



Actuary 101

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Actuary 101



Recruitment



Q&A



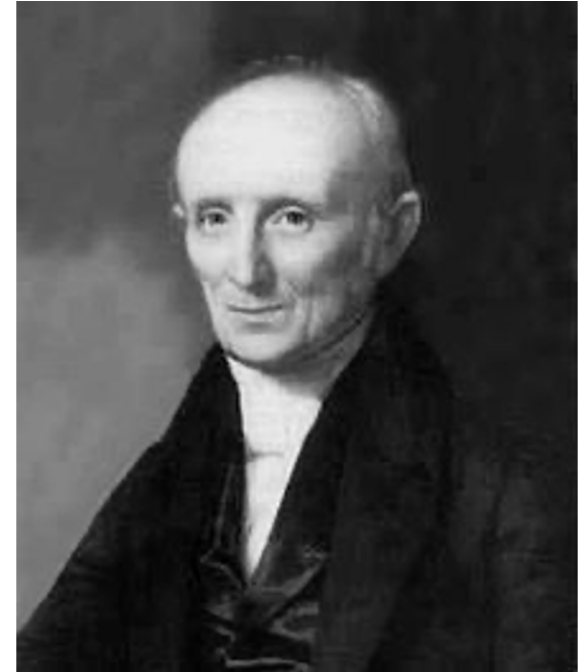
Actuarial 101

Actuary 101

- What is an Actuary?
- Areas of Work
- Why be an Actuary?
- What is the difference – CAS and SOA?
- Career Paths
- What skills are needed to be an Actuary?

What is an Actuary?

- A business professional who deals with the financial impact of risk and uncertainty
- Analyzes, manages and measures the financial implications of future risk
- Develops and validates models and communicate results to guide decision-making
- “Calculates the price tag on risk transfer”



Area of Work

- Insurance Industry
 - Property and casualty (P/C)
 - Life and annuities
- Employee Benefit Industry
 - Retirement benefits
 - Health benefits
- Financial Services Industry
 - Banks, investments, risk management
 - Mergers & Acquisitions
- Government
 - Social Security
 - Regulation of insurance companies

Typical Actuarial Projects

- Property/Casualty:
 - Estimating the amount of money to be set aside for insurance claims that have not been paid
- Life Insurance:
 - Designing and pricing life insurance products
- Health Benefits:
 - Setting HMO premium rates.
- Retirement Systems:
 - Pricing the cost of increasing retirement benefits
- Finance & Investments:
 - Portfolio diversification studies

Why be an Actuary?

- Prestige
 - Overall, a highly ranked profession
- High earnings potential
- Exams
 - No “glass ceiling”
 - Graduate school not required – no loans to repay
- Job market advantage
 - Advancement opportunities expand throughout career
 - Variety of avenues to choose: PC, Life, HB, Retirement, Investment
 - High demand – less sensitive to economic cycles
 - Job security

Career Outlook

- Employment growth for consulting actuaries
- Development of new financial tools
- Growing ability to model risks
- Growth in the health services industry
- Growth in risk management

Professional Exams and Study Benefits

- ~10 Actuarial exams plus various modules, depending on the path.
Typically 6-12 years to complete
- Paid Study Time (100 – 120 hours per exam is not uncommon)
- Raises or bonuses for each exam (\$3,000 - \$5,000 range), and for each designation (\$5,000 - \$7,500)
- Company pays for exam materials, seminars, exam fees, etc. (roughly about \$2,000 - \$5,000 cost/exam)

CAS 2022 Syllabus to FCAS

Plan Your Exam Path 2022

While there's no required order to attain your CAS credentials, certain exams are still suggested to complete before others.

* The last offering of Exam 3F will be in November 2022. Candidates that have not received credit for 3F by the last offering in November 2022 will be required to pass CAS Online Course 3.

