So You Want To Be An Actuary?

October 30, 2017

Alice Alsberghe, ASA, MAAA
Overview

• What is an Actuary?
• What do Actuaries do?
• Where do Actuaries work?
• What is great about the actuarial profession?
• What skills and talents are needed?
• How can you become an Actuary?

• What is it like to work at Cheiron?

Note: Portions of this presentation were taken from the Society of Actuaries and Casualty Society of Actuaries presentation “Be An Actuary”.

October 30, 2017
What is an Actuary?

An actuary is a person who:

– Analyzes, manages and measures the financial implications of future risk
– Develops and validates financial models to guide decision making

– Keystone of Cheiron:
  Interactive financial modeling to simulate the financial future depending on assumed key risk variables
What do Actuaries do?

• Actuaries manage risk.
  – We use a combination of strong analytical skills, business knowledge, and understanding of human behavior to manage today’s complex risks facing our society.

• What is risk?
  – Risk is the chance that an undesirable event will occur.
  – But risk is opportunity. That’s where an actuary comes in.
Where do Actuaries work?

- Insurance Companies
- **Consulting Firms**
- Government Insurance Departments
- Banks and Investment Firms
- Large Corporations
- Public Accounting Firms
- Anywhere Risk Management is needed
Where do Actuaries work?

- **Insurance Industry**
  - Property (home) and casualty (auto)
  - Life and Health
- **Employee Benefits Industry**
  - Retirement Benefits
  - Health Benefits
  - Social Security
- **Financial Services Industry**
  - Banks, investing, risk management
  - Mergers & Acquisitions
Where do Actuaries work?

Where do Actuaries work?

What is great about the profession?

• Top-ranked job
  – Work environment, employment outlook, job security, growth opportunity, salary
• High earning potential
  – Entry level actuary starting salary $45,000 - $65,000
  – Experienced fellows earn $150,000 - $250,000 +
• No cost of graduate school – “learn while you earn”
• Skills are highly transferable to other industries and job responsibilities
• Potential for travel (as a consultant) or a non-travel 9-to-5 job (as a non-consultant)
• High demand – less sensitive to economic cycles
• Allows for work/life balance
• Make an impact – manage today’s complex risks facing our society
Earning Potential

2017 Entry Level Actuarial Salary Survey


Classified Values, Innovative Advice
# Pension Actuary Salary Survey

A passing grade for exams P, FM, MLC, MFE and C each equal 1 exam.

<table>
<thead>
<tr>
<th>Pension</th>
<th>&lt; 1 yr</th>
<th>1-3 yrs</th>
<th>3-5 yrs</th>
<th>5-7 yrs</th>
<th>7-10 yrs</th>
<th>10-15 yrs*</th>
<th>15-20 yrs*</th>
<th>20+ yrs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exam</td>
<td>44-56</td>
<td>50-64</td>
<td>55-70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Exams</td>
<td>46-62</td>
<td>56-70</td>
<td>58-77</td>
<td>64-83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Exams</td>
<td>48-68</td>
<td>57-74</td>
<td>61-84</td>
<td>65-91</td>
<td>72-99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Exams</td>
<td>56-75</td>
<td>63-84</td>
<td>65-91</td>
<td>74-100</td>
<td>76-106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Exams</td>
<td>56-75</td>
<td>63-84</td>
<td>65-91</td>
<td>74-100</td>
<td>76-106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASA</td>
<td>76-95</td>
<td>80-105</td>
<td>87-118</td>
<td>90-139</td>
<td>108-175</td>
<td>123-243</td>
<td>152-260+</td>
<td></td>
</tr>
<tr>
<td>FSA</td>
<td>112-151</td>
<td>118-168</td>
<td>125-235</td>
<td>154-329</td>
<td>164-364+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What skills and talents are needed?

- Knowledge of math and finance
- Computer skills
- Keen analytical, project management, and problem solving skills
- Attention to detail
- Solid communication skills (oral & written)
- Good business sense (know what is important)
- Motivation, creativity, independence
- Ability to work with others
How can you become an Actuary?

• An actuary achieves professional status by passing examinations to prove a certain level of knowledge

• Actuarial examinations are administered by the Casualty Actuarial Society (CAS) and Society of Actuaries (SOA)
  – Preliminary exams are administered jointly
  – Examinations are held multiple times a year depending on the exam

• Two professional designations exist for each organization:
  – **Associate** (either ASA or ACAS)
  – **Fellow** (either FSA or FCAS)

• You can earn while you learn - employers support actuarial trainees taking exams by providing exam study time on the job
Preliminary Education Structure

• Prerequisites
  – Calculus
  – Linear Algebra

• Validation by Educational Experience (VEE)
  – VEE credits are obtained through college courses, standardized exams, approved educational experiences, and transitional exams for:
    • VEE- Applied Statistics
    • VEE- Corporate Finance
    • VEE- Economics
Preliminary Education Structure

• Preliminary Examinations
  – Exam 1/P: Probability
  – Exam 2/FM: Financial Mathematics
  – Exam 3F/MFE: Models for Financial Economics
  – Exam 3L/MLC: Life Contingencies
  – Exam 4/C: Construction and Evaluation of Actuarial Models

• In addition to the preliminary education, each society has additional requirements to achieve professional designations
How can you become an Actuary?

• Acquire a well-rounded curriculum, including classes approved for VEE credit
• Sharpen your communication skills (especially writing/grammar)
• Take advantage of opportunities to give presentations
• Sharpen your computer skills
• Get good grades *(3.0 GPA required at Cheiron)*
• Take actuarial exams while in school *(at least 1 exam for internship at Cheiron and 2 exams for new hires)*
• Find an actuarial internship
What is it like to work at Cheiron?

- Employee benefits consulting firm
- Employee-owned
- All revenue derived from actuarial consulting services
- Two primary specialty areas, retirement and health
- Clients include public sector entities, multiemployer plans, corporations and nonprofit organizations
What is it like to work at Cheiron?

- Nine offices nationwide (plus 4 satellites)
- 100+ Employees
- Serve over 300 pension and health funds throughout the country
- Excellent reputation in our industry (plan sponsors and competitors)
- Significant growth on the West Coast
  - Offices in San Diego (Solana Beach), Los Angeles, Oakland, and Portland (satellite in Seattle)
Why Join Cheiron?

• Opportunity to work in both health and retirement practice areas before committing
• Early exposure to client meetings
• Extensive responsibility and ownership of work product early on in career
• Work directly with senior consultants
• Small enough for you to make a big impact
• Less bureaucracy than other firms
• Work/Life Balance
Helpful Resources

- Be An Actuary
  - beanactuary.org
- Society of Actuaries
  - soa.org
- Casualty Actuarial Society
  - casact.org
- Recruiting and Salary Surveys
  - dwsimpson.com
- To learn more about internships and career opportunities at Cheiron
  - cheiron.us
  - opportunity@cheiron.us
“Classic Values, Innovative Advice”

Our Mission: To empower benefit plan sponsors to understand and better manage their benefit programs and their resulting financial risks through innovative technological applications and unsurpassed professional expertise.
Cheiron (pronounced kī·ron), the immortal centaur from Greek mythology, broke away from the pack and was educated by the gods. Cheiron became a mentor to classical Greek heroes, then sacrificed his immortality and was awarded in eternity as the constellation Sagittarius.