

MSSCM

CORE COURSES

- MKT 630: Supply Chain Fundamentals & Strategies
- MKT 631: Production & Operations Management
- MKT 632: Supply Chain Modeling & Analysis
- MKT 633: Applied Data Analytics
- MKT 634: Quality Management & Lean Operations
- MKT 635: Logistics Management
- MKT 636: Sourcing, Purchasing & Contract Management
- MKT 637: Negotiation in Supply Chain

CAPSTONE COURSE

- MKT 740: Industry Project (10 weeks in summer)

ELECTIVE COURSES

Choose ONE of the following:

- MFS 613: Sustainability, Ethics & Leadership in Manufacturing Organization (Spring)
- MFS 606: Global Issues in Manufacturing (Fall)
- MKT 530: Service Marketing Management (Fall/Spring/Summer)
- MGT 610: Global Management (Fall/Spring)
- MGT 697: Leadership, Communications & Ethics (Summer)
- CPH 600: Health Services and Systems Organizations (Fall/Summer)
- PA 602: Strategic Planning and Organizational Change in the Public and Nonprofit Sectors (Fall)
- HMT 588: Strategic Management in the Hospitality & Food Service Industry (Fall/Spring)

COURSE DESCRIPTIONS

MKT 630: Supply Chain Fundamentals & Strategies

Supply chain management concerns the integration of key business processes that enable the fulfillment of end-customers real needs. Central to supply chain management philosophy is integration - the socio-technical linkages that facilitate the efficient flows of information, ideas, knowledge, goods, services, and cash through the supply chain. This course will introduce students to the terminology, concepts, and skills related to supply chain management, with a focus on strategic, relational, and operations issues. Through this course, students will develop an understanding of important supply chain terminology, processes, systems, and improvement methodologies that enable effective management and strategy deployment.

MKT 631: Production & Operations Management

This course will introduce students to concepts, tools, and techniques necessary for planning and control of production and other operations of an organization. Organizational processes from sourcing and inventory management to production planning and scheduling as well as quality control will be covered. Students will learn how to model and analyze operations, and to evaluate impact of various strategies on the processes and on products/service quality, productivity, efficiency, and cost effectiveness, especially when there are uncertainties.

MKT 632: Supply Chain Modeling & Analysis

This course teaches students how to make business decisions based on the data and quantitative models. It introduces students to the optimization methods used in business primarily linear and integer programming. The concepts are studied mainly in the context of applications to the operations and supply chain management field. Examples from other business disciplines such as finance and human resource management are included too. In this course, students learn to model the business problems on Excel spreadsheets, analyze and solve the models, and then interpret the solutions obtained to make recommendations to managers.

MKT 633: Applied Data Analytics

In today's business settings, knowledge workers increasingly rely on data-driven decision-making strategies. This course provides the necessary data analytics background for subsequent coursework dealing with topics such as quality control, inventory management, sourcing, and logistics management. It introduces students to the Normal distribution, Decision Tree Analysis, Demand Forecasting, and Interactive Data Visualization, all of which rely on data as the grist to help generate useful managerial information and insights.

MKT 634: Quality Management & Lean Operations

This course focuses on the principles, and practices of total quality management (TQM) and lean operations. Topics that are covered include: process focus; continuous improvement; service quality; customer satisfaction; process control and capability; Six-Sigma methodology and tools; economics of quality; and organizational learning.

MKT 635: Logistics Management

This course focuses on the physical distribution, movement, and delivery of goods and services throughout the supply chain so that the right amount of materials and/or products arrive at the right place at the right time. It requires the co-ordination, organization, and management of an organization's distribution network to perform such function as facility location, transportation, storage, material handling, packaging, inventory control, order fulfillment, and reverse logistics.

MKT 636: Sourcing, Purchasing & Contract Management

This is an advanced course that aims to educate students about strategic considerations and complex decision-making processes in sourcing, purchasing and contract management. The course broadens and enhances students knowledge and skills to manage related issues through a mixture of lectures and case analyses and discussions. Students will learn how to systematically and effectively approach complicated supply chain management problems on strategic sourcing, supplier selection, and contract design by integrating and applying the knowledge, analytics skills, and ways of thinking that they acquired in prior SCM coursework.

MKT 637: Negotiation in Supply Chain

This course focuses on developing your negotiating skills and making you a more confident negotiator. By the conclusion of this course, you will have improved your ability to diagnose negotiation situations, strategize and plan upcoming negotiations, and engage in more fruitful negotiations, even in situations where you are dealing with difficult negotiation partners.

MKT 740: Industry Project

This is a team-based industry project course where collaborative teams of Supply Chain Engineering and Supply Chain Management students are paired with a company or organization. Each company or organization provides the team with a supply chain related problem of importance. Student teams are co-advised by Engineering and Business faculty who have direct contact with the company. The faculty co-advisers will mentor and guide each team to work together collaboratively to propose solutions for a real-world supply chain problem with an industry partner.