

Learning Objectives

1. Apply actuarial skills across a range of traditional practice areas and in unfamiliar (i.e. non-traditional) areas by contextualising actuarial solutions in the wider commercial environment of the business as a whole, and applying the actuarial control cycle
2. Understand the overall aspects of the business which impact on the formulation of actuarial methodology and be able to incorporate those aspects into the approach and/or solutions. Specific aspects of the business include:
 - availability and optimum use of capital
 - Medium term (3 to 5 years) financial projections
 - Asset / liability matching management
 - Impact of strategic objectives on shorter term decisions
 - Profit optimisation of price / volume
 - Holistic risk management
3. Measure and communicate the risks attending alternative solutions
4. Recognise the cost of additional levels of detail in actuarial solutions and their relative value.
5. Apply sound investment practice to asset / liability matching
6. Communicate, in written form, the actuarial solutions to a range of audiences:
 - simplify complex ideas
 - pitch ideas at the audience
 - focus on the key facts, issues and risks rather than explain all the details.
7. Apply general ethical concepts, corporate governance requirements and actuarial professional standards when contextualising actuarial solutions.

Detailed Syllabus

Part A – Application of Actuarial Skills in a Business Environment

The syllabus will cover both traditional and non-traditional practice areas. Students will be required to demonstrate the ability to apply actuarial skills and judgement in one traditional and two non-traditional practice areas by contextualising actuarial solutions in the wider commercial environment of the business as a whole, and by applying the actuarial control cycle. Practice areas are referred to as a “business” even though in some cases eg. superannuation, ageing populations, there may not be a profit making enterprise as the entity being advised, or a major component of any solution may be government action.

In traditional practice areas, it is assumed that students have a level of understanding and competence in their chosen traditional practice area which is at the level required for a pass in both Modules 2 and 3 in that practice area.

The understanding and competence required for each non-traditional practice area is at the general level but with sufficient clarity to contextualise the actuarial solutions at a high level, rather than at the detailed level required of traditional practice areas. That is, it is not expected that students would be able to pass equivalent Modules 2 or 3 in the non-traditional practice areas, were they to be offered.

Given the above distinction between traditional and non-traditional practice areas, the depth required in respect of some of the Aims below will vary depending on whether a traditional or non-traditional practice area is being considered.

Aim A1 - Understand the overall environment in which the business operates

- a. Understand the legislative context in which the business operates and the essential features of the relevant legislation
- b. Describe the societal context and expectations of the business
- c. Describe the key political constraints which impact on the operation of the business

Aim A2 – Understand the key drivers of the business and the underlying business models which apply

- a. Describe the key drivers of financial outcomes in the business
- b. Analyse the broad economic and financial relationships in each of these drivers
- c. Understand the various business models used by participants in the appropriate market places
- d. Analyse those models and determine their strengths and weaknesses

Aim A3 – Recognise and analyse the major risks faced by the business from an holistic perspective

- a. Identify the risks faced by the business as a whole
- b. Identify any risk contagion applying to the business as a whole from the interaction of specific risks across other parts of the business
- c. Measure the potential impact of those risks including probability of occurrence and likely financial impact
- d. Understand the possible risk management practices that could be used by the business
- e. Analyse those practices and identify their strengths and weaknesses
- f. Recommend new practices and procedures to improve the risk management in the business

Aim A4 – Price traditional products so as to optimise the price / volume / capital matrix

- a. Understand the impact of the business' strategy on the pricing paradigm
- b. Price products so as to optimise the price / volume trade-off, where one exists
- c. Understand the importance of capital availability and related risks on sales volume and other business objectives
- d. Price products for the business as a whole recognising the requirement for adequate return on capital

Aim A5 – Prepare medium term financial projections

- a. Create appropriate actuarial models to facilitate the preparation of medium term financial projections reflecting the essential business activities
- b. Analyse the material areas of experience for each of the key business drivers
- c. Develop an appropriate assumption set for the medium term including alternative scenarios
- d. Develop a stochastic approach to highlight the risks in these projections
- e. Prepare those medium term projections, including alternative scenarios, with particular attention to the uncertainties involved, including issues related to the capital required for the business
- f. Develop and use processes and key indicators to review future outcomes
- g. Understand the impact of longer term strategic objectives which impact on shorter term objectives

- h. Measure and communicate the risks involved in any departure from “true” matching between assets and liabilities
- i. Using the above outcomes, develop a proposed solution/s

Aim A6 – Measure the risks involved in alternative solutions

- a. Identify the risks involved in alternative solutions
- b. Measure these risks in terms of probability of occurrence and potential financial impact
- c. Communicate these risks in a manner such that their full impact is understood by management

Aim A7 – Understand the concept of materiality

- a. Understand the various definitions of materiality
- b. Develop the approaches or solutions with regard to appropriate materiality: costs, benefits, time
- c. Understand the risks involved in various approximations involved when using different measures of materiality

Aim A8 – Contextualise the proposed actuarial solution/s

- a. Place the proposed solution/s in the overall business context
- b. Apply the legislative, societal and political constraints which are relevant to the business to the proposed solution/s
- c. Communicate the proposed solution/s to the business’ stakeholders in a manner designed to ensure their understanding
- d. Describe and communicate the risks involved in those proposed solutions and in any alternative approaches

Part B – Communication in Written Form: Communicate, in written form, the solution/s to a range of audiences.

Aim B1 – Understand the different needs of various audiences

- a. Describe the different needs of various audiences in respect to the communication of solution/s
- b. Determine the necessary differences to the written communications required to satisfy the needs of those various audiences

Aim B2 – Understand the requirements for written actuarial communications

- a. Apply the requirements of the code of conduct and any relevant legislation to the communications

Aim B3 – Prepare actuarial reports

- a. Produce actuarial reports consistent with Aims B1 and B2

Part C – Application of Ethical, Corporate Governance and Professional Standards

Aim C1 – Understand general ethical business requirements

- b. Describe the generally accepted standards for ethical business behaviour

- c. Understand current societal attitudes towards business, their apparent behaviour standards and the potential diversity in these attitudes across different cultures
- d. Understand the responses emerging to the societal and political pressures on business to change its apparent behaviour standards

Aim C2 – Understand the emerging standards of corporate governance

- a. Understand the broad direction of legislation applying to corporate governance
- b. Understand the other forces impacting on general corporate governance standards
- c. Describe the actuarial profession's emerging standards relating to corporate governance.

Aim C3 – Apply ethical, corporate governance and professional standards to the contextualisation of solutions

- a. Apply the requirements of professional standards in framing and communicating the solution/s
- b. Apply the general ethical and corporate governance standards when contextualising the solution/s within the business as a whole
- c. Apply corporate governance standards as developed by the actuarial profession in the formulation and communication of the solution/s.