Actuarial Career Feature

Learning the Truth behind Actuarial Work and Making It Your Career

One of the most important fields in business is actuarial work. Actuaries are specialists in the art of risk assessment, and risk management is a critical business skill, especially in tight financial times, like the ones we're going through right now as a nation.

Actuarial work also rates highly among professional surveys for time in job, and overall enjoyment of the career path; it's consistently in the top five careers for overall job satisfaction and enjoyment of the work place, and it pays very well– starting salaries are in the $60,000 per year range, and it goes up considerably from there.

If being an actuary appeals, you may want to check out more about the career by attending a few actuarial seminars or even lurking on actuary forums. Most actuaries have a meticulous, logical bent, as well as a good grasp on numbers, statistical methods, and higher order mathematics; it's something of a truism that an actuary is a mathematician who was forced to get a real job.

All that being said the benefits that actuaries bring to society are huge. The classic example of a graduate from an actuary school is working in the insurance industry, taking demographic and census data, along with tabulated accident reports, to figure out the likelihood of accident and set insurance rates. Not all (not even a majority, even) of actuaries work in the insurance industry, though most work in the financial sector of the economy.

Actuaries work in many fields – any field where there's a risk reward ratio that's more complex than counting out change can benefit from an actuarial professional watching trends. The largest fields that use actuaries regularly are in the financial sector, as mentioned before. Actuaries take the publicly disclosed statements of businesses, compare them to past trends, and advise investors on the relative risks and rewards of investing in a particular firm. Things like profit and loss, and expenditure reports and market analysis are all tools for a well-trained actuary in the financial sector.

Other places that employ actuarial school graduates are engineering firms and regulatory agencies. For example, Underwriter's Laboratory and the EPA both have actuarial divisions, charged with figuring out the cost-benefit ratios for certain events and scenarios happening, and whether or not the event is likely enough, or the cost is high enough, that it's worth paying for preventative measures.

Sometimes, actuaries aren't involved in a process, and the situation can be disastrous. For example, the recent TVA fly ash debacle in Tennessee is an example of a preventable calamity where if they'd consulted an actuary, it would've cost money each year, but prevented a billion dollar (and growing) cleanup.

While actuaries are specialists in identifying avoidable risks, if you're thinking about going into the profession, read actuary forums about low probability, impossible to predict, high impact events. In statistical fields, most of these are called 'black swans' after Talib's book of the same name. A classic example of the black swan is the implosion of Long Term Capital Assets back in 2001; a result that was the result of a very improbable events that, if they all occurred, would result in a collapse (and did)

Other examples of industries that use actuaries include oil and gas prospecting – it takes an actuary to assess how expensive a project would be in terms of risk to assets, as well as profit and loss statements. In a real sense, actuarial analysis is figuring out how to place a bet before taking a course of action that involves significant amounts of money.

Because of this, success at an actuarial position, as anyone who talks at an actuarial seminar would state up front, is driven as much by mathematical knowledge and statistical ability as it is by specific business knowledge about the field the actuary is consulting in, and the psychology and sociology to understand why people do things and how they react as groups. It's a position that requires analysis techniques and a solid bent for basic and applied research. If you're planning to go to actuarial school, you'd best think about how you handle this type of course load, because it's going to continue once you're on the job market.

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Because the demand for actuarial expertise grows as the complexity of the world increases, and the boundaries of risks expand, there's plenty of opportunity for both professional challenges in the field, and personal and professional growth within it. This is one reason why actuaries tend to stay in the field and often times with the same employer for years and decades.

Actuarial work is demanding, and mentally taxing, but very important. Actuaries are the hand on the brake for our financial services industry, and it's through their work that things like home insurance exists, and that retirement programs and health insurance exist in any form whatsoever, no matter how flawed. If you have the mental skill set, and the basic analytical composure to enjoy the work, working as an actuary is a deeply rewarding career, both personally and financially. Be sure to go to a few actuarial seminars, or hang out on some of the forums, to see if it's the right match for you.