

Course No. 1876

Insurance Pricing Analytics Training Course

INSURANCE PRODUCTS & PRICING
INSURANCE & RISK MANAGEMENT

DURATION

5 Days

DELIVERY

Classroom



Course Overview

This professional training course provides a comprehensive and practical framework for applying analytics to insurance pricing decisions. It focuses on how insurers can use data, statistical analysis, risk characteristics, claims experience, and portfolio information to develop technically sound, commercially competitive, and risk-appropriate pricing strategies.

The course examines the complete insurance pricing analytics process, from data preparation and portfolio segmentation to risk classification, claims analysis, pricing variables, loss cost estimation, rate adequacy, profitability analysis, and monitoring. Participants will learn how to transform historical and current insurance data into meaningful insights that support more accurate pricing decisions.

A strong emphasis is placed on the relationship between pricing, underwriting, claims, risk selection, customer behavior, and portfolio performance. Participants will explore how analytical techniques can identify patterns in frequency, severity, loss ratios, exposure, retention, and profitability, while supporting pricing decisions across different customer segments, products, channels, and territories.

The course also addresses pricing governance, model validation, monitoring, data quality, assumptions, scenario analysis, and responsible use of analytical models. Participants will develop practical approaches for improving pricing accuracy while maintaining competitiveness, profitability, customer value, and effective risk management.

Objectives

- By the end of the course, participants will be able to:
- Analyze the strategic role of pricing analytics in insurance profitability and risk management.
- Evaluate insurance data required for effective pricing analysis and decision-making.
- Apply data preparation and segmentation techniques to insurance pricing datasets.
- Analyze claims frequency, severity, loss costs, loss ratios, and exposure patterns.
- Identify and evaluate key rating factors and risk characteristics.
- Develop analytical approaches for assessing insurance rate adequacy.

- Apply statistical and predictive techniques to support insurance pricing decisions.
- Evaluate pricing performance across products, customers, territories, channels, and risk segments.
- Analyze the relationship between pricing, underwriting performance, customer behavior, and portfolio profitability.
- Apply scenario and sensitivity analysis to evaluate pricing assumptions and potential outcomes.
- Establish pricing performance indicators and monitoring frameworks.
- Strengthen pricing governance, model validation, data quality, and analytical controls.
- Develop practical pricing improvement initiatives that balance competitiveness, profitability, and risk.

Who Should Attend

This course is designed for professionals working in insurance pricing, actuarial functions, underwriting, risk management, portfolio management, claims analytics, business intelligence, and insurance performance management.

It is particularly suitable for Insurance Pricing Managers, Actuaries, Pricing Analysts, Underwriting Managers, Insurance Risk Analysts, Portfolio Managers, Data Analysts, Business Intelligence Specialists, Product Managers, and professionals responsible for insurance pricing strategy and technical performance.

The course is also valuable for executives and decision makers responsible for underwriting profitability, product performance, portfolio growth, risk selection, pricing governance, and the effective use of analytics in insurance business decisions.

Learning Outcomes

- Upon completion of the course, participants will be able to:
- Explain the principles and business value of insurance pricing analytics.
- Assess the quality, relevance, and completeness of data used for pricing analysis.
- Prepare and structure insurance datasets for analytical applications.
- Segment insurance portfolios according to risk, exposure, customer, product, and performance

characteristics.

- Analyze claims frequency, severity, loss costs, and loss ratios.
- Identify significant pricing variables and evaluate their impact on risk.
- Assess rate adequacy and identify potential pricing deficiencies.
- Apply statistical and predictive analytical methods to insurance pricing.
- Compare pricing performance across customer segments, products, territories, and distribution channels.
- Evaluate the impact of pricing changes on profitability, retention, and portfolio mix.
- Use scenario and sensitivity analysis to assess pricing decisions under changing assumptions.
- Develop pricing dashboards and key performance indicators.
- Identify data, model, and assumption risks affecting pricing decisions.
- Establish effective pricing monitoring and review processes.
- Develop an actionable pricing analytics improvement plan aligned with business strategy and risk appetite.

