

MS in Supply Chain Management Curriculum

List of Courses by Semester	
<p>Foundations Course Work during August (assigned based on academic background and are in addition to the 36 required credits)</p> <p>FIN 510 Introduction to Finance (2) ACCT 560 Introduction to Financial Accounting (2) OMM 510 Operations Management Foundations (2)</p>	
Fall Semester (18.0 credits)	
Fall A	Fall B
<p>OMM 576 Foundations of SC Management (1.5) MKT 579G Contemporary Marketing Channels (1.5) or MGT 534, Corporate Strategy in FL B</p>	<p>MGT 534 Corporate Strategy (1.5) or MKT 579G, Contemporary Mkt Channels in FL A OMM 572 Strategic Quality Management (1.5) MGT 550B Managing the Innovation Process (1.5)</p>
<p>OMM 500D Project Management (3) MEC 537 Data Analysis, Forecasting and Risk Analysis (3) OMM 558 Advanced Operations Strategy (3) MGT 501 Global Supply Chain and Logistics System Design Project* – Practicum (3)</p>	
Spring Semester (18.0 credits)	
Spring A	Spring B
<p>OMM 559 Managing Global Business Process Outsourcing for Competitive Advantage (1.5) OMM 577 IT & Supply Chain Management (1.5) OB 565 Leading Change (1.5) FIN 524 Options and Futures (1.5)</p>	<p>OMM 500E Supply Chain Risk Management (1.5) ACCT 502 Managerial Control Systems (1.5) OMM 573 Operations Mgmt in the Service Industry (1.5) Marketing Elective** (1.5)</p>
<p>OMM 554 Operations Planning and Control (3) OMM 500F Advanced Topics in Logistics and Supply Chain Management (1.5)</p> <p>OB 561 Negotiations and Conflict Management (1.5) or MGT 528 Creating Exceptional Value: Performance w/o Compromise (1.5) or Auctions and Procurement Markets (1.5)</p>	
Total (36 credits) 31.5 required and 4.5 elective credits	

**The MGT 501 practicum experience can occur during the fall semester, spring semester, or summer term based on project availability and student interest.*

***The Marketing elective can be taken in either Spring A or Spring B.*

Fall Courses

OMM 576 Foundations of Supply Chain Management

Examines how companies manage effectively the entire set of activities involved in the production and delivery of goods and services to their customers. Supply chain management (SCM) deals with the management of materials, information, and financial flows in networks consisting of suppliers, manufacturers, distributors, and customers. Recent trends in communication technology, sophisticated information systems, globalization of operations and markets, increased demand for mass customization, and increasing customer expectations have made the coordination and integration of these flows within and across companies critical to the success of businesses. This course focuses primarily on the foundations of SCM, touching topics such as: 1) matching supply with uncertain demand, 2) inventory management, 3) logistics, 4) design for variety, 5) global issues in SCM, 6) Quick/Accurate Response, and 7) collaborative processes. 1.5 credits.

MKT 579G Contemporary Marketing Channels

In this course we examine the important strategic issues related to marketing channels. Important topics include: conflict versus cooperation in marketing channels, the coordination problems between manufacturers and retailers, vertical restrictions, channel leadership, firm boundary and channel structure, franchising, and public policy towards marketing channels. 1.5 credits.

OMM 500D Project Management

Change management has become synonymous with project management, since organizations that want to change their focus or direction increasingly recognize that introducing new products, processes, or programs in a timely and cost effective manner requires professional project management. This course analyzes complex projects and discusses available tools for managing them. Some of the topics covered include life cycle models, project selection, project monitoring and control, planning with uncertainty, project risk management, the critical chain method, and managing multiple projects. It also discusses commercial project management software and how to overcome its limited functionality to address the requirements of managing risky complex projects in practice. Students learn project management skills that will be useful throughout their careers. As such, this course is essential for current or future managers regardless of their career concentration. 3 credits.

MEC 537 Data Analysis, Forecasting & Risk Analysis

This course presents a modern and contemporary coverage of several econometric models that are used for the analysis and forecasting of business data. The basic building blocks for the analysis are regression time series models. Broad coverage of non-seasonal and seasonal ARIMA models is included. The important family of ARCH-GARCH models, used to represent changing volatility, are also covered in detail. These models are widely used in option pricing and in other financial applications. The course includes some extensions of these models to multivariable problems. Students are exposed to numerous real data sets in class and in assignments. All the models are analyzed with a popular econometrics software package that is employed in business. A group project is required. 3 credits.

