



Admissions Transformation Plan

A Guide to the Future of CAS Admissions: 2022 and Beyond

The CAS is committed to ensuring that our credential holders have the professional knowledge and expertise to meet market demands. This document is the first iteration of our high-level blueprint to evolve and enhance the credentialing program.

FEATURES

The CAS is evolving with the profession and responding to industry demands with enhancements to our credentials. The rollout of any changes will be managed carefully to avoid disruption for those already on the path to CAS credentials.



Content Outline
(Syllabus)



Study
Materials



Exam
Features



New
Offerings

BENEFITS

Why make these changes? How do they benefit the CAS community?

As the actuarial profession changes at an accelerated pace, the CAS will stay relevant and reliable by making ongoing enhancements based on our Strategic Plan.



Solid Foundation



Exam Experience



Rigor

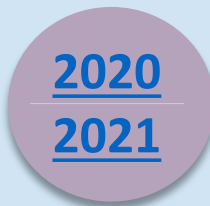


Future-Forward

MILESTONES

When are we targeting to make these changes?

Key milestones are outlined to provide a high-level overview of CAS plans. More information will be released as details are further developed.



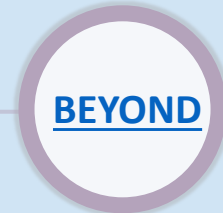
2020
2021



2022



2023



BEYOND



Admissions *Transformation* Plan

FEATURES

Learn more about enhancements the CAS will make to our credentialing program.

We are adopting a new exam design and development process over the next several years, and there will be changes to our future CAS credentialing exams.

The new process started with capturing recent developments in the actuarial profession using a Job Task Analysis (JTA) survey of CAS members conducted in 2020. Data collected from that JTA is used to inform exam development. Any changes to exams will also be reflected in CAS resources like Content Outlines (formerly known as Syllabi) and Study Materials.

MAS-I and MAS-II are the first exams to be updated. They are targeted to launch in 2023.

We are providing this preview of the evolving credentialing program, but the detailed design is not yet completed.

Rest assured that we will continue to give advanced notice of exam changes to candidates and other key stakeholders. If transition rules are required, then that notification and corresponding documentation will be provided promptly.

We recognize that candidates are at different points on the [CAS Educational Journey](#). As the exam design progresses, we will provide more information about specific impacts to candidates' paths.



Admissions *Transformation* Plan

FEATURES



Content Outline (Syllabus)

Some terminology will change with our new exam design and development process. Exam Syllabi will shift to Content Outlines, with job-performance Competencies listed instead of Learning Objectives. Similar to our current syllabi, Content Outlines also include the weights or degree to which those competencies are assessed on the exam.



Study Materials

Study materials will be revised or newly developed to reflect any exam updates. These study preparation tools could include study guides, notes and tips, and practice questions. To ensure enough preparation time, these materials will be made available six months before an updated exam is delivered.



Exam Features

Updates to exams could include such changes as new test item types, quicker grading and score reporting, as well as organizing exams into shorter blocks of content during the one-day exam sitting.



New Offerings

To tackle the important insurance and risk management problems in our data-rich world, actuaries use a powerful combination of skills that include analytics, problem-solving and domain knowledge. In addition to including more predictive analytics items on exams, we will offer continuing education products related to predictive analytics in the future.



Admissions *Transformation* Plan

BENEFITS

Learn more about the value of these advancements in the CAS credentialing program.

This section highlights some of the ways this transformation benefits our candidates, employers and the broader CAS community.

Building on a solid foundation of over 100 years, the CAS is heading towards an exciting Envisioned Future, based on our Strategic Plan. The changes outlined in this Admissions Transformation Plan are all steps towards realizing those strategic goals. This future state will integrate our existing best practices into a professional testing model.

We will continue to build skills for the future by updating our exam process. With an improved candidate experience along the [Educational Journey](#) and the same dedication to rigor, a CAS credential represents the actuarial talent of tomorrow.

Envisioned Future

CAS members are sought after globally for their insights and ability to apply analytics to solve insurance and risk management problems

-[CAS 2021-2023 Strategic Plan](#)



Admissions *Transformation* Plan

BENEFITS



Solid Foundation

We strive to lead our members through change and to serve as a model of opportunity, adaptation and innovation. We embark on this transformation with a solid foundation and a dedicated community of volunteers. All changes will be rolled out carefully after being fully vetted by representatives of that community.



