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# Financial Digital Twins and Scenario Simulation for Business Resilience

## COURSE OVERVIEW

This course explores the emerging concept of Financial Digital Twins, virtual replicas of financial systems powered by real-time data and AI to simulate business performance and support resilient decision-making. Participants will acquire the needed skills to build, deploy, and interpret dynamic models that mirror real-time financial operations, forecast outcomes, and stress-test strategies under varying scenarios. Through interactive sessions and various case studies from sectors such as banking, corporate finance, and investment management, participants will be equipped with practical tools for enhancing forecasting accuracy, agile planning, and strategic risk management.

## WHO SHOULD ATTEND?

This course is ideal for CFOs, finance professionals, risk managers, business analysts, corporate strategists, and digital transformation teams looking to enhance financial agility, scenario planning, and resilience through simulation-driven decision-making. It also benefits investment analysts, financial controllers, fintech developers, and data scientists transitioning into predictive finance, as well as management consultants, regulators, and business intelligence professionals aiming to advance from descriptive analytics to prescriptive, model-based planning.

## COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Design financial digital twins integrating accounting, market, and operational data.
- Develop scenario engines to simulate economic shocks and black swan events.
- Calibrate simulation models using machine learning and historical crises data.
- Translate simulation outputs into actionable risk mitigation strategies.
- Evaluate ethical implications of predictive modeling in financial decision-making.
- Optimize real-time decision flows between twin simulations and live financial systems.
- Benchmark simulation accuracy against traditional forecasting approaches.

## KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- How to architect financial digital twins that mirror real-world accounting, market, and operational systems.
- The mechanics of scenario engines for simulating black swan events and economic shocks.
- Calibration techniques using machine learning and historical crisis datasets.
- Methods to operationalize simulations into executable risk mitigation strategies.
- Ethical guardrails for predictive modeling in financial decision-making.
- Integration protocols connecting twin outputs with live financial systems.
- Validation frameworks to benchmark simulation accuracy against traditional models.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.
1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded