides an excellent foundation from which to pursue a career in actuarial science.

The Baylor Program

The Actuarial Science Preparation curriculum was developed as a sister program to the Risk Management and Insurance (RMI) program at Baylor. It takes advantage of the interdisciplinary nature of the revised actuary exam series.

The BS in Economics allows you to take the four economics courses needed for exam two, econometrics for exam six, and four additional courses in economics, which include your first exposure to risk and insurance concepts. You also will take the six math courses necessary for exam one and parts of later exams, plus up to three additional math courses. You will take the two finance courses that cover the theory of interest for exam two, and have the flexibility of selecting additional electives as partial preparation for post-graduate exams. A key strength of the Baylor program is the opportunity to take courses in risk management and insurance from two nationally recognized scholars in the RMI field – Drs. Jim Garven and Allen Seward.

Flexibility

The required courses and electives within this program also provide a springboard for careers other than actuarial science. In particular, the major provides an excellent background for jobs with economic, financial, and legal consulting firms, banking organizations, and research oriented firms. Additionally, the major develops the skill set for those wishing to pursue graduate studies in economics, finance, and risk management, up to and including the Ph.D.

Faculty interaction

In 2001, Baylor was granted a charter for a chapter of Gamma Iota Sigma, the national professional fraternity in risk management and insurance. Because GIS is a professional fraternity, there is no pledging period, and students are encouraged to join during their freshman year. Fraternity activities provide an excellent opportunity for you to get to know, and be known by, the RMI faculty at Baylor. That relationship plays an important role in recommendations for scholarships and internships while you are a student at Baylor, and job placement when you graduate.

Requirements for Bachelor of Science Degree with a Major in Economics

Minor in Mathematics

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MINIMUM REQUIREMENT
124 semester hours

I. Basic Requirements
44-55 semester hours
(Undergraduate Catalog, p. 58)

A.	English 1302*, 1304* (or 3300), 2301, plus one of the following: 2302 or 2304 or 2306	12 hrs
B.	Religion 1301* and 1311*, or 1315 & one advanced course	6 hrs
C.	Mathematics 1321* & 1322*	6 hrs
D.	Computer Science 1430*	4 hrs
E.	Language* (consult with department chair)	3-14 hrs
F.	History and/or social science (not economics)*	6 hrs
G.	Political Science 2302	3 hrs
H.	Physical Education*, four activity courses	4 hrs
I.	Chapel-Forum*	2 semesters

II. Economics Major 27 semester hours

A.	Economics 2306 & 2307	6 hrs
B.	Economics 3306, 3307 & 4347	9 hrs
C.	RMI 4335 and either 4320 or 4330	6 hrs
D.	Upper level economics electives chosen from 3000 or 4000 level courses	6 hrs

III. Mathematics/Science Requirements 34 semester hours

A.	Lab science*	8 hrs
B.	Mathematics 2321, 2311, 3224, 3325, 3381, and 4385	18 hrs
C.	Math/Science electives, any combination totaling 8 hours or more	8 hrs

IV. Business Courses
9 -21 semester hours

A.	Accounting 2303	3 hrs
B.	Finance 3310, 4360	6 hrs
C.	Additional electives from finance, economics, and risk management, or Business Law 3305	0-12 hrs

* Freshman year courses should be drawn from these. Credit for the math courses *must* be received by the end of the first year.

For additional information, contact:

Dr. Steve Green, Chair
Department of Economics
Baylor University
Waco, TX 76798-8003
(254) 710-2263
e-mail: Steve_Green@baylor.edu

Dr. Allen Seward
Dept. of Finance, Insurance & Real Estate
Waco, TX 76798-8004
(254) 710-4542
e-mail: Allen_Seward@baylor.edu

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