Improved Candidate Experience

All impacts to our stakeholders are being carefully considered, with particular focus on our candidate experience and credential value to employers. Moving to computer-based testing opens up additional exam administration opportunities in the future that support scheduled breaks and accommodation needs as well as quicker score reporting.



Continued Commitment to Rigor

The new exams will meet the highest standards in professional testing. Changes in exam content, format and frequency will only enhance our rigorous standards. The validity, reliability and fairness of our exams will remain a top priority.



Future-Forward

Our updated exam design and development process enables us to continuously capture data from actuaries on what is needed for success in today's workplace. A diversity of inputs will be incorporated that ensures we continue to generate a global demand for the services and expertise of current and future CAS credential holders.



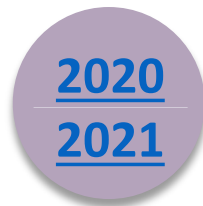
Admissions *Transformation* Plan

MILESTONES

Learn more about when we're targeting to launch announcements and advancements.

This section reviews enhancements made over the past two years and high-level milestones for the future. Because we are working in an agile way, this plan will continue to develop, with more details added over time. It is critical for any credential to reflect changes in the profession, so this approach allows us to be responsive and adaptable.

Providing such an early indication of milestones so far off in the future shows our commitment to transparency and feedback. [Feel free to submit your feedback on the CAS website.](#) Our intent is to provide advance notice to those beginning or currently on the CAS credential pathway.





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2020/2021

2022

2023

BEYOND

2020

- Moved all CAS exams to the Computer-Based Testing (CBT) format with Pearson VUE.
- Completed all grading in new grading management software.
- Completed Job Task Analysis for ACAS and FCAS examinations.

2021

- Launched Exam 6–International.
- Administered multiple forms of each CAS exam for security.
- Delivered MAS-I and MAS-II exam results 46% faster than previous paper-and-pencil exams.



Admissions *Transformation* Plan

2020/2021

2022

2023

BEYOND



Publish announcement about Preliminary Exams.

Any changes to Preliminary Exam requirements 1, 2 and 3F planned for 2023 will be announced no later than early 2022.



Publish announcement on domain-level topics for all CAS-administered exams.

This outlines how Competencies determined by the Jobs Task Analysis map to each exam and when any changes to content will occur.



Produce new Content Outlines (Syllabi) for MAS-I and MAS-II Exams.

Created using Job Task Analysis data, Content Outlines define the exam specifications, including Competencies and Weights.



Remove guessing penalty for MAS-I and MAS-II Exams.

Eliminating the guessing penalty will provide additional item analysis.



Admissions *Transformation* Plan

2020/2021

2022

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BEYOND



Produce new Study Materials for MAS-I and MAS-II Exams.

Materials will include study guides, tips and notes, and practice questions. All materials will be based on exam content. New Study Materials will be available six months before the Fall 2023 sitting.



Administer the new MAS-I and MAS-II Exams.

To be delivered in Fall 2023.



Administer new Preliminary Exams alternatives.

To be implemented in 2023.



Admissions *Transformation* Plan

2020/2021

2022

2023

BEYOND



Produce new Study Materials.



Administer updated exams.

Once MAS-I and MAS-II are updated, other CAS exams will be updated on a rolling basis to reflect their new content outline.

- The same process will be followed with new Study Materials provided six months before any updated exams are administered.
- The specific exams and timing will be announced in advance for candidate planning and preparation.



Launch updated Exams 5-9 to include both constructed and selected response test items.

Selected response items used in professional testing include multiple choice and fill-in-the-blank questions. Having multiple types of test item allow for variation while still meeting scientific standards.



Restructure exams to allow for breaks during exam sittings.

With the candidate experience in mind, these key improvements will be made:

- Instead of a continuous four-hour sitting, breaks can be factored into an exam administered on the same day.
- With the introduction of new test item types that require less grader resources, exams can be scored more quickly.



Produce exam results faster.



