CONCEPT

AI in Insurance: Underwriting, Pricing, Claims Automation and AI Governance

22 – 26 February 2027
Dubai - Five-star CBD venue



AI in Insurance: Underwriting, Pricing, Claims Automation and AI Governance

Ref: 72_9055 **Date:** 22 – 26 February 2027 **Location:** Dubai - Five-star CBD venue **Fees:** 21450 SAR

Introduction:

AI in insurance now shapes how carriers select risks, set premiums, settle claims and serve policyholders, yet many insurers run scattered pilots that never reach production or deploy pricing and claims models that nobody can explain to a policyholder or a supervisor. Underwriting, claims and customer teams need a shared way to choose, run and govern these tools. This Core Concept course takes insurer managers through AI along the policy lifecycle, from submission intake to claim settlement, and closes with an Insurer AI Roadmap and Use-Case Register built for their own line of business.

Course Objectives:

- Map AI and machine learning applications to each stage of the insurance value chain, from distribution and underwriting to claims settlement and renewal
- Specify underwriting and pricing analytics requirements, including risk selection signals, rating factors and data sources, for a chosen line of business
- Design claims triage and straight-through processing rules that route simple claims automatically and send complex or suspicious claims to adjusters
- Evaluate telematics, IoT, document processing and conversational AI proposals for policyholder value, data quality and operational fit
- Apply governance, fairness and explainability controls to insurance AI models, with reference to ISO/IEC 42001, NIST AI RMF 1.0 and the IAIS application papers on AI and fair treatment
- Build an Insurer AI Roadmap and Use-Case Register with sequencing, owners, KPIs and control checkpoints

Target Audience:

- Underwriting managers accountable for risk selection, referral limits and portfolio quality
- Pricing and actuarial managers who own rating structures and premium adequacy
- Claims managers responsible for first notice of loss, adjuster workload and settlement cycle times
- Customer service and distribution managers running contact centres, portals and broker or agent channels
- Insurance operations and transformation managers who sponsor automation and digital programmes
- Data and analytics managers who supply, buy or oversee models used by underwriting and claims teams

Course Outline:

Day 1: The AI Landscape Across the Insurance Value Chain

- Insurance Value Chain Map: Distribution, Underwriting, Policy Administration, Claims and Renewal
- Insurtech Business Models: Embedded Insurance, Digital MGAs and Parametric Cover
- Predictive, Generative and Agentic AI Explained for Insurance Managers
- Insurer Data Estate Review: Policy, Claims, Exposure and Third-Party Data
- Insurer AI Maturity Scorecard by Line of Business

Day 2: Underwriting and Pricing Analytics

- Submission Intake Automation and Underwriting Workbench Triage
- Risk Selection Models: Loss Propensity Scores and Referral Rules
- Pricing Analytics: Generalised Linear Models Versus Machine Learning Rating Factors
- Price Optimisation, Demand Elasticity and Renewal Retention Models
- Underwriting Performance Metrics: Hit Ratio, Loss Ratio Lift and Model Lift Charts

Day 3: Claims Automation, Documents and Customer Channels

- First Notice of Loss Capture and Claims Complexity Scoring
- Straight-Through Processing Rules and Adjuster Referral Thresholds
- Image-Based Damage Assessment for Motor and Property Claims
- Intelligent Document Processing for Policy Wordings, Invoices and Medical Reports
- Conversational AI Assistants and Next-Best-Action Personalisation for Policyholders

Day 4: Telematics, Fraud Signals and AI Governance for Insurers

- Telematics and IoT Data in Usage-Based Motor, Property and Health Cover
- Claims Fraud Signals Overview: Red Flags, Network Links and Referral to Special Investigations
- Proxy Discrimination and Fairness Testing in Rating and Claims Decisions
- Explaining Premiums and Claim Outcomes to Policyholders, Brokers and Supervisors
- Insurance Model Inventory and Controls Using ISO/IEC 42001, ISO/IEC 23894 and NIST AI RMF 1.0

Day 5: Case Work and the Insurer AI Roadmap

- Motor Insurer Case: Telematics Pricing Pilot Go or No-Go Decision
- Property and Health Claims Case: Straight-Through Processing Rate Versus Leakage
- IAIS Application Paper on AI: Supervisory Expectations Gap Check
- Insurer AI Roadmap and Use-Case Register Drafting for an Own Line of Business
- Roadmap Presentation to a Mock Underwriting and Claims Steering Group

Skills You Will Gain:

- Insurance AI Use-Case Mapping
- Underwriting Analytics Specification
- Rating Factor Evaluation
- Claims Triage Design
- Telematics Data Assessment
- Insurance Model Governance
- Fair Pricing Review
- Insurance AI Roadmapping

Why Attend This Course:

- Leave with an Insurer AI Roadmap and Use-Case Register that sequences pilots for your own line of business
- Challenge vendors and data teams on pricing lift, straight-through processing rates and claims leakage with evidence rather than demos
- Recognise when a rating factor or claims rule may treat policyholder groups unfairly and know which control to apply
- Compare AI practice with managers from motor, property, health, life and takaful carriers working in different markets

Conclusion:

AI adds value to an insurer only when underwriting, pricing, claims and customer teams pursue the same prioritised use cases, feed them sound data and can explain each automated decision to policyholders and supervisors. The course moves from the insurance value chain and insurtech models, through underwriting and pricing analytics, claims automation, document processing and customer channels, to telematics, fraud signals, fairness and model governance. The final day applies this material to motor, property and health cases and produces an Insurer AI Roadmap and Use-Case Register.