QUEST
Professional Center

PROFESSIONAL TRAINING COURSE

Course No. 1910

Insurance Data Analytics Training Course

INSURANCE DATA & ANALYTICS
INSURANCE & RISK MANAGEMENT

DURATION
5 Days

DELIVERY
Classroom

LOCATION
Dammam, Kingdom of Saudi Arabia

DATES
28 Dec 2026 – 1 Jan 2027

Scheduled Event Details

CITY	Dammam, Kingdom of Saudi Arabia
DATE	28 Dec 2026 – 1 Jan 2027
DELIVERY TYPE	Classroom
COURSE FEE	€4,200

Course Overview

This advanced training course provides a practical and strategic framework for using data analytics to improve decision-making, risk management, operational performance, and customer value across the insurance industry. It enables insurance professionals to transform large volumes of structured and unstructured data into meaningful insights that support underwriting, claims, pricing, fraud detection, portfolio management, and strategic planning.

The course explores the insurance data lifecycle, from data collection and quality assessment to analysis, visualization, interpretation, and business application. Participants will learn how to identify relevant insurance data sources, assess data quality, structure analytical problems, select appropriate analytical techniques, and translate analytical results into actionable business decisions.

A major focus is placed on applying analytics across key insurance functions. Participants will examine how descriptive, diagnostic, predictive, and advanced analytics can support risk assessment, customer segmentation, claims forecasting, pricing decisions, fraud detection, retention strategies, loss analysis, and portfolio performance monitoring.

The course also addresses data governance, privacy, security, analytical risks, model performance, data bias, and responsible use of insurance data. Through practical exercises, case studies, and applied workshops, participants will develop the ability to build insurance analytics frameworks, interpret key performance indicators, communicate insights to decision makers, and develop a roadmap for strengthening data-driven decision-making across the organization.

Objectives

- By the end of this course, participants will be able to:
- Understand the principles and strategic importance of data analytics in insurance.
- Analyze the insurance data lifecycle and identify critical data requirements.
- Assess insurance data quality, completeness, consistency, and reliability.
- Apply descriptive and diagnostic analytics to insurance performance data.
- Use predictive analytics to support underwriting, claims, pricing, and risk decisions.
- Analyze customer and policy data to identify segments, trends, and behavioral patterns.
- Apply analytical techniques to identify unusual patterns and potential insurance fraud.
- Evaluate claims data to identify drivers of frequency, severity, cost, and processing performance.
- Develop meaningful insurance dashboards and performance indicators.
- Interpret analytical outputs and translate them into actionable business recommendations.
- Identify data governance, privacy, security, bias, and model-related risks.
- Evaluate analytical models and monitor their effectiveness over time.
- Strengthen data-driven decision-making across insurance functions.
- Develop a practical roadmap for expanding data analytics capabilities within an insurance organization.

Who Should Attend

This course is designed for insurance professionals working in underwriting, claims management, actuarial functions, pricing, risk management, fraud management, product development, customer analytics, operations, finance, and strategic planning.

It is particularly suitable for executives, managers, team leaders, analysts, specialists, and decision makers who are responsible for using insurance data to improve operational performance, risk assessment, profitability, customer experience, and portfolio management.

The course is also relevant to data analytics, business intelligence, information technology, digital transformation, compliance, internal audit, and governance professionals who need to understand how insurance data can be analyzed, governed, and converted into practical business intelligence.

Learning Outcomes

- Upon completion of the course, participants will be able to:
- Explain the role of data analytics across the insurance value chain.
- Identify critical data sources and analytical requirements for insurance functions.
- Assess the quality and reliability of insurance datasets.
- Structure insurance business problems into analytical questions.
- Apply descriptive analytics to understand insurance performance and trends.
- Use predictive analytics to support risk and business forecasting.
- Analyze underwriting data to identify risk patterns and performance drivers.
- Analyze claims data to understand frequency, severity, costs, and operational trends.
- Identify analytical indicators associated with potential insurance fraud.
- Segment customers and policies using relevant data characteristics.
- Develop meaningful dashboards and key performance indicators.
- Interpret analytical results and communicate insights to management.
- Identify data governance, privacy, security, and analytical model risks.
- Monitor analytical model performance and data quality over time.
- Develop a practical insurance data analytics roadmap.

Course Outline

DAY 01

Foundations of Insurance Data Analytics

- Understanding the role of data analytics in modern insurance.
- The insurance data lifecycle and analytical value chain.
- Structured and unstructured insurance data.
- Internal and external data sources.
- Policy, customer, underwriting, claims, financial, and operational data.
- Data quality, completeness, consistency, and accuracy.
- Identifying analytical challenges and business requirements.
- From raw data to actionable insurance intelligence.

DAY 01 — CONTINUED

- Building a data-driven insurance culture.

> **PRACTICAL APPLICATION**
>
> Map key insurance data sources and identify opportunities to improve data-driven decision-making.

DAY 02

Descriptive and Diagnostic Analytics for Insurance

- Understanding descriptive and diagnostic analytics.
- Insurance performance measurement and trend analysis.
- Policy and portfolio analysis.
- Claims frequency and severity analysis.
- Loss ratios and operational performance indicators.
- Customer behavior and segmentation analysis.
- Channel and product performance analysis.
- Identifying trends, correlations, anomalies, and performance drivers.
- Developing effective insurance dashboards.

> **PRACTICAL APPLICATION**
>
> Analyze an insurance performance dataset and develop management insights and key performance indicators.

DAY 03

Predictive Analytics for Underwriting, Pricing and Claims

- Fundamentals of predictive analytics in insurance.
- Using historical data to identify future risk patterns.
- Predictive underwriting and risk classification.
- Claims frequency and severity forecasting.
- Predictive approaches to pricing and rating.
- Customer retention and lapse prediction.

DAY 03 — CONTINUED

- Portfolio risk forecasting.
- Model evaluation and performance monitoring.
- Translating predictive results into business decisions.

> **PRACTICAL APPLICATION**
> Develop a predictive analytics framework for underwriting or claims forecasting.

DAY 04

Insurance Fraud, Customer Analytics and Advanced Applications

- Data analytics for insurance fraud detection.
- Identifying anomalies and suspicious patterns.
- Customer segmentation and behavioral analytics.
- Customer lifetime value and retention analytics.
- Product and channel analytics.
- Portfolio profitability analysis.
- Early warning indicators and risk monitoring.
- Combining analytics with Artificial Intelligence and machine learning.
- Advanced analytical applications across insurance operations.

> **PRACTICAL APPLICATION**
> Design an analytics-based early warning framework for fraud, customer attrition, or portfolio risk.

DAY 05

Data Governance, Visualization, Decision-Making and Implementation

- Insurance data governance and accountability.
- Data privacy, confidentiality, and information security.
- Managing data bias and analytical risks.

DAY 05 — CONTINUED

- Governance of analytical models and decision-support tools.
- Designing executive dashboards and management reporting.
- Communicating analytical insights to senior decision makers.
- Defining analytics performance indicators and value realization.
- Building organizational data analytics capabilities.
- Prioritizing analytics initiatives and developing business cases.
- Final Practical Workshop: Develop an integrated Insurance Data Analytics Roadmap covering priority use cases, data requirements, analytical capabilities, governance controls, dashboards, performance indicators, and implementation priorities.

Register or Request More Information

Course page: https://quest-training.com/courses/insurance-data-analytics-training-course
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