Singapore College of Insurance

Introductory Level

The Impact of Artificial Intelligence (AI) on Reinsurance

Register Now

📅 **20 May 2026** 📜 **3 CPD hours**

🕐 **9.30 a.m. to 12.30 p.m.**

💻 **Virtual Instructor Led Training**

Artificial Intelligence (AI) is reshaping the insurance industry, and reinsurance, with its complex risks and data-driven decisions, is uniquely impacted. The Impact of Artificial Intelligence (AI) on Reinsurance course is a focused 3-hour virtual programme designed to help reinsurance professionals understand how AI is transforming underwriting, pricing, claims, portfolio management, and strategic decision-making.

This programme demystifies AI, Machine Learning, and Generative AI in clear, non-technical terms, highlighting how they differ from traditional actuarial models and why reinsurance presents both significant opportunities and distinct challenges, particularly in long-tail and catastrophe exposures.

Participants will explore practical AI applications across the reinsurance value chain — from treaty pricing, exposure and accumulation management, catastrophe modelling, claims triage, reserving support, fraud detection, and capital optimisation.

Importantly, this programme also addresses the risks and governance challenges of AI adoption, including model bias, explainability, regulatory expectations, and the need for strong human oversight.

The session concludes with a forward-looking discussion on how AI may reshape reinsurer-cedant relationships, broking dynamics, and professional roles — reinforcing that AI is a decision-support tool that must be applied with sound judgment, discipline, and accountability.

Target Audience

Reinsurance underwriters, treaty & facultative teams, brokers, actuaries, claims professionals, risk managers, and senior insurance professionals seeking a strategic and practical understanding of AI in reinsurance.

Key Learning Outcomes

At the end of the programme, participants should be able to:

- Understand how AI is transforming the **reinsurance value chain.**
- Identify practical AI use cases across **underwriting, pricing, claims, and portfolio management.**
- Appreciate the **risks, limitations, and governance challenges** of AI in reinsurance.
- Evaluate how reinsurers and cedants can **responsibly adopt AI** to enhance decision-making and resilience.

Programme Outline

Module 1

AI Fundamentals & Why It Matters to Reinsurance

Key Topics

- What is AI, Machine Learning, and Generative AI (non-technical overview).
- How AI differs from traditional actuarial and rule-based models.
- Why reinsurance is uniquely suited (and challenged) by AI adoption.
- Data as the foundation: internal, external, and alternative data sources.
- The evolving role of human judgment vs algorithmic decision-making.

Reinsurance Lens

- Long-tail risks, sparse data, and tail dependency.
- Model uncertainty and explainability concerns.
- Impact on underwriting discipline and risk appetite.

Learning Outcome

- Explain key AI concepts and their relevance to reinsurance decision-making.

Module 2

AI Applications Across the Reinsurance Value Chain

Underwriting & Pricing

- AI-enhanced risk selection and portfolio optimisation.
- Treaty pricing, exposure analysis, and accumulation management.
- Use of AI in catastrophe modelling and climate-adjusted risk assessment.

Claims & Loss Analytics

- AI in claims triage, reserving support, and fraud detection.
- Pattern recognition in complex and catastrophic loss events.
- Improving speed and consistency in claims handling.

Portfolio, Capital & Strategy

- AI for stress testing, scenario analysis, and capital optimisation.
- Early warning signals and emerging risk detection.
- AI-driven insights for retrocession and risk transfer strategies.

Learning Outcome

- Identify practical AI use cases across underwriting, claims, and portfolio management in reinsurance.

Programme Outline

Module 3

Risks, Limitations & Governance of AI in Reinsurance

Key Risks

- Model bias, data quality, and over-reliance on AI outputs.
- Explainability and transparency challenges.
- Regulatory expectations and supervisory scrutiny.
- Cyber, data privacy, and intellectual property risks.

Governance & Controls

- Human-in-the-loop decision frameworks.
- Model validation, monitoring, and auditability.
- Ethical AI and accountability in reinsurance decision-making.

Learning Outcome

- Assess the risks and governance requirements associated with AI adoption in reinsurance.

Module 4

The Future of Reinsurance in an AI-Driven World

Looking Ahead

- How AI may reshape reinsurer–cedant relationships.
- Impact on reinsurance broking and market intermediation.
- Talent, skills, and organisational implications.
- Balancing innovation, prudence, and trust.

Interactive Discussion

- Case discussion: "Would you trust AI with this reinsurance decision?"
- Group reflection on opportunities vs risks for participants' organisations.

Learning Outcome

- Evaluate how AI could reshape reinsurance business models and professional roles.

Programme Fee

Local Participant: **S$141.70** (inclusive of 9% GST)
Overseas Participant: **USD100.00**

Participants who register at least two months prior to the course commencement date will be entitled to a 10% Early Bird Discount.

A 10% Group Discount is also applicable for organisations registering a minimum of three participants.
Please note that the Early Bird and Group Discounts are not cumulative.

Programme Leader
Mr. Raymond Cheung

Raymond Cheung is a CEO, Independent Director, and Chartered Actuary with over 20 years of leadership experience across financial services, insurance, fintech, and capital markets in Asia. He most recently served as Group CEO of Basel Medical Group (Nasdaq: BMGL), leading its successful Nasdaq IPO in 2025 and subsequent strategic acquisition to strengthen operational scale and governance.

Raymond currently serves as an Independent Director of SGX- and Nasdaq-listed companies, chairing Risk Management Committees and providing oversight on governance, IPO readiness, restructuring, and M&A. His career includes senior roles as Chief Risk Officer at AIG Asia Pacific and Asia Capital Reinsurance Group, and Regional Insurance Lead at Grab, where he built insurance frameworks across eight Southeast Asian markets.

A former Chair of Singapore's Risk-Based Capital Working Party, he has worked closely with MAS and regional regulators. Raymond is also an ESG advisor and sustainability trainer, and a UK-qualified Chartered Actuary.