Description

In this three credit, 15-week online graduate course, leverage practical analytics tools to solve a variety of supply chain problems. This is achieved by using time series analysis, linear programming, statistical analysis, and other mathematical techniques. Quantify supply, demand, and inventory levels to develop insights for managerial recommendations.

Projects

Project 1
Experiment with predictive analytics to develop, evaluate, and determine which forecasting model should be used to plan for demand within a new supply chain.

Project 2
Develop a data-driven, prescriptive recommendation to meet demand and minimize production and logistics costs. Consider import duties as well in your recommendation.

Project 3
Conduct a descriptive analysis to select a regional source of supply for a product family. Craft an evidence-based recommendation by evaluating data related to quality and delivery performance.

Outcomes

Completion of the course enables you to:

- Develop forecasts from historical demand data
- Optimize production capacity allocation across multiple facilities accounting for time and cost
- Use supplier quality and lead time data to evaluate supplier performance
- Apply an analytic approach to develop descriptive, predictive, and prescriptive models to supply chain and logistics management scenarios
- Employ software tools to deliver insights and respond in context to a supply chain question, problem, or decision

Features

Live, online synchronous sessions with the instructor and professionals from various industries are scheduled every 2-3 weeks throughout the semester. These sessions are designed to cultivate your understanding of course concepts, guide your approach, and gain insights from others.

Technology

This course is offered through the RensselaerStudio, providing ease of access to all course technologies and software required, any time, anywhere. Synchronous sessions are held via Zoom.

Have questions about the course? Schedule a time to chat with Rensselaer