Description

In this three credit, 15-week online graduate course, employ the Supply Chain Operations Reference (SCOR) model to drive design and performance improvement within a manufacturing firm. Through the completion of three sequential course projects, you will manage key functions and processes within a supply chain to reduce costs, increase revenue, and satisfy customer needs.

Projects

Project 1: Demand Planning and Bill Of Materials
Diagnose issues within a bill of materials (BOM) by considering integration with the existing Enterprise Resource Plan (ERP), Materials Requirements Plan (MRP), and Master Production Schedule (MPS). Create a new BOM for a similar new product that aligns with ERP, MRP, and MPS constraints.

Project 2: Supply Chain Network Design
Develop a supply chain and logistics network design to launch a new product in a foreign market. This includes an evaluation of logistics, procurement and sourcing strategies, as well as inventory management considerations.

Project 3: Sales & Operations Planning
Utilize the Sales and Operations Planning (S&OP) process to evaluate historical supply and demand, create future projections, and formulate an appropriate plan to meet projected demand. Summarize your efforts by crafting an S&OP presentation for an executive management team.

Outcomes

Completion of the course enables you to:

- Understand and apply the Supply Chain Operations Reference (SCOR) model to view the overall supply chain
- Scrub, create and manage a bill of materials (BOM) to improve demand planning
- Design a supply chain network considering regional and/or global requirements and tradeoffs
- Understand the role and advantages of varying modes of transportation for logistics decision making
- Improve vendor management for new and existing suppliers with a strategic approach to procurement
- Use real supply chain data to achieve actionable results

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