

## **Actuarial Science Overview**

Actuarial science is the discipline of using mathematical and statistical methods to analyze risk in insurance, finance, and related fields. Professionals who work in the field of actuarial science are called Actuaries. To become an accredited Actuary, one must pass a series of extremely rigorous exams as well as successfully complete additional requirements. It takes about ten years of study (which is done concurrently with employment or college) to become fully accredited, although taking significantly less or more time to do so is not uncommon. Actuary is consistently ranked among the top careers in the country (rarely outside of the top five) due in part to the well above-average salaries, the challenging/rewarding nature of the work, and the tendency to receive great benefits from employers. Most Actuaries have a Bachelors Degree in fields such as actuarial science, mathematics, statistics, risk management, finance, economics, or other quantitative disciplines. However, it is possible to become an Actuary without such a degree if you have a strong background in mathematics and the ability to pass actuarial exams.

The vast majority of Actuaries are employed by either insurance companies or consulting firms. Employers traditionally have extremely generous benefits for actuarial students (Actuaries who are not accredited) which can include having all exam materials and registration fees paid for, ~90-150 paid study hours per exam attempt, automatic pay raises for each exam passed, bonuses for passing an exam on your first attempt, fully paid for expenses for actuarial conferences around the country, etc. Actuarial internships are also traditionally high paying, with \$20-

calculus is assumed for every exam. Each exam typically has a 30-50% pass rate, and the exams are offered at frequencies ranging from every other month (for exam P/1 and FM/2) to twice a year (upper level exams). The preliminary exams are multiple choice, with 30-35 questions each. Later exams are largely in essay format, although there are

offered. Finally, I would recommend any supplemental Economics courses that you are able to take.

To properly prepare yourself for a career in actuarial science, I would recommend completing at least two exams and one actuarial internship prior to graduation. Campus involvement and leadership positions are also very important to attain while you are at IWU. To sufficiently study for an actuarial exam