Master of Science in Supply Chain Management

36 semester credit hours minimum

Faculty

**Professors:** Alain Bensoussan, Metin Cakanyildirim, Huseyin Cavusoglu, Milind Dawande, Ganesh Janakiraman, Elena Katok, Ozalp Ozzer, Suresh P. Sethi, Kathryn E. Stecke

**Associate Professor:** Mehmet Ayvaci, Dorothée Honhon, Bin Hu, Anyan Qi, Shouqiang Wang

**Assistant Professors:** Soraya Fatehi, Andrew Frazelle, Ignacio Rios Uribe, Serdar Simsek, Ashwin Venkataraman, Guihua Wang

**Professor Emeritus:** John J. Wiorkowski

**Clinical Professors:** William Hefley, Sonia Leach, Divakar Rajamani, Kannan Ramanathan, Mark Thouin

**Clinical Associate Professors:** Shawn Alborz, Avanti P. Sethi, Ramesh Subramoniam, Aysegul Toptal, David Widdifield

**Clinical Assistant Professors:** Athena Alimirzaei, Judd Bradbury, Jason Parker

**Professor of Instruction:** Luell (Lou) Thompson

**Associate Professors of Instruction:** Monica E. Brussolo, Mohammad Naseri Taheri

**Assistant Professors of Instruction:** Negin Enayaty Ahangar, Rasoul Ramezani

**Associate Professor of Practice:** David Parks

**Assistant Professor of Practice:** Khatereh Ahadi

Degree Requirements

The Master of Science in Supply Chain Management (MS SCM) is a minimum 36 semester credit hours STEM (Science, Technology, Engineering and Mathematics) degree program that explores the key issues associated with the design and management of industrial supply chains, including methods for improving supply chain operations by lowering costs and improving quality. The depth of the program uniquely prepares students to be the next generation of business leaders with skills and competencies necessary to perform across functions within an organization. Students gain business management knowledge and analytical decision-making skills (especially for complex systems) along with real-life experiences through industry projects.

To apply for this degree program, an undergraduate degree is required (all majors are considered). Students must maintain a 3.0 grade-point average (GPA) in both core courses and in all graduate courses taken in the
degree program, excluding program prerequisites to qualify for the MS degree. Following the completion of 18 credit hours, a student must successfully complete an internship or practicum.

Prerequisites

Students pursuing the Master of Science in Supply Chain Management degree program are required to complete one semester credit hour of MAS 6102 Professional Development course (except executive education students). In addition, knowledge of calculus is required and students who have not completed an undergraduate calculus course may satisfy the prerequisite by completing OPRE 6303 Quantitative Foundations of Business. Degree credit is not earned for program prerequisites, however, the grade achieved in prerequisites will count toward the student's grade-point average (GPA). All program prerequisites must be satisfied within the first semester of graduate study as a degree-seeking student.

Course Requirements

Core Courses: 18 semester credit hours

- **OPRE 6301** Statistics and Data Analysis
- **OPRE 6302** Operations Management
- **OPRE 6366** Global Supply Chain Management
- **OPRE 6370** Global Logistics and Transportation
- **OPRE 6371** Purchasing, Sourcing and Contract Management

And choose one course from the following courses:

- **ACCT 6305** Accounting for Managers
- **FIN 6301** Financial Management

Elective Courses: 18 semester credit hours

Students may choose any master's level course with the OPRE prefix, excluding OPRE core courses, or any course listed below. As part of the 18 semester credit hours of elective courses, students may substitute up to six semester credit hours of master's-level courses from any unrestricted course/prefix or catalog year offered within JSOM.

- **OPRE 6009** Supply Chain Management Internship (required elective)
- **OPRE 6304** Operations Analytics
- **OPRE 6305** Business Analytics with R
- **OPRE 6325** Healthcare Operations Management
- **OPRE 6332** Spreadsheet Modeling and Analytics
- **OPRE 6334** Advanced Business Analytics with SAS

OPRE 6335 Risk and Decision Analysis
OPRE 6340 Flexible Manufacturing Strategies
OPRE 6341 Retail Operations
OPRE 6354 Quality Improvement in Healthcare: Six Sigma and Beyond
  or OPRE 6364 Lean Six Sigma
OPRE 6355 Deal Making Strategies
OPRE 6359 Advanced Statistics for Data Science
OPRE 6362 Project Management in Engineering and Operations
OPRE 6363 Inventory Control
OPRE 6367 Capstone Projects in Supply Chain Management
OPRE 6368 Industrial Applications in Supply Chains
OPRE 6369 Supply Chain Software with SAP
  or OPRE 6390 Enterprise Resource Planning with SAP
OPRE 6377 Demand and Revenue Analytics
OPRE 6378 Supply Chain Strategy
OPRE 6379 Product Lifecycle Management
OPRE 6382 Import and Export Trade Compliance
OPRE 6388 Engineering Packaged Goods Distribution
OPRE 6389 Managing Energy: Risk, Investment, Technology (MERIT)
OPRE 6393 Database Foundations
OPRE 6394 Technology and New Product Development
OPRE 6398 Prescriptive Analytics
OPRE 6399 Business Analytics with SAS
OPRE 6V98 Supply Chain Management Internship
OPRE 6V99 Special Topics in Operations Research

Supply Chain Management Tracks

The MS SCM degree program offers students with opportunities to focus in a specific track or combination (optional) to obtain an in-depth knowledge in a specific business area depending on their interests.

The Analytics track is recommended for students interested in managing and analyzing large-scale data and developing organizational strategies.
The Retail track is recommended for students interested in managing retail operations, understanding demand and pricing and customer relationships.

- **OPRE 6341** Retail Operations
- **OPRE 6355** Deal Making Strategies
- **OPRE 6377** Demand and Revenue Analytics

The Risk track is recommended for students interested in understanding uncertainty, decision making in risky environment and budgeting and scheduling projects.

- **OPRE 6335** Risk and Decision Analysis
- **OPRE 6362** Project Management in Engineering and Operations
- **OPRE 6389** Managing Energy: Risk, Investment, Technology (MERIT)

The Strategy track is recommended for students interested in business strategy, product development and quality.

- **OPRE 6340** Flexible Manufacturing Strategies
- **OPRE 6364** Lean Six Sigma
- **OPRE 6378** Supply Chain Strategy
- **OPRE 6379** Product Lifecycle Management

1. Executive Education students may take FIN 6301 course as an elective with prior approval of the program director.

2. Students may use OPRE 6009 only for their first internship and any additional internship must be completed as OPRE 6V98 (3 semester credit hours maximum). Students may use OPRE 6V98 or OPRE 6367 to fulfill the internship requirement. Students are no longer eligible to enroll in OPRE 6009 if they have already completed OPRE 6V98 or OPRE 6367.