Course Outline

DAY 01

Fundamentals of Insurance Pricing Analytics & Data Foundations

- Principles and strategic role of insurance pricing.
- Relationship between pricing, underwriting, claims, and profitability.
- Insurance pricing lifecycle and analytical decision-making.
- Types and sources of insurance pricing data.
- Exposure, premium, claims, customer, policy, and portfolio data.
- Data quality, completeness, consistency, and reliability.
- Data preparation and transformation for pricing analysis.
- Portfolio segmentation and risk classification.
- Identifying data patterns, anomalies, and potential biases.
- Defining analytical objectives and pricing questions.

DAY 01 — CONTINUED

PRACTICAL APPLICATION

Preparing and segmenting an insurance dataset for pricing analysis.

DAY 02**Claims Analytics, Risk Factors & Loss Cost Analysis**

- Understanding claims frequency and severity.
- Claims development and historical loss analysis.
- Loss costs and pure premium concepts.
- Loss ratios and their interpretation.
- Exposure analysis and portfolio characteristics.
- Identifying key rating factors and risk characteristics.
- Risk segmentation and classification.
- Geographic, demographic, behavioral, and product-related factors.
- Detecting trends and changes in claims experience.
- Evaluating the relationship between risk factors and claims outcomes.

PRACTICAL APPLICATION

Conducting a claims and loss cost analysis to identify key pricing drivers.

DAY 03**Statistical Pricing Analysis & Rate Adequacy**

- Statistical foundations for insurance pricing.
- Developing analytical relationships between risk characteristics and claims outcomes.
- Frequency and severity modeling concepts.
- Predictive analytics for insurance pricing.
- Evaluating pricing factors and their relative impact.
- Assessing rate adequacy and technical pricing.
- Benchmarking rates and identifying pricing gaps.

DAY 03 — CONTINUED

- Analyzing price differentials across customer and risk segments.
- Balancing technical pricing with market competitiveness.
- Evaluating pricing assumptions and analytical limitations.

PRACTICAL APPLICATION

Developing a pricing analysis framework to assess rate adequacy across selected insurance segments.

DAY 04

Pricing Optimization, Profitability & Customer Behavior

- Linking pricing decisions with underwriting performance.
- Pricing and portfolio profitability analysis.
- Customer retention and price sensitivity.
- Impact of pricing changes on demand and customer behavior.
- Cross-segment pricing analysis.
- Product, territory, and channel profitability.
- Scenario and sensitivity analysis.
- Evaluating pricing changes under alternative assumptions.
- Identifying opportunities for pricing optimization.
- Balancing growth, competitiveness, profitability, and risk.

PRACTICAL APPLICATION

Evaluating alternative pricing scenarios and their potential impact on profitability, retention, and portfolio composition.

DAY 05

Pricing Governance, Monitoring & Strategic Optimization

- Pricing governance frameworks and responsibilities.
- Pricing model validation and performance assessment.
- Data governance and analytical controls.

DAY 05 — CONTINUED

- Monitoring pricing performance and emerging trends.
- Pricing dashboards and key performance indicators.
- Tracking loss ratios, profitability, retention, rate adequacy, and portfolio mix.
- Identifying pricing deterioration and early warning indicators.
- Managing model, data, assumption, and implementation risks.
- Establishing pricing review and continuous improvement processes.
- Aligning pricing strategy with business objectives and risk appetite.

FINAL WORKSHOP

Developing an integrated insurance pricing analytics framework covering data, segmentation, claims analysis, pricing factors, rate adequacy, predictive analytics, profitability, customer behavior, scenario analysis, monitoring, governance, and continuous improvement.

Register or Request More Information

Course page: <https://quest-training.com/courses/insurance-pricing-analytics-training-course>

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