OMM 558 Advanced Operations Strategy

This course deals with operations issues having a long-term impact on the corporate strategy, and on the competitive viability of a firm. We develop a general framework for creating and

analyzing strategies for managing domestic and international manufacturing and service operations. The strategic decision categories to be examined include product-process technology strategies, facilities, and capacity management, performance measurement, managing quality and productivity, and system design. The course covers productivity measurement, process choice, product profiling, interfaces with marketing, experience costs, process positioning, accounting and financial perspectives, and international operations. It gives equal attention to service operations and manufacturing operations. Emphasis is on the application of systems thinking to case studies and the design of world class operations. It is valuable for students with an operations or general management focus, as well as for finance and marketing students. 3 credits.

MGT 501 Global Supply Chain and Logistics System Design Project Practicum

Students work in four-person teams on consulting projects, applying insights from their course work to real-world business problems under faculty supervision. Each student is expected to spend about 150 hours on the project. Grades are based on the quality of the final written and oral reports, as determined by the faculty supervisor. Students are paid a small gratuity, the amount, depending on the quality of the work. 3 credits.

MGT 534 Corporate Strategy

This course explores the unique strategy issues that arise within multi-business firms. The course examines how value is created or destroyed through the process of combining businesses and examines strategic issues surrounding mergers and acquisitions. Discussion within the course will critically evaluate patterns of diversification and growth within firms. The course will also address issue of vertical integration, exploring the limits of firm size. The course will also address the unique organizational design choices that emerge in multi-business settings, including an exploration of corporate governance. 1.5 credits.

OMM 572 Strategic Quality Management

Discusses the theory and practice of quality management in the business world. Covers operations and marketing issues that are typical for manufacturing and service organizations, a cross-functional perspective emphasizing the interactions between the operations and marketing decisions. Topics include quality strategies and competition; organization and incentives for quality enhancement (the approaches of Crosby, Deming, Feigenbaum, Ishikawa, and Juran); quality-function deployment; process mapping; and the role of top management. 1.5 credits.

MGT 550B Managing the Innovation Process

The course takes the perspective that innovation is a core business process associated with survival and growth of the organization, and it should be managed as such. We view innovation broadly as a process of knowledge creation. Innovation creates new possibilities through combining different knowledge sets. This process is multi-stage and takes place under highly uncertain conditions. The course objective is to help develop for our students the needed managerial skills in managing the multi-stage process of innovation. We focus on the systematic management of innovation processes through careful resource commitment and management of involved uncertainties. 1.5 credits.

Spring Courses

OMM 500E Supply Chain Risk Management

Many events in the last few years made supply chain managers keenly aware of the multiplicity and diversity of risks affecting them, from fluctuating commodity prices, unstable currencies, hurricanes and earthquakes, fires, terrorist attacks, contaminated material sourced from developing countries, and suppliers going bankrupt in tight financial credit environments. Building a functional supply chain requires careful planning and consideration of a variety of disruption risks, and it is of paramount importance to integrate management of physical flows and financial hedges when dealing with such risks. Companies that effectively manage their supply chain risks enjoy a level of robustness (flexibility) and resilience (disruption-"proof-ness") that affords them significant competitive advantage. This course will develop a comprehensive risk management framework for complex supply chains and introduce students to all needed decision tools for supply management and risk hedging. In addition, it will outline a portfolio of proven strategies to assess, reduce, hedge, and mitigate supply chain risks. 1.5 credits.

OMM 577 Information Technology and Supply Chain Management

Recent developments and breakthroughs in information technology have radically changed the business world, offering opportunities not only for new products and services also for reengineering supply chains and improving supply chain performance. The course will study how the innovations in information technology affect the ways information flows through the supply chain, which in turn provide opportunities to better coordinate the material and financial flows. The course will review business cases in which companies use supply chain management concepts and emerging technologies to improve business processes as well as creating values. 1.5 credits.

OB 565 Leading Change

This course introduces the concepts of how leaders create and manage change in four domains: developing a strategic vision, designing new structures and processes, aligning individual motivation with organizational culture, and gaining support for the implementation of change. The class approach will include presentations on leadership experiences, case studies of examples of leaders exhibiting specific behaviors, and experiential exercises. It offers participants meaningful opportunities for the development of a portfolio of tools for leading change. 1.5 credits.