Start

CAS Foundational Requirements

VEEs

Exam 1

Exam 2

Exam 3F*

Online Course 1

Online Course 2

ACAS

Requirements for Associateship

MAS-I

MAS-II

Course on Professionalism

Exam 5

Exam 6

FCAS

Requirements for Fellowship

Exam 7

Exam 8

Exam 9

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CAS Foundational Requirements

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Requirements for Associateship

MAS-I

MAS-II

Course on Professionalism

Exam 5

Exam 6

FCAS

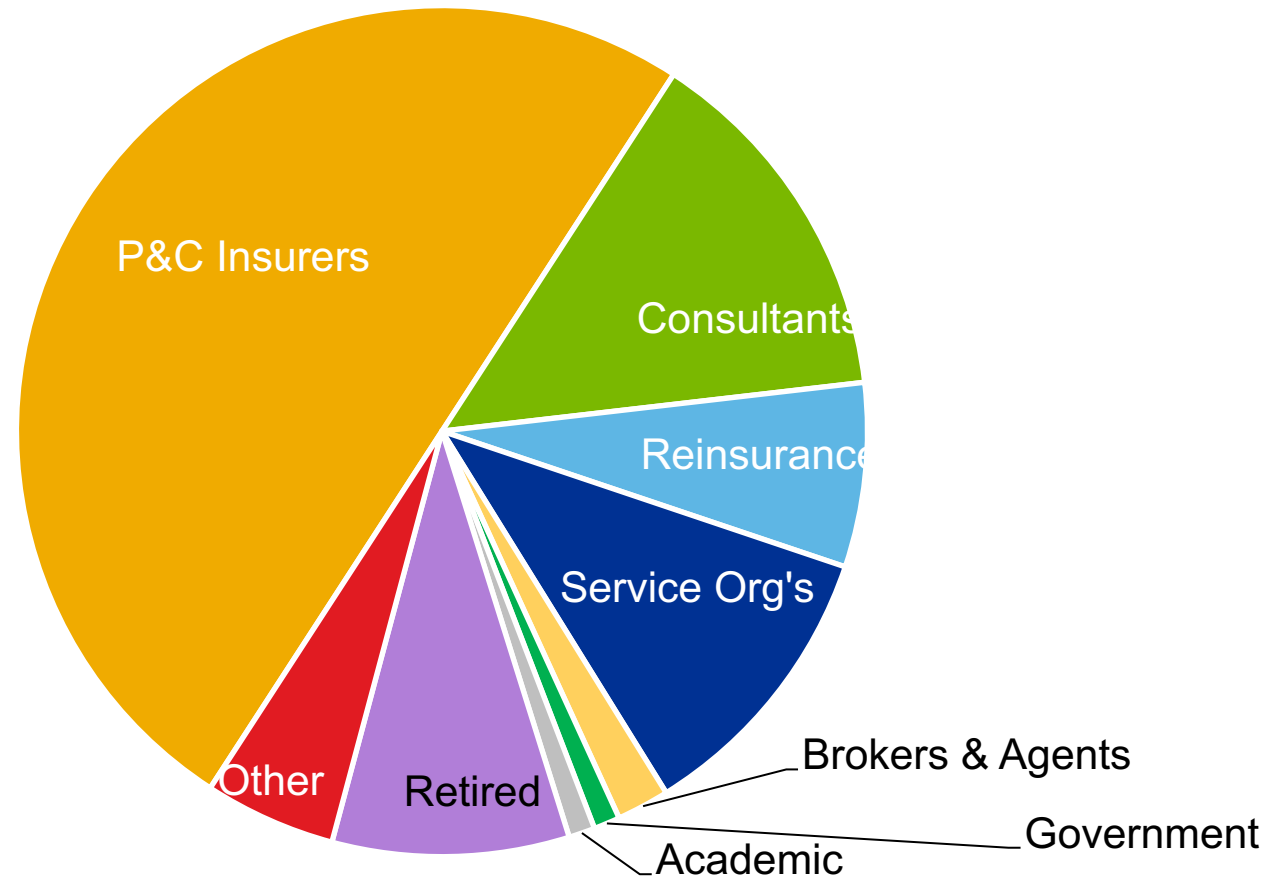
Requirements for Fellowship

Exam 7

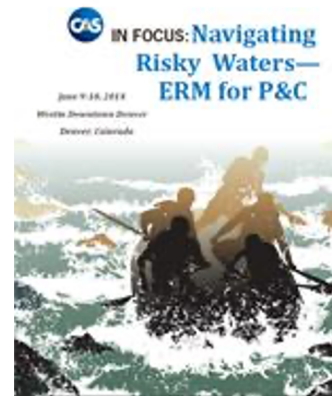
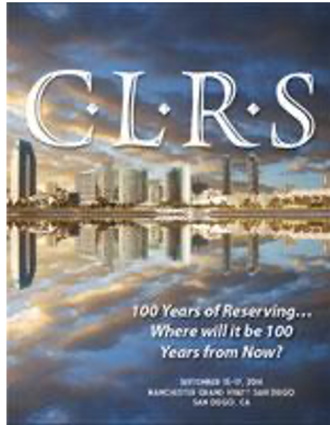
Exam 8

Exam 9

CAS Members by Type of Employment



What do Property/Casualty Actuaries do?