Admissions *Glossary*

Candidate Handbook

This document contains detailed certification program information including eligibility, application, and examination requirements, policies, and procedures. This is what the Syllabus of Basic Education will eventually be called.

Cognitive Complexity

The kind of thinking required to demonstrate competence in a particular area as required by exam standards. A taxonomy (e.g., Bloom's) is used to classify the depth of knowledge expected (e.g., recall, applying, evaluation). Items should assess the expected cognitive complexity.

Constructed Response Item

Also referred to as an essay, this type of exam item uses a prompt or question that requires a written response that can vary in length. Such items can assess deeper levels of understanding. They are generally hand-scored according to a rubric.

Content Outline

Rather than a syllabus, each exam will eventually have its own content outline. Also referred to as the exam blueprint, it is built from the **JTA** and rather than learning objectives, it identifies the **domains, tasks, and knowledge and skills** that the candidate could be tested on. Just as the CAS syllabus does today, it also includes the **weight** that each topic will be covered.

Content Validity

The extent to which the exam's **items** are balanced representations of the **knowledge and skills** needed for successful and competent job performance.

Criticality

One of the areas that is considered when determining the **weight** of a topic covered on an exam. **Subject matter experts** (SMEs) are asked to rate **domains** and **tasks** as to the degree to which the inability to understand and perform them would cause harm (physical, emotional, financial) to the people with whom actuaries work.



Admissions *Glossary*

Defensibility

Capable of being defended. An exam is likely to withstand legal challenges of potential exam flaws because a rational, thorough and fair **psychometric** process was used to create the exam.

Domains

The principal areas of responsibility that actuaries perform.

Frequency

One of the areas that is considered when determining the **weight** of a topic covered on an exam. **SMEs** are asked to rate how often actuaries work within a **domain** or perform a **task**.

Importance

One of the areas that is considered when determining the **weight** of a topic covered on an exam. **SMEs** are asked to rate **domains** and **tasks** on their significance to the job.

Items

Term indicating that not all exam questions are stated as questions. Every **item** on a professional certification exam tests knowledge that is essential for the competent actuarial practice of the **minimally qualified candidate**.

Job Task Analysis (JTA)

A process that begins with **SMEs** identifying the **domains, tasks, and knowledge and skills** performed by practicing actuaries. The accuracy of these competencies are further validated by a representative sample of practitioners, who also rate the **importance, criticality** and **frequency** of performance for each **domain** (and often **tasks**).



Admissions *Glossary*

Knowledge and Skills

The specific areas an actuary must possess in order to successfully perform the **tasks** identified in the **JTA**.

Minimally Qualified Candidate (MQC)

Performance-level descriptor that distinguishes between test takers who are minimally proficient in the identified qualifications from those who are less than proficient. This description is foundational to designing the **content outline**, writing **items**, and determining the passing score.

Psychometrics

The scientific field of measurement and evaluation. Psychometricians follow many standards, namely [*The Standards for Educational and Psychological Testing*](#) (American Educational Research Association, et al., editors, 2014.).

Reliability

Indicates that the scores candidates earn are dependable measures of their abilities. Scores are consistent regardless of when a test was taken, or which version of a test was used.

Selected Response Items

Also referred to as objective assessments because there is a single, best answer. **Selected response items** can include multiple choice, fill-in-the blank, and matching type questions.

Study Guide

A study tool outlining the breadth of content areas candidates will be tested on and the relative emphasis of each. Coverage is for the purposes of reinforcing what actuarial candidates should know or broadly reviewing concepts for which they are less familiar. **Item**-type descriptions and test-taking strategies are often included. This guide should not be the only resource used in examination preparation.



Admissions *Glossary*

Subject Matter Experts (SMEs)

Individuals whose actuarial expertise is called upon for the **JTA, item** writing and review, scoring, and other exam development tasks. A volunteer's expertise should be reflective of the exam content for which they are responsible. They should also be familiar with the level of knowledge a **MQC** has.

Tasks

What a person performs to be successful within a **domain**.

Weights

Data collected from the **SME** ratings as to the **importance, criticality, and frequency** of performance for each **domain** (and often, **tasks**) that is used to determine the proportion of test **items** to be included in each exam section.