

# BIN620 : Process Modeling and Analysis

The Process Modeling and Analysis Course will address how business intelligence systems are used to support the analysis and improvement of business processes. In addition to an exploration of business process modeling (BPM), process simulation modeling (PSIM), and enterprise risk modeling the course will examine a variety of statistical simulation and modeling concepts including model validation, sensitivity estimation, and Monte Carlo simulation. Lessons will also cover AB testing and optimization through simulation, including the use of Bayesian statistics in simulations used to support optimization processes. Selected cases and assignments will explore practical application of business-process analytics in solving real-world quality control, user-experience, and process-improvement problems. Students will also explore the application of course concepts in decision support systems (DSS) and the selection of key performance indicators (KPIs), including the use of balanced scorecards to monitor organization performance.

**Credits** 3