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EZRA PENLAND ACTUARIAL RECRUITMENT  
California Actuarial Student Summit hosted by  
University of California, Santa Barbara  
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# The Path to Starting your Actuarial Career

EXAMS | EDUCATION | EXPERIENCE | COMPUTER SKILLS  
NETWORKING | RESUME | INTERVIEWING

# POINTS OF DISCUSSION



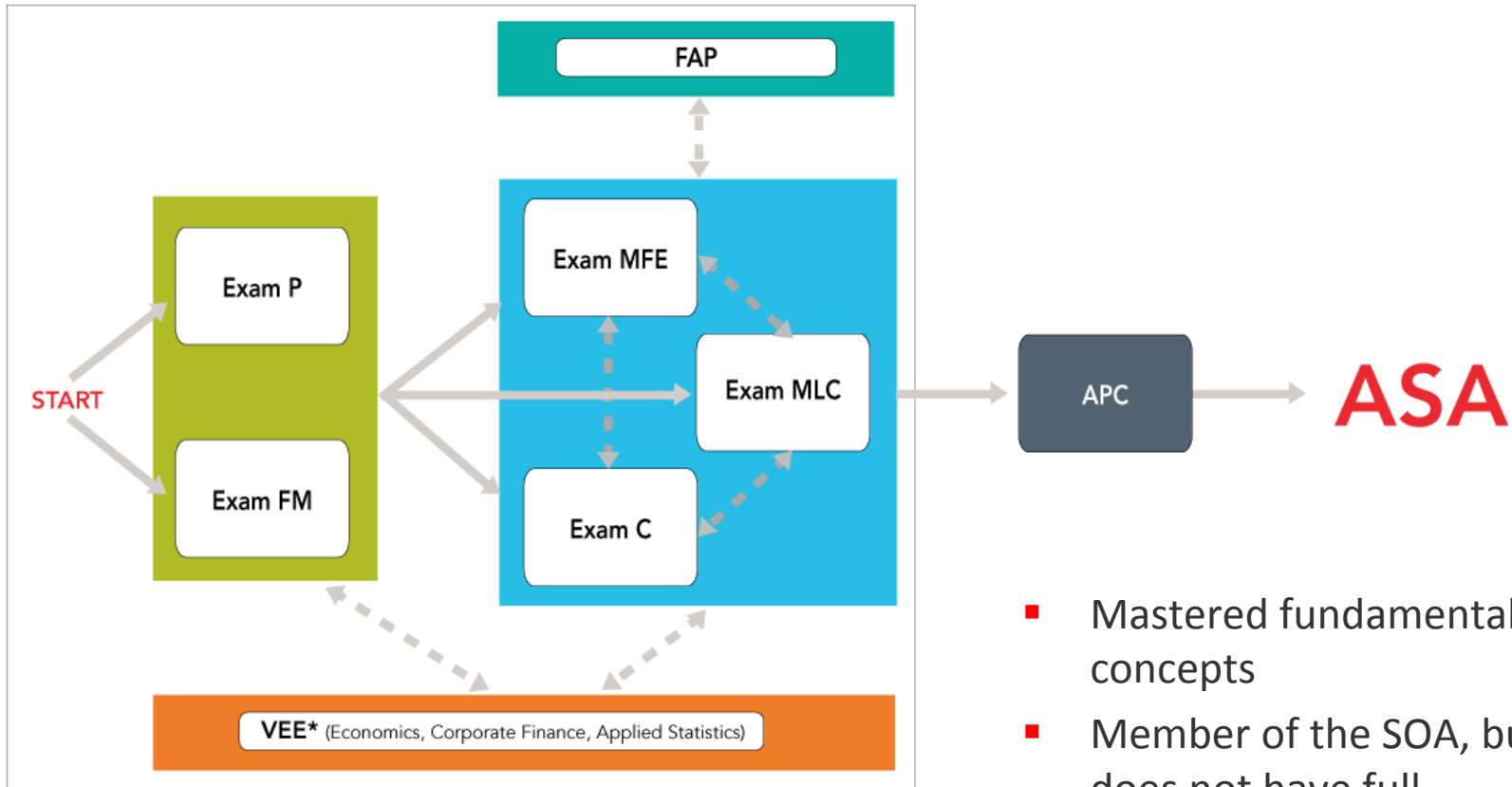
- The Path to Starting your Actuarial Career
  - Exams
  - Education
  - Experience
  - Computer Skills
  - Networking
  - Resume
  - Interviewing

