FIRST-YEAR WORKSHOP

Bruin Actuarial Society



AGENDA

- 1. Introduction to the Actuarial Career
- 2. What to Study
- 3. Exams
- 4. Skills
- 5. Recruitment



INTRODUCTION TO THE ACTUARIAL CAREER



THE ACTUARIAL CAREER

An actuary performs **risk analytics** in:

- Insurance
 - How much should an insurance company charge for car insurance?
 - How much insurance should banks buy to manage financial risk?
- Retirement
 - How much should a company invest to pay for employees' pensions?
- Other Areas
 - What is the cost of an oil spill?

Life is full of uncertainty and risk. So actuaries help answer these questions.



FIRMS













Industries	Firms
Property and Casualty	Liberty Mutual, Farmers, Allstate, CSAA
Health and Benefits	UnitedHealth Group, Aetna, Anthem
Life	Pacific Life, AIG, New York Life
Retirement	Aon, Fidelity, Mercer
Reinsurance	Gen Re, Munich Re, Swiss Re
Consulting	Willis Towers Watson, Oliver Wyman, Milliman



WHAT TO STUDY



THE MAJOR

- Financial Actuarial Mathematics
 - Prereqs: Math 31A to 33B; Math 11N, 42, 61, or 70;
 Mgmt 1A; Econ 1, 2, 11; PIC 10A, 16
 - Major (12 courses): More Math
- During your first year,
 - Take Math every quarter
 - Start Econ/PIC/Mgmt requirements
 - Start GE courses
 - But don't finish all of them early or you will only be taking math by senior year





OTHER MAJORS

- Actuaries come from all kinds of majors and minors
- A quantitative background is usually preferred, so many students major in the following:

Major	Requirements (excluding prereqs)
Mathematics	12 pure math courses
Applied Mathematics	12 applied math courses
Mathematics of Computation	14 math and computer science courses
Mathematics / Economics	14 math and economics courses
Data Theory	16 math and statistics courses
Statistics	13 statistics courses, including a capstone project
Business Economics	10 economic and management courses



MINORS

• If your major is less quantitative or you just want to study another area relevant to the actuarial career, you might consider the following minors:

Minor	Course Requirements (excluding prereqs)
Specialization in Computing (For Math Majors)	7 courses related to programming
Accounting	7 courses related to financial and managerial accounting, tax policies, etc.
Statistics	6 courses related to theoretical and applied statistics, R
Math (For Non-Math Majors)	5 courses that can be any upper division math courses



EXAMS



EXAMS





For Health, Life, & Retirement

Exam P

Exam FM



For Property and Casualty

Exam 1

Exam 2



EXAMS

- Exams are often more important than grades
 - (But don't ignore your grades)
- Computer-Based Test
 - Register for the exam with the SOA
 - Sign up for a spot at a Prometric Testing Center
 - Exams P and FM are both multiple choice
- You can decide when to take it
 - 1 exam is often required for an internship
 - Good target is to pass an exam by Fall of the year that you are recruiting for a summer internship (sophomore or junior year)





EXAM P/1 – PROBABILITY

Exam Name	CBT Dates	Paper/Pencil Dates*	Registration Deadline
Exam P, Probability	Nov. 12-28, 2020	None	Oct. 13, 2020
	Jan. 14-25, 2021	Jan. 14, 2021	Dec. 15, 2020
	Mar. 11-22, 2021	None	Feb. 9, 2021
	May 14-25, 2021	May 14, 2021	Apr. 13, 2021
	July 15-26, 2021	None	June 15, 2021
	Sept. 9-20, 2021	Sept. 9, 2021	Aug. 10, 2021

- Corresponds to Math 170E (or Math 170AB)
- Many students self study before taking this exam



EXAM FM/2 – FINANCIAL MATHEMATICS

Exam Name	CBT Dates	Paper/Pencil Dates*	Registration Deadline
Exam FM, Financial Mathematics	Dec. 8-24, 2020	None	Nov. 10, 2020
	Feb. 12-23, 2021	Feb. 12, 2021	Jan. 12, 2021
	Apr. 8-19, 2021	None	Mar. 9, 2021
	June 10-21, 2021	June 10, 2021	May 11, 2021
	Aug. 13-24, 2021	None	July 13, 2021
	Oct. 14-25, 2021	Oct. 14, 2021	Sept. 14, 2021

- Corresponds to Math 177
- Can also be taken as first exam



STUDYING FOR EXAMS

- Official recommended study time: 100 hours per exam hour
 - i.e. 3-hour test = 300 hours of studying
- Some study resources:
 - Paper Manual: ACTEX, ASM
 - Online Seminars: CoachingActuaries, TheInfiniteActuary
 - Free Resources: Dr. Finan's study manual for P/FM, old manual from Boelter Library
 - Warning: May be outdated as exams have changed in recent years

Note: We are in the process of building a new tab on our website with reviews of study resources to make it easier to choose the right resource for you.



SKILLS



SKILLS



Math Skills

- Quantitative major/minor
- 3.0 GPA or above
 (3.5 to be competitive)
- 1 Exam Passed



Computer Skills

- Object-Oriented Languages
- SQL (Database manipulation language)
- Excel: PivotTables, Formulas, Macros



Professional Skills

- Resume
- Interview skills
 - Prepare answers to common questions
- Communication skills



YOUR BEST FRIEND - BAS!!

BAS will help you gain the skills you need to be successful.