- Ratemaking
- Reserving
- Capital Adequacy
- Reinsurance
- ERM
- Trends

Insurance is fun, no matter what they say.



LLOYD'S

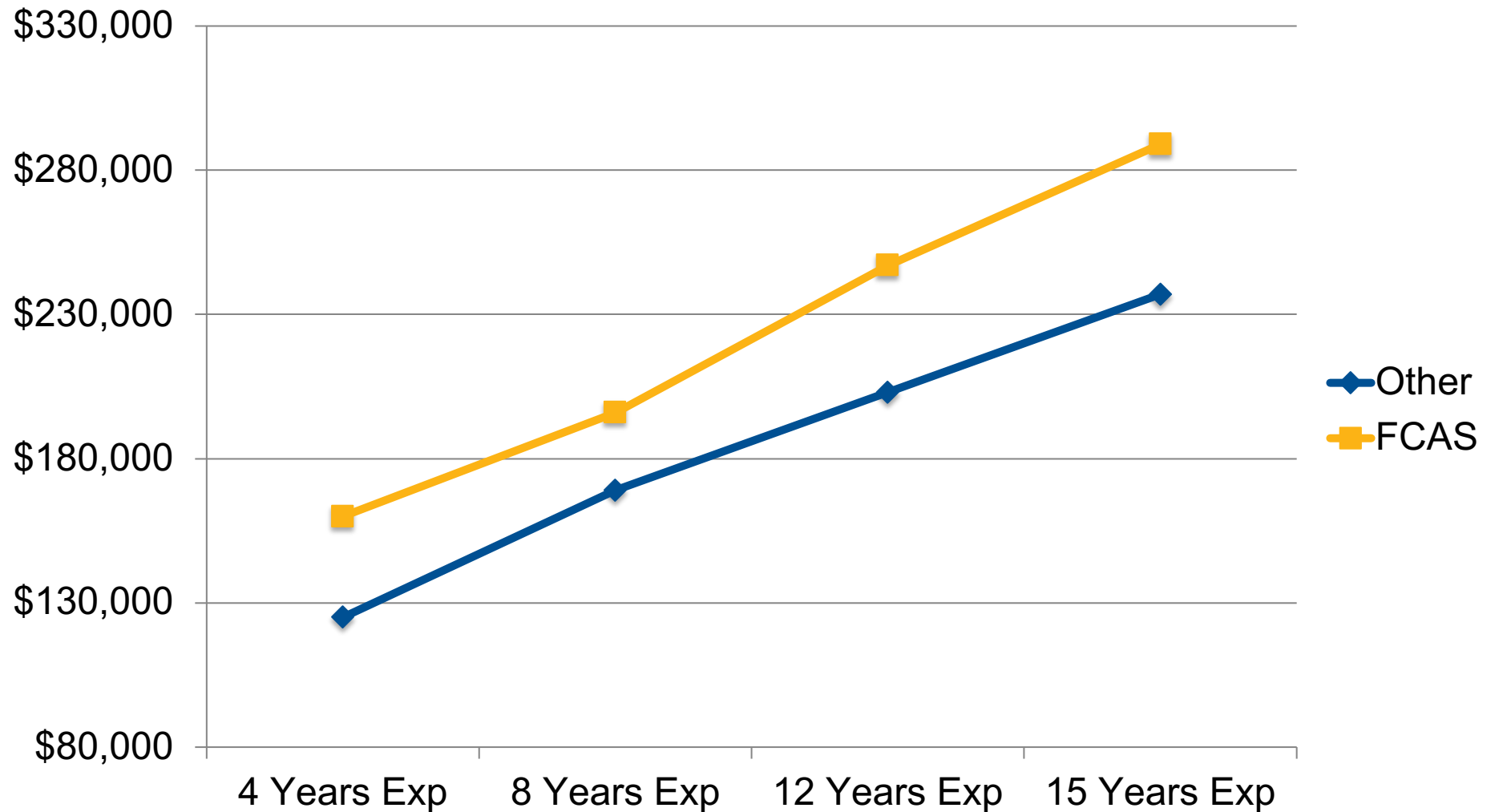


Skills Needed on the Job

- Technical
 - Understanding of math, probability, and statistics
 - Ability to apply actuarial techniques
 - Critical thinking/informed judgment
 - Programming
- Soft
 - **Communication**
 - Handling pressure
 - Business etiquette



Salary Comparisons





Recruitment

Discussion Points

- Resume Preparation
- Job Searching
- Interview Preparation
- Interview Tips
- Misc.