# EXAMS



- What are the different exams?
  - P/1 – Probability
  - FM/2 – Financial Mathematics
  - MFE/3F – Derivatives
  - MLC/LC & ST – Life Contingencies, Stochastic Processes
  - C/4 – Construction & Evaluation of Actuarial Models
  - FAP Modules
  - S – Statistics and Probabilistic Models
  - CAS 5 – Ratemaking
  - CAS 6 – Regulation & Financial Reporting
- What order do I need to take the exams?
- How many exams do I need before I can get a job?
- How many is too many?

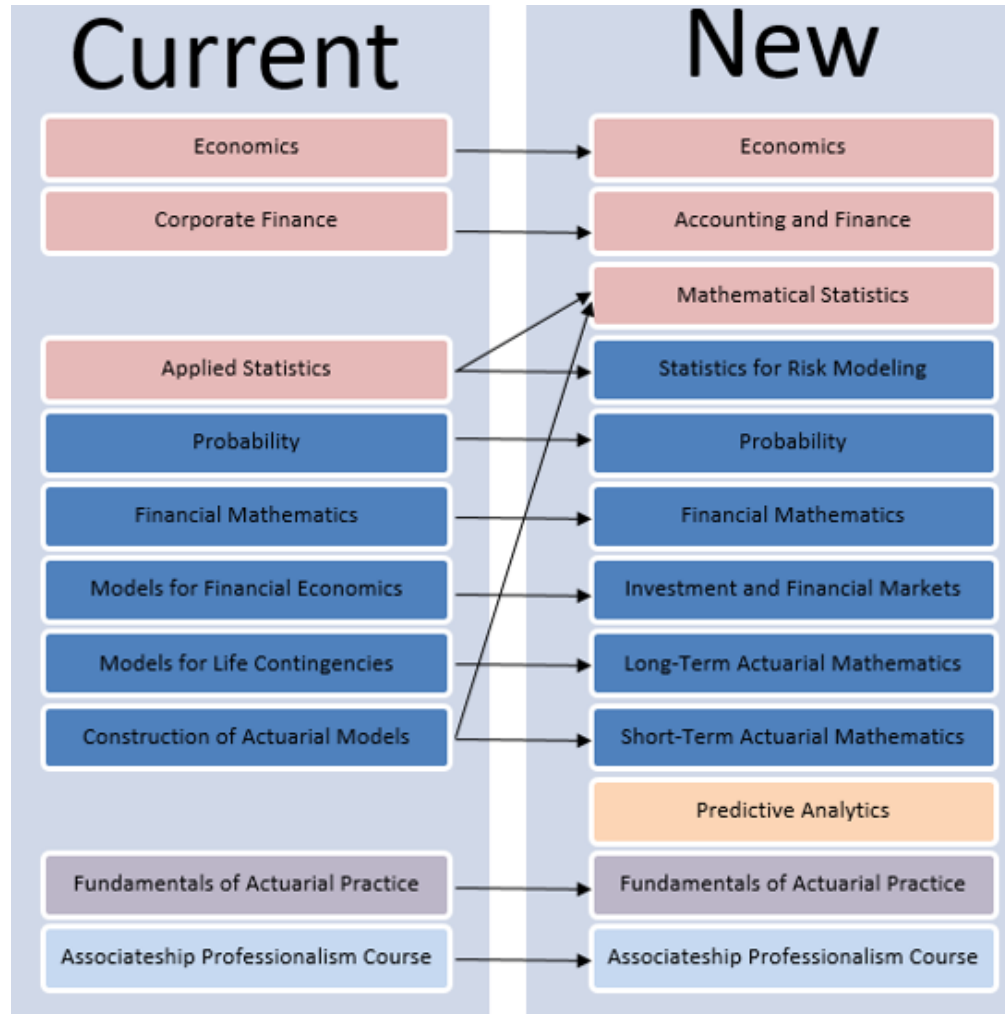
# Associate of the SOA (ASA)



