



Singapore College
of Insurance

Intermediate Level

Advanced Risk-Based Capital (RBC2) Strategies & Applications for Insurers

Register for

In Person Session

Or

Virtual Access



26 & 27 October 2026



14 CPD hours



9.00 a.m. – 5.00 p.m.
(Singapore Time)



Hybrid Mode
(Singapore College of Insurance / Virtual Mode)



As insurers continue to operate in a more complex capital, risk and regulatory environment, the ability to understand and apply Singapore's Risk-Based Capital framework has become increasingly important for senior insurance professionals, actuaries, risk managers, finance teams and business leaders. This two-day programme provides an advanced and practical exploration of RBC2, focusing not only on regulatory requirements, but also on how capital considerations influence solvency management, stress testing, liability valuation, product strategy, reinsurance decisions, asset-liability management and enterprise-wide governance.

The first four modules will be led by Vanessa Lou and Azer Manalad from EY, bringing together actuarial, finance, risk, regulatory, accounting and insurance-sector perspectives. This programme will examine the technical building blocks of RBC2, including capital modelling, solvency requirements, risk modules, financial resources, stress testing, liability valuation and capital optimisation. Participants will also work through practical scenarios and case studies to strengthen their ability to interpret RBC2 outcomes and translate them into strategic management actions.

Modules 5 and 6 will provide participants with a broader regulatory and practical perspective on risk-based capital frameworks and the application of Singapore's RBC2 regime. The modules will examine international solvency approaches, key principles of capital adequacy and supervisory intervention, as well as the practical interaction between RBC2, capital management, ERM, Own Risk and Solvency Assessment (ORSA), stress testing and governance. By combining international perspectives with the practical application of RBC2 in Singapore, participants will gain a deeper understanding of both the technical mechanics of risk-based capital regulation and its wider implications for insurers' capital, risk management and supervisory engagement.



Target Audience

This programme is suitable for insurance professionals who require a deeper understanding of RBC2 from a technical, strategic or governance perspective, including:

- Chief Financial Officers, finance leaders and capital management teams
- Chief Risk Officers, enterprise risk management teams and ORSA/stress testing teams
- Appointed actuaries, actuarial teams and valuation specialists
- Senior management and business leaders involved in capital planning or strategy
- Product, pricing and portfolio management teams
- Reinsurance, investment and asset-liability management professionals
- Compliance, governance and regulatory affairs teams
- Board members, board risk committee members and senior executives seeking stronger oversight of RBC2 implications



Key Learning Outcomes

By the end of the programme, participants will be able to:

- Explain the key components of the RBC2 framework, including solvency levels, capital adequacy requirements, financial resources and regulatory intervention levels.
- Analyse the main risk requirement modules under RBC2, including insurance, market and operational risks, and understand how correlation, diversification and aggregation affect capital outcomes.
- Assess the role of stress testing, scenario analysis, ORSA and reverse stress testing in evaluating insurer resilience under adverse conditions.
- Understand how liability valuation, discounting, matching adjustments, illiquidity considerations and IFRS 17 interactions can affect RBC2 assessments.
- Evaluate capital optimisation strategies involving product design, reinsurance, asset-liability management, capital planning and intra-group considerations.
- Compare the key principles and design features of Singapore's RBC2 framework with selected international risk-based capital and solvency regimes, including the IAIS Insurance Capital Standard and Solvency II.
- Evaluate how capital management, ERM, ORSA, governance, disclosure and supervisory intervention interact with regulatory capital requirements under RBC2.
- Apply risk-based capital concepts through case studies, workshops and discussions involving stress scenarios, market shocks, valuation impacts and capital-management responses.

Module 1: Advanced Capital Modelling

This module provides an advanced overview of the RBC framework and solvency levels, including RBC development, solvency requirements, intervention levels, Capital Adequacy Ratio, Financial Strength Ratio, Tier 1 capital and Common Equity Tier 1 (CET1) capital considerations. It will examine the detailed risk requirement modules under RBC2, including insurance risks such as mortality, morbidity, dread disease, expense and persistency risks, as well as market risks such as equity risk, interest rate mismatch, counterparty risk and credit spread risk. The module will also cover operational risk, correlation, diversification, aggregation approaches, financial resources, regulatory adjustments, capital add-ons and supervisory interventions.

Module 2: Stress Testing & Scenario Analysis

This module examines the role of stress testing and scenario analysis under RBC2, including MAS expectations on stress testing, Insurance-Wide Stress Testing and ORSA requirements. Participants will explore reverse stress testing for tail risks and consider how insurers can assess vulnerabilities under severe but plausible scenarios. The module will include case study discussions on catastrophic event simulation for life and non-life insurers, as well as a practical workshop on building multi-scenario stress testing models and identifying appropriate management actions.