FIN 524 Options & Futures

Focuses on futures with an introduction to options. Discusses forward and futures pricing, and the use of various futures contracts to hedge commodity price risk, interest risk, currency risk, stock portfolio risk, and other risk exposures. 1.5 credits.

OMM 554 Operations Planning and Control

Examines approaches to problems of operations planning and control in various organizational settings. Topics include demand forecasting (data analysis, forecasting techniques, and control of forecasting systems), end-item inventory control (lot sizing, safety stock, and evaluation of systems), and materials requirements planning (master scheduling, shop scheduling, aggregate capacity planning, and systems implementation). 3 credits.

OMM 500F Advanced Topics in Logistics and Supply Chain Management

Fast-changing consumer demand, the Internet and digital technology, growing competitive pressures, and globalization create new opportunities and challenges on how firms can efficiently deliver the right product to the right place at the right time. Practitioners have responded to drastic market changes through various innovative strategies such as supply chain redesign. These challenges have also attracted significant academic attention and inspired new supply chain research. This course focuses on advanced topics in logistics and supply chain management that are of interest to managers, consultants, and researchers. Students will gain exposure to state-of-the-art knowledge about these topics by attending seminar sessions given by both industry and academic speakers. 1.5 credits.

OB 561 Negotiation & Conflict Management

Managers spend the majority of their time negotiating - from negotiating schedules and vacation time to negotiating resource allocations to negotiating mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the toolbox of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations, to analyze, plan, and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and resolving conflict in a variety of settings. Course format will involve simulated negotiation and experiential exercises, cases, discussion, and lecture. Students will be evaluated on the basis of case analysis, negotiating performance, a final project, and participation. Students are expected to participate in all negotiation exercises. 1.5 credits.

MGT 528 Creating Exceptional Value: Performance without Compromise

This course will be a kind of experiential learning course in which students understand how the various concepts they have learned during the program were applied by a company (Emerson) that achieved excellent results. The course will bring together a variety of concepts in leadership, CEO succession, strategic planning, operational processes, customer satisfaction, organic growth and growth through mergers and acquisitions, globalization, and innovation. It will involve discussions by the ex-CEO of Emerson and senior executives. 1.5 credits.

ACCT 502 Managerial Control Systems

Organizations face both information and incentive problems, usually simultaneously. Managerial control involves developing policies and systems to cost-effectively minimize these problems while helping the organization achieve its objectives. The course focuses on control issues by analyzing the financial aspects of planning, feedback, and performance measurement. Topics include: responsibility accounting, budgeting, benchmarking, target costing, variance analysis, productivity measures, transfer pricing and optimal design of performance measures. 1.5 credits.

OMM 559 Managing Global Business Process Outsourcing for Competitive Advantage

The growth of global outsourcing of all types of business processes (from manufacturing, to R&D, engineering, call centers, clinical trial tests, IT, Accounting, human resources, etc.) with third party contracting organizations all over the world has been heralded by the popular and academic press as the most important business trend of the last decade. As a result of such strategic trends and actions, it becomes essential to strategically manage the "global business process outsourcing" as a key business process by itself, and thus to hire and train managers that fully understand the tradeoffs, implementation challenges involved, approaches for

managing risks, and more importantly, able to manage the business relationships with the third party contracting organizations. The course is intended to provide the fundamental skills to our MBA/PMBA students so they can become successful, global managers of "virtual" value chains, which when faced with outsourcing decisions, can competently make them within the context of their firm's strategy, but also effectively execute all aspects of the outsourcing process and manage the outsourcing relationship with their suppliers. There will be a course packet with readings and case studies. 1.5 credits.

OMM 573 Operations Management in the Service Industry

The service industry is of vital importance to today's economy. Through a greater understanding of the design and operation of services, productivity improvements can be achieved which result in real growth. In this course we will analyze both the strategic issues in service management as well as the particular aspects of running firms. We will discuss important issues in the operations of major service providers such as hotels and restaurants, airlines, retailers, financial services, and health care providers. We cover such topics as: service design, capacity and demand management, quality in services, variability and bottlenecks, and revenue management. The course will approach services from an operations management viewpoint, though related aspects of strategy, marketing, technology management and organizations will be discussed. Much of the discussion will focus on case studies and articles. Students will be required to write-up several cases, complete other written assignments, and may be required to take part in a term project. 1.5 credits.