

STUDENT CENTRAL

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CASstudentcentral.org

The CAS Basic Education System

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California Actuarial Student Conference
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Current CAS Syllabus to Reach ACAS (Until Fall 2016)

- Validation by Educational Experience (VEE):
 - VEE-Applied Statistical Methods
 - VEE-Corporate Finance
 - VEE-Economics
- Two CAS Online Courses:
 - Online Course 1—Risk Management and Insurance Operations
 - Online Course 2—Insurance Accounting, Coverage Analysis, Insurance Law, and Insurance Regulation
- Course on Professionalism
- Exams

Current CAS Syllabus to Reach ACAS (Until Fall 2016)

| Required CAS Learning Objectives Met Through Following Exams | CAS Exams |
|--|--|
| <ul style="list-style-type: none">– P—Probability– FM—Financial Mathematics– MFE—Models for Financial Economics– C— Construction and Evaluation of Actuarial Models | <ul style="list-style-type: none">– Exam LC*—Models for Life Contingencies and Statistics– Exam ST —Statistics and Stochastic Modeling– Exam 5—Basic Techniques for Ratemaking and Estimating Claim Liabilities– Exam 6—Regulation and Financial Reporting (Nation Specific)<ul style="list-style-type: none">– Actuarial Institute of Chinese Taipei, Canada, and United States <p><i>*CAS accepts waiver for MLC Exam</i></p> |

Current CAS Syllabus to Reach FCAS

ACAS plus:

- Exam 7—Estimation of Policy Liabilities, Insurance Company Valuation, and Enterprise Risk Management
- Exam 8—Advanced Ratemaking
- Exam 9—Financial Risk and Rate of Return

CAS Preliminary Education

- For CAS learning objectives currently addressed through Exams 1/P, 2/FM, 3F/MFE, and 4/C, CAS will grant waiver to candidates who receive credit for exams offered by other organizations deemed to cover CAS learning objectives in acceptable depth and breadth.
 - Society of Actuaries
 - Actuaries Institute (Australia)
 - Actuarial Society of South Africa
 - Canadian Institute of Actuaries
 - Institute and Faculty of Actuaries (UK)
 - Institute of Actuaries of India

CAS Preliminary Education

- Since January 1, 2014, CAS has been offering two unique preliminary examinations
 - LC, covering life contingencies and survival models
 - ST, covering statistics and stochastic modeling
- They are administered exclusively by the CAS

Upcoming Changes – Exam S

- Consolidating material contained on current ST, LC, and the VEE on Statistics into a new comprehensive exam
- Exam will also cover Generalized Linear Models
- Topics and coverage:
 - A. Probability Models (Stochastic Processes & Survival Models) 20-40%
 - B. Statistics (2nd semester of a 2-semester undergraduate course on Probability and Statistics) 20-40%
 - C. Extended Linear Models (NEW!) 25-40%
 - D. Time Series with Constant Variance (ARIMA) 5-10%

CAS Syllabus to Reach ACAS (After Fall 2016)

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| <ul style="list-style-type: none">– P—Probability– FM—Financial Mathematics– MFE—Models for Financial Economics– C— Construction and Evaluation of Actuarial Models | <ul style="list-style-type: none">– Exam S—Statistics and Probabilistic Models– Exam 5—Basic Techniques for Ratemaking and Estimating Claim Liabilities– Exam 6—Regulation and Financial Reporting (Nation Specific)<ul style="list-style-type: none">– Actuarial Institute of Chinese Taipei, Canada, and United States |

CAS Preliminary Education: Changes

- CAS believes these changes:
 - Align preliminary educational objectives to the appropriate coverage for these topics
 - Recognize the increasing importance of statistics in property/casualty actuarial practice
 - Allow the CAS to focus on exams that validate knowledge that is uniquely relevant to property/casualty actuaries

Basic Education: In Summary

- CAS relies on subject matter specialists to develop questions that are relevant to actual practice and that test the ability to apply theory to real-life situations.
- CAS Admissions Committees: 600 CAS Fellows with combined 5,000 years of experience
- Exam Committee leadership: 23 Fellows with average of 19 years of experience

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CAS Student Central

- Membership program for university students:
 - No Membership fee
 - Access to resources including P&C internship listings, CAS Curriculum Guide, Case Studies, Online Community
 - Free webinars created specifically for students
 - Invitations to free networking events including student programs at CAS meetings and Seminars
- Approximately 1,400 student members from 300 schools

Upcoming Changes – Exam S

- 4 hour multiple choice examination
- Offered twice a year starting in Fall of 2015
- Guessing penalty exists on this examination
- Sample questions will be released in late Spring for Exam S
- No programming language will be tested with Exam S, but the textbooks rely on programming output to teach
 - Exam questions may contain parameter tables and diagnostic tables or plots of the type shown in the text. Candidates should understand how to interpret these tables. Candidates who become familiar with a statistical language capable of generating this type of output, such as R or SAS, will have an easier time understanding and applying the concepts covered in the syllabus material. However, for exam questions candidates will not be asked to write or interpret R or SAS code.

Upcoming Changes – Exam S

| Candidate Credit on August 31, 2015 | | | Action Required by August 31, 2016 to Earn Credit for new Exam S |
|-------------------------------------|---------|-----------|--|
| Exam ST | Exam LC | Stats VEE | |
| ✓ | ✓ | ✓ | Credit granted. No candidate action required. |
| ✓ | ✓ | | Complete the Applied Statistical Methods VEE. |
| ✓ | | ✓ | Pass Exam LC. |
| ✓ | | | Pass Exam LC and complete the Applied Statistical Methods VEE. |
| | ✓ | ✓ | Pass Exam ST. |
| | ✓ | | Pass Exam ST and complete the Applied Statistical Methods VEE. |
| | | ✓ | Candidate must take full Exam S. |
| | | | Candidate must take full Exam S. |