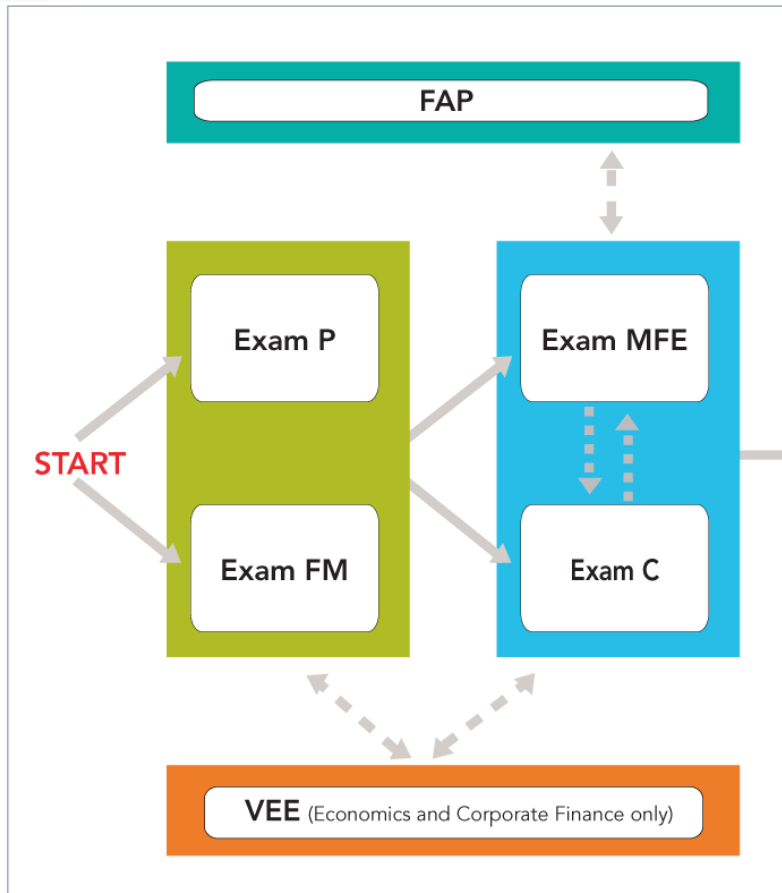
*\*Must complete any two exams before applying.*

- Mastered fundamental concepts
- Member of the SOA, but does not have full privileges