Why is a Strong Resume Important?

- It's the first thing a recruiter sees about you.
 - Your personal “sell sheet”
 - An advertisement for you that should reflect your brand
- Your chance to highlight why you would be valuable to a company.
 - Examples include:
 - Career goals
 - Technological skills
 - Analytical skills
 - Leadership skills
 - Communication Skills
- Demonstrates your written communication and organization skills.

What is Expected on a Resume?

- Well Organized and Easy to Read Format
- College Classes and GPA Information
- Actuarial Exams & VEE Credits
- Internship Experience
- Academic Project or Case Competition Experience
- Demonstrate How You Are Well-Rounded
- Proven Leadership

Sample Resume Structure

- Name & Contact Info
 - Tel, Email, Address, Credentials, LinkedIn, etc.
- Education
 - Major/Minor, GPA
 - Courses taken not necessary except they are highly relevant to the job duty
- Employment
 - Title, *Company*, Location, Period (order new to old)
 - Simply, direct, one or two lines, key words, results with numbers and metrics
- Academic Projects/Case Competitions
 - Brief summary of the project and your duty if it is a teamwork (leadership)
 - Tools used, key observations, quantified results,
- Activities & Awards
- Skills & Exams & Certificates

Resume Tips

- 1 page please!
- Professional, no errors, easy to read and navigate through it
- Activities and awards includes shadow day programs, scholarships, membership, honors, leadership roles, etc.
- Exams: simple, passed plus 1 exam you plan to take, no score needed
- Skills - No need to be detailed
 - Computer skills: MS suite, Programing language, Database, BI Apps.
- Certificate: MOS, CPCU, SAS Cert., DataCamp or Coursera Completion cert.
- Academic Projects/Case Comp: Kaggle
- Have someone edit your resume for you.
 - Peers, Professors, Career Services

Be a Well Rounded Candidate on Your Resume

- Companies look for candidates who can demonstrate:
 - Quality leadership skills (student government, volunteering)
 - Strong academic success (GPA, Professional Exams, Case Competition)
 - Excellent time-management skills (Extra-curricular activities)
 - Stellar communication abilities (Toast Master membership, frequent presenter)

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Events & Networking:

- Career Fair
- Company Info Sessions
- Case Competitions
- University Actuarial Society Leadership Roles
- Other seminars (University liaison, resume correction, excel, R/Python training)
- LinkedIn networking
 - Long term relationship
- Mentorship programs

Recruitment

- Opportunities on Handshake (campus recruitment only)
- Opportunities on LinkedIn (open to everyone, maintain your page)
- Opportunities on each company's career site (set alarm, be noticed)
- Opportunities from professional recruiters:
 - DW Simpson
 - Ezra Penland Actuarial Recruitment
 - Career development training companies
- Who is hiring???

Top Employers of CAS Members

Company or Organization	Number Employed	% of CAS membership
Liberty Mutual	434	4.6
Zurich (including Farmers)	251	2.7
Travelers	246	2.6
Intact (including OneBeacon)	198	2.1
Marsh (including Guy Carpenter & Oliver Wyman)	191	2.0
Allstate	184	1.9
Chubb	178	1.9
Willis Towers Watson	175	1.9
AIG	148	1.6
Milliman, Inc.	130	1.4
The Hartford	130	1.4

Other Actuarial Companies in Various Fields

- PC:

- Traveler, Chubb, Applied Underwriter, Berkshire Specialty, AIG, AAA, State Farm, Farmers, Zurich, Munich re, Swiss re, Modern America, CNA, Hartford, ISO, NCCI, WCIRB, nationwide, USAA, Liberty Mutual, etc.

- Life:

- Pacific Life, MetLife, NY Life, AIG, Transamerica, Prudential, Mass Mutual, etc.

