



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.



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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**).



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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.



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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.