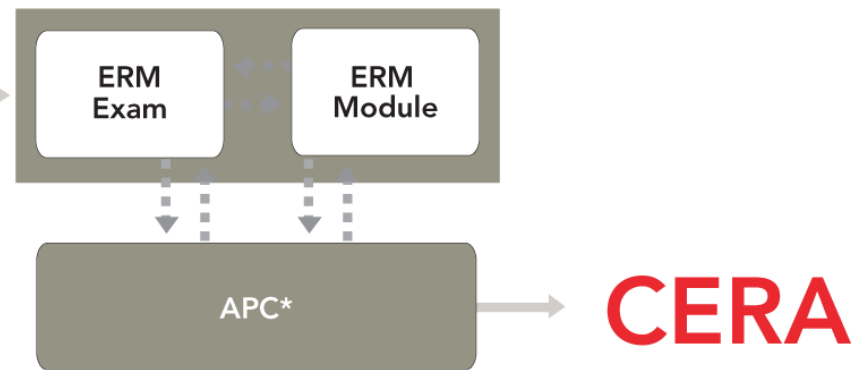
# Coming Soon - SOA



# Chartered Enterprise Risk Analyst (CERA)

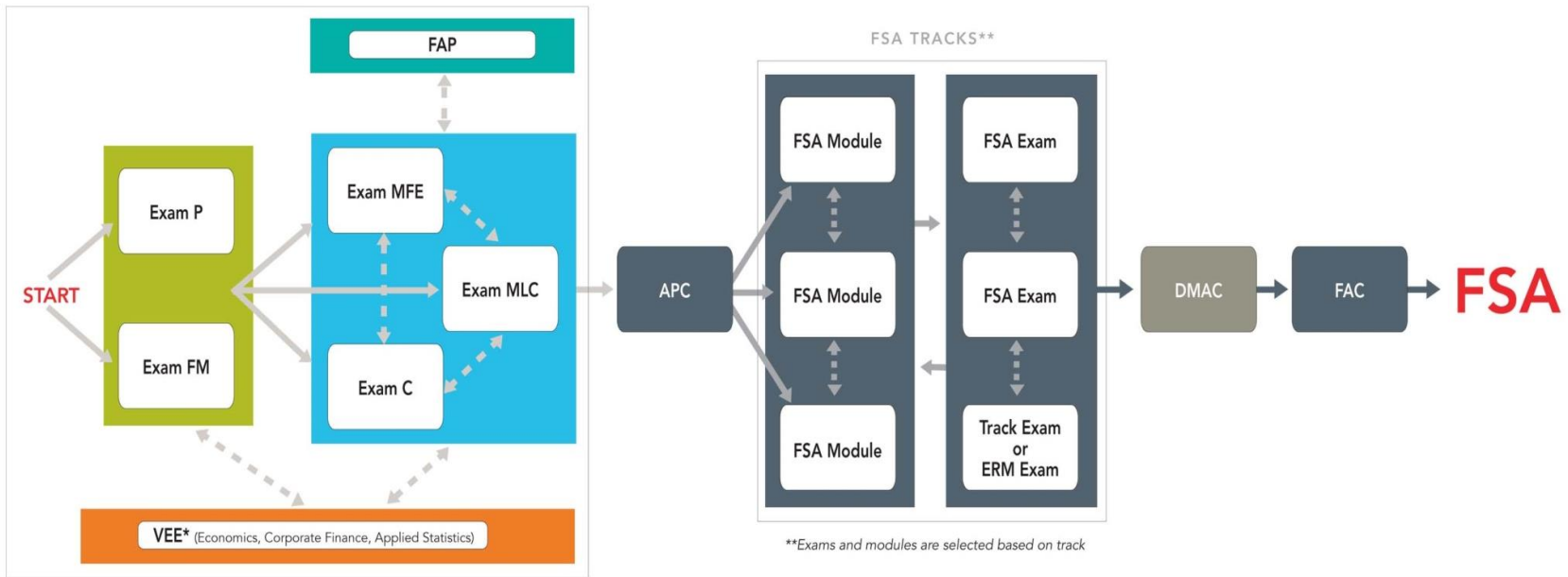


- Equivalent to ASA in effort
- A special combination of exams and modules with an ERM focus



*\*Special eligibility rules apply.*

# Fellow of the SOA (FSA)



\*Must complete any two exams before applying.

*An FSA is a fully qualified actuary with specialization in one area.*



# Six Specialty Tracks to FSA

- Corporate Finance and Enterprise Risk Management
- General Insurance
- Group and Health
- Individual Life and Annuities
- Retirement Benefits
- Quantitative Finance and Investment



# CAS EXAM PATH



## THE CAS PATH TO SUCCESS

In principle and in practice, the CAS is the gold standard for the property and casualty actuarial profession. With 100 years of experience and expertise, the CAS continues to focus on comprehensive exams and education that are uniquely relevant to property and casualty actuaries. Our CAS credentialing program is the program of choice for attracting top candidates and meeting employers' needs.