- Health:

- UnitedHealth, Anthem, Aetna, Kaiser Permanente, Cigna, Humana, Molina, Healthnet, Oscar, CVS, Trupanion, Beam, Delta dental, Blue Cross Blue Shield

International Opportunities

2021 Geographic Distribution - CAS			
United States	7,704	Singapore	46
Canada	1,130	United Kingdom	45
China	144	Switzerland	35
Bermuda	109	Malaysia	28
Hong Kong	57	Other	150

- CAS & SOA Actuary Directory:
 - <https://www.casact.org/membership/find-actuary/>
 - <https://www.actuarialdirectory.org/>
- Company name, location, website, fellows & associates contact information

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Interview Process

- Round 1: Phone screen with HR (no need if it is campus interview)
- Round 2: Hiring manager interview (or senior interview)
- Round 3: Group interview
 - 1 on 1 interview with multiple rounds or,
 - Panel interview with 2+ interviewers
 - Panel interview, multiple interviewees and multiple interviewers (rare)
- Optional: Case Study (take home interview project)

Interview Preparation I

- Read the JOB POST!!!
- Company Research
 - Background Info (why you want to come to our company?)
 - Competitor research (show your knowledge of the whole industry, find a few differences and similarities to impress the hiring managers)
 - Google news for recent company development (can be a good discussion topic)
 - Products (position related)
 - Interviewer info (LinkedIn)
 - How long with the firm
 - Education background
 - Previous job
 - Any common topics
 - Glassdoor research
 - Interview process
 - Prior questions asked etc.

Interview Preparation II

- Be ready to support everything on your resume.
- Behavior Questions
 - Prepare question bank
 - Frequently asked questions, general questions
 - Questions from Glassdoor
 - Write short essay on each question (related to experiences on your resume)
 - Peer edit
 - Memorize and Practice
- Technical Questions
 - Search questions from Glassdoor
 - Prepare questions on commonly used tools: Excel, SQL, R/Python, BI apps
 - Prepare a couple of actuarial concepts: Central limit theorem, Time value theory
 - Confirm your answer with a professor or someone in the industry
 - Practice

Interview Preparation III

■ Questions to Ask

- Can you describe the duties of the job for me?
- Can you describe your company's study program for me?
- What do you like best about your company?
- What skills are especially important for someone in this position?
- What does a typical day look like for this position?
- What projects is the department working on, and can you please describe any upcoming projects?
- Is there a busy season? When is it?
- What is the typical career path for this position?
- How much of the day-to-day work will be individual contributor versus team-based and project work?
- Some questions related to the topics discussed during the interview, such as some software mentioned, or some projects that you are interested in.
- When should I expect to hear from you or should I contact you?

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What to Wear

Men

- Suit (Black, gray, or navy)
- Tie (Solid color or simple pattern)
- Belt
- Dark socks
- Clean Shave
- Conservative jewelry and cologne

Women

- Suit (Black, gray, or navy)
- Blouse (Solid color or simple pattern)
- Simple jewelry
- Be conservative with makeup and perfume

Dining Out During the Interview

- Remember: This is still an interview.
- Be careful with what you order to eat.
- Alcohol is not acceptable for lunches.
- Pay attention to basic dining etiquette – it can go a long way in that setting.

Questions to Avoid Asking in Interview

- What does this company do?
- Will I have to work overtime?
- What do I have to do to get to your position?
- Why do you think I'd be a good fit for the company?
- If I get the job, how soon can I use my vacation?
- How much will I get paid?

Interview Follow-Up

- Thank you notes are a powerful tool.
 - Handwritten letter is nice but e-mail is now universally accepted.
 - Send in a timely manner -- 1-2 days is ideal to maximize impression with the interviewers.
 - Do not send the exact same letter to everyone in the company who you met.
 - Spell-check and proof-read any of your communications prior to sending.

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Other Tips

- Exams are important, but no more than 4 if you don't have any experience
- You can try to extend your Internship from 10 weeks to 6 months (part-time)
- Networking is a big part of the working world
- Internal referral can increase the chance
- Once hired, but you have another position you are waiting for results, ask more time but no more than 2 weeks.
- Internship is important, even it is not directly relevant to the position
- Internal transfer is way easier than external applicants
 - Risk management / Underwriting / Commercial Brokerage / Pension admin
 - Other Analyst jobs in insurance companies
 - Catastrophic modeler
 - Actuarial contractor jobs

Questions?



Thank you!

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