Mentorship Program	Ask your mentor if you have any questions or concerns
Technical Workshops	Learn how to use Excel, R, and VBA
Professional Development Workshops	Learn about career paths, exams, and more (We already held our resume and interviewing workshops, but you can find the slides on our website: www.math.ucla.edu/~actuary/events.html)
Case Competition	Build your technical and communication skills and gain industry knowledge by tackling an actuarial problem
Our Handbook	Look on our website for a detailed guide on writing a resume, interviewing, taking actuarial exams, creating a 4-year plan, and more



TIMELINE

First Year



Second Year



Third Year



Fourth Year

- GPA
- Programming
- Resume & LinkedIn
- Network
- Communication skills
- CASE COMP

- Attend Career Fair
- Pass exam(s)
- Case competition
- Finish up premajor courses
- Work on interviewing skills

- Attend Career Fair
- Apply for internship
- Interview
- Pass exam(s)



RECRUITMENT



GENERAL RESUME TIPS

- Be concise
- Make sure each bullet point answers:
 - What?
 - Hows
 - So what? (e.g. Positive effect on company)
- Use past tense
- Make it look nice!!
- It is okay to include high school experience for now (if you're a freshman)
- Review Resume Workshop/Handbook for more detailed tips

FIRSTNAME LASTNAME

ProfessionalEmailAddress@domain.com | (###) ###-#### | Permanent Address

EDUCATION

University of California, Los Angeles Los Angeles, CA B.S. Financial Actuarial Mathematics, Specialization in Computing Expected Jun 2020

- GPA: 3.XX/4.00
- · Activities: [List some club memberships]
- · Relevant Coursework: Mathematics of Finance, Life Insurance and Annuities

ACTUARIAL EXAMS

•	Passed Exam P (Score 8/10)	Jan 2019
•	Sitting for Exam FM	Dec 2020
•	Fulfilled VEE Economics	Jun 2019

WORK EXPERIENCE

ABCD Company	City, Sta
Position Title	Jun 2019 – Aug 20

- [Arrange bullet points in order of importance/relevance]
- · [Start each bullet point with a strong, past-tense action verb]
- [Talk about what you did, how you did it, and why it matters]
- [Think about and focus on what skills and experiences an employer would care about]

 XYZ Company
 City, State

 Position Title
 Jun 2018 – Sep 2018

- [Try to have around 3 bullet points for each item—at least 2, no more than 4]
- [Be specific about what you accomplished—broad generalities aren't helpful]
- [Replace old, irrelevant work experience with more applicable actuarial experiences when possible]

RELEVANT EXPERIENCE

Bruin Actuarial Society Case Competition Finalist

Los Angeles, CA Jan 2019

- [Try to fill as much of the line as possible—use all the space you can]
- [If your bullet point goes to a second line, try to use as much of it as you can so it doesn't look bare]
- [Use a variety of action verbs—there are plenty to choose from; avoid repeating]

LEADERSHIP

Name of Society / Club Los Angeles, CA Position Title Sep 2018 – Present

- [Look for some organizations to seek a leadership position in—doesn't have to be professional]
- [If you don't have any leadership experience, you can list "Extracurricular Activities" instead]
- [Even if the activity isn't professional, try to frame the activity in contexts employers would care about]

SKILLS

- Computer Skills: Intermediate Microsoft Excel, Introductory C++, etc.
- Languages: [Languages you can speak and proficiency level]
- Interests: [List a few of your interests—some interviewers like to see these]



NETWORKING TIPS

- Prepare a short self-introduction (60 seconds max)
 - Name, Year, Major(s), Minor(s)
 - Relevant past experiences
 - Career specific experiences
- Network
 - Meet representatives! They are actuaries and recruiters at the same time
 - Take one: Ask for a business card (or email address if virtual)
 - Give one: Ask to present your resume





CAREER CENTER

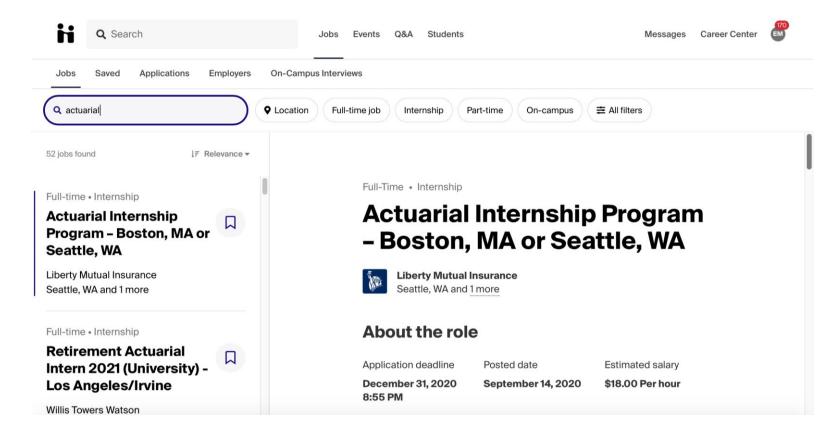
- When school is in-person, this is where on-campus interviews take place
 - Located on third floor of the Strathmore Building at Strathmore and Westwood Plaza
 - Come in early to sign in
- Virtual Services
 - Events and workshops
 - Career advising





HANDSHAKE WWW.UCLA.JOINHANDSHAKE.COM/

- LinkedIn for students
- Companies will post job openings here







LINKEDIN

- Social media for working professionals
- Build your profile
 - Current and former jobs
 - Skills and endorsements
 - Test scores and courses completed
 - Projects (e.g. Case Competition)
- Connect with friends and colleagues
 - Classmates
 - BAS members
 - Firm representatives you talked to