\* The CAS will honor credits from candidates who pass examinations offered by other organizations that cover our CAS learning objectives for CAS Exams 1, 2, 3F, and 4 as well as the VEEs. These organizations include but are not limited to: Society of Actuaries, Canadian Institute of Actuaries, Institute and Faculty of Actuaries (UK), Actuaries Institute (Australia), Actuarial Society of South Africa, and Institute of Actuaries of India. For example, requirements for CAS Exams 1, 2, 3F and 4 can be fulfilled by passing the Society of Actuaries' Exams P, FM, MFE, and C, respectively.

# Coming Soon - CAS



- Effective in 2018, the CAS will require new exams to achieve ACAS
- Modern Actuarial Statistics I (MAS-I) is largely a modification of current CAS Exam S, which it will replace when it is first offered in the spring of 2018
- Modern Actuarial Statistics II (MAS-II) will replace the current CAS Exam 4 requirement and will focus on modern statistics and predictive analytics
- For more information:  
[http://www.casact.org/cms/files/2018\\_Changes\\_to\\_CAS\\_Credentiaing\\_Requirements.pdf](http://www.casact.org/cms/files/2018_Changes_to_CAS_Credentiaing_Requirements.pdf)

# EDUCATION



- Desirable candidates possess at least a bachelor's degree in a quantitative area of study:
  - Actuarial Science
  - Computer Science
  - Economics
  - Engineering
  - Finance
  - Management Information Systems (MIS)
  - Mathematics
  - Physics
  - Statistics
- Actuaries come from all walks of life

# EXPERIENCE



- Obtain at least one actuarial summer internship
- Ideally, you should strive for two internships
- Internships are a great opportunity to "try on" a discipline
  - Health
  - P&C
  - Life
  - Pension
- Internships are a great way to determine what kind of work environment you like
  - Consulting
  - Insurance Company
    - Larger or smaller company
  - View the differences between consulting and insurance here:  
<https://www.soa.org/News-and-Publications/Publications/E-News/soa-candidate-connect/Features/2015-insiders-insights-consulting-versus-insurance.aspx>

# COMPUTER SKILLS



- Technology plays an important role in the actuarial profession
- Must-Have Computer Skill:
  - Excel
    - Use of pivot tables daily, lookups, and complex formulas are crucial
    - Know how to organize the field and summarize data
    - Key functions: VLOOKUP, INDEX, MATCH, TEXT, IF, AND, OR, SUMIF, LEFT, and RIGHT
- Should-Have Computer Skills:
  - Visual Basic (VBA)
  - SQL (Structured Query Language)
  - R (open-source) or SAS
- Could-Have Computer Skills:
  - C++
  - Other Modeling Software (learned on the job)

# NETWORKING



- Talk to everyone about being an Actuary
- The actuarial community is small, use it and treat it well
- Become involved with the Alumni from your Alma Mater
- Attend Meetings of Local Actuarial Clubs
  - Southern California Casualty Actuarial Club
- SOA/CAS Seminars – Podcasts, Professional Development Courses
- Utilize Student Central resources
- Scholarships – Actuarial Foundation and local clubs
- Build Your Online Brand
  - LinkedIn, Twitter
  - Any email correspondence should have a signature
- SOA Candidate Connect
  - Newsletter designed for SOA candidates taking exams; updates on initiatives, exam development, and candidate events
- Research the company and field

# RESUME

- Contact Information at the top
- Education, Anticipated Graduation Date, GPA
- Exams Passed
- Your Next Sitting
- Relevant Coursework
- Actuarial Internships
- Technical Skills
- Review formatting – is it consistent and attractive





## John R. Smith

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### ACTUARIAL EXAMS

- Passed Exams P/1 (07/2015), FM/2 (02/2016), and MFE/3F (07/2016)
- Sitting for Exam C/4 (06/2017)