Module 3: Liability Valuation & Complex Adjustments

This module focuses on advanced liability valuation issues under RBC2, including discounting techniques, risk-free rates and participating fund discount rates. It will also cover matching adjustment, volatility or illiquidity premium considerations, and their implications for RBC assessments. Participants will examine contract boundaries and interactions with IFRS 17, including differences relating to discount rates, expenses and contract boundary treatment. The module will include a workshop on valuation under stressed market conditions, with reference to how RBC results may be affected during and after market stress events.

Module 4: Capital Optimisation & Strategic Responses

This module explores how insurers can use RBC2 insights to support capital planning and strategic decision-making. Topics include capital levels, fungibility and transferability issues, corporate planning, intra-group considerations, product strategy based on RBC considerations, product capital intensity, reinsurance optimisation, governance requirements and the impact of reinsurance on capital outcomes. The module will also examine regulatory and accounting arbitrage considerations, asset-liability management under RBC2 constraints, duration matching, foreign exchange matching, investment risk hedging, participating fund management and unit-linked fund management.

Module 5: Risk-Based Capital Regimes – Design, International Perspectives & Implementation Challenges

This module examines the principles underlying risk-based capital regimes and how different solvency frameworks translate insurers' risk exposures into appropriate capital requirements.

Participants will consider the essential components of an effective solvency regime, including valuation, risk coverage, capital adequacy, calibration, and supervisory intervention.

The session will also draw on international and regional frameworks, such as IAIS Insurance Capital Standard (ICS) and Solvency II, to provide a broader perspective on the evolution of risk-based capital regulation.

The module will conclude by examining practical implementation challenges, including complexity of valuation and capital calculations, reliance on actuarial judgement, consistency of interpretation and possible unintended consequences of capital regulation.

Module 6: RBC2 in Practice – Capital Management, Supervisory Intervention & ERM

This module focuses on the practical application of Singapore's RBC2 framework and how it operates as part of an insurer's wider capital and risk-management framework. Participants will examine the objectives and key features of RBC2, including risk coverage, capital requirements, available financial resources, Capital Adequacy Ratio and solvency intervention levels.

The session will also explore how ERM, ORSA, stress testing, disclosure and board/senior management oversight complement regulatory capital requirements. Participants will consider the interaction between capital management and risk management, as well as the role of supervisory intervention and capital add-ons where risks or deficiencies are not adequately captured.



Programme Fee

In Person Session

Full Course Fee: **S\$827.31** (inclusive of 9% GST)

Virtual Mode

Singapore-based Participant: **S\$620.21** (inclusive of 9% GST)

Overseas-based Participant: **S\$569.00**

A 10% Group Discount is also applicable for organisations registering a minimum of three participants.

Programme Leaders



Vanessa Lou

Vanessa leads the ASEAN insurance and actuarial practice for EY. She has nearly 20 years' experience spanning actuarial work, finance, risk, product development, and large-scale business transformation. Her work with insurers, regulators, and industry bodies throughout the Asia Pacific has given her a well-rounded perspective on market entry strategies, regulatory frameworks, and value creation.



Azer Manalad

Azer Manalad has more than 20 years of experience in Assurance practice providing professional services to his clients in financial services, primarily in insurance, with some in banking and capital management, wealth and asset management as well as service sectors. He has been in the Financial Services team of EY Singapore since 2005. Azer worked for years in other EY offices (New York, Seattle and the Philippines) prior to joining EY Singapore. Azer has extensive experience across Life and General Insurance, as well as Reinsurance sectors. Azer has strong technical knowledge (both insurance and IFRS) and is highly competent in the Singapore financial services regulatory framework



Lee Wai Yi

**Director & Head of Supervisory Analytics Division, Insurance Department
Monetary Authority of Singapore**

Wai Yi has spent more than 20 years with the MAS. She first joined the MAS in 2004, when the risk-based supervision and risk-based capital framework was being rolled out. She started heading a newly formed division, Supervisory Analytics Division, within the Insurance Department in MAS in 2011. She led a team to enhance the Risk-Based Capital framework for insurers in Singapore ("RBC 2"), which was implemented in 2020. Her role involves making further refinements to the RBC 2 framework, conducting stress-testing on significant insurers, monitoring the macroeconomic inter-linkages between insurance and other financial sectors and providing analytics support to the insurance supervisors within MAS. Prior to this, Wai Yi was responsible for leading a team of officers in supervising a portfolio of direct life and composite insurers in Singapore. She was, and continues to be in some cases, actively involved in a number of projects such as enhancing the policy owners' protection scheme and insurance resolution framework in Singapore, the domestic systemically important insurers' framework, key executive persons' approval regime as well as the governance and disclosure framework for participating life insurance policies. She is also actively involved in supporting MAS' active participation in International Association of Insurance Supervisors' key initiatives, such as the holistic assessment of systemic risk. Wai Yi sits on the relevant committees chaired by the Supreme Court, responsible for developing and ensuring ongoing relevance of the actuarial tables for use in personal injury and death claims. Wai Yi had also undertaken actuarial roles such as product development, pricing, valuation and financial reporting, with a composite insurer and a regional office of a global reinsurer prior to joining MAS as a regulator.