### PROFESSIONAL EXPERIENCE

**Department of Mathematics, NYU – New York, NY** 08/2013 – Present  
*Mentor and Grader, Calculus I/II*

- Attend all lectures and lead weekly recitations
- Prepare, distribute, and provide solutions for exam review sessions
- Responsible for scoring and correcting weekly quizzes and bi-weekly exams

**Reinsurance Company – Boston, MA** 05/2014 – 08/2014  
*Actuarial Intern*

- Developed Excel spreadsheets that eased the pricing of three different lines of business
- Evaluated competitor rate changes for trends in pricing, to be compared to Company's method of pricing
- Presented rate change findings as graphical results to company board, consisting of actuaries and non-technical managers

**Life Insurance Company – New York, NY** 05/2013 – 08/2013  
*Actuarial Intern*

- Assisted in the development of asset and liability models, used to improve current policy guidelines
- Generated user reports and added new assumptions, improving current models
- Ensured accurate input of consumer data using Excel and Access

### TECHNICAL SKILLS

- Expert in Microsoft Office Suite (Word, Excel, PowerPoint, Access)
- Proficient with VBA, SQL, and SAS

### EDUCATION

**New York University – New York, NY** Expected 05/2015  
*Bachelor of Science, Actuarial Science (GPA: 3.6/4.0)*

- Minor: Economics
- Awards and Honors: Dean's List, NYU Scholar Award, Martin Luther King, Jr. Scholarship

### INVOLVEMENT

**Actuarial Club, NYU – New York, NY** 08/2011 – Present  
*President (08/2014 – Present), Treasurer (08/2013 – 08/2014)*

- Lead monthly meetings for Actuarial Club members; meeting topics include exam preparation, internship opportunities, and interview tips, among others
- Act as liaison between Actuarial Club members and hiring managers of local actuarial employers
- Organized efforts to create the Actuarial Club Sponsored Scholarship, awarded to one incoming freshman each fall

**Habitat for Humanity – Armonk, NY** 06/2010 – Present  
*Construction Team Volunteer*

- Work with local chapter of Habitat for Humanity to build homes for families in need



# INTERVIEW QUESTIONS



- What's going on in the industry now?
- What was your favorite and least favorite class in college and why?
- Among all the candidates, why should we hire you?
- What is the difference between insurance and consulting?
- What do you think an actuary does?
- How would you explain what an actuary does to someone?
- What is the most difficult actuarial concept you have learned? Can you please explain it?
- What do you know about our company?
- Why would you choose P&C over health (or life or pension) insurance or vice versa?
- Tell me about the time when you had to explain to someone long and short term tails.
- Describe a time when you have had to work with a particularly large data set.
- How would you explain the time value of money to a 5 year old?
- Explain Data.

# ONLINE RESOURCES



- The Entry-Level Actuary: <http://bit.ly/249Uu1h>
- Nemo Ashong Podcast: <http://apple.co/1QFuzlc>
- Actuarial Startup: <http://bit.ly/1SUKqUt>
- Student Central: <https://www.studentcentral.com/>
- Actuary of the Future: <https://www.soa.org/aof/>
- SOA Candidate Connect: <https://www.soa.org/candidateconnect/>
- Slides 5, 7, 8 & 9 courtesy of the Society of Actuaries ([www.soa.org](http://www.soa.org))
- Slide 10 courtesy of the Casualty Actuarial Society ([www.casact.org](http://www.casact.org))
- Ezra Penland Salary Survey: [https://s3.amazonaws.com/cpenlandsite/Ezra\\_Penland\\_2016\\_2017\\_Brochure\\_Salary\\_Surveys.pdf](https://s3.amazonaws.com/cpenlandsite/Ezra_Penland_2016_2017_Brochure_Salary_Surveys.pdf)

# Thank You

- Prepared for the California Actuarial Student Summit, University of California – Santa Barbara (January 14, 2017)
- For a digital copy of this presentation, please contact [Jessika@EzraPenland.com](mailto:Jessika@EzraPenland.com)





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