Supply Chain Management

M A S T E R   O F   S C I E N C E   D E G R E E
The mission of the Broad College of Business is to excel in the education and development of business leaders and in the creation and dissemination of knowledge, leading to national and international prominence in our core programs.
Michigan State University has led the nation and the world in supply chain education for more than 50 years. MSU has always recognized the demand for supply chain professionals who have the breadth of knowledge to efficiently and effectively manage integrated supply chain processes. And we are proud that we are recognized for our efforts in leading supply chain education.

Additionally, MSU’s Broad College of Business has one of the top 25 business programs in the nation according to U.S. News & World Report’s rankings. The mission of the Broad College is to excel in the education and development of business leaders and in the creation and dissemination of knowledge, leading to national and international prominence in our core programs.

MSU is one of the largest universities in the nation with more than 46,000 students. It can provide world-class academic resources and facilities at both the undergraduate and graduate level. The Henry Center for Executive Development — where the Master of Science in Supply Chain Management classes are held — is a state-of-the-art teaching facility that offers everything a graduate student needs for a world-class educational experience.

We offer the opportunity for the working SCM professional to earn a supply chain degree from the top-ranked school in supply chain — and we encourage you to learn more about us.
Our curriculum is designed to train students to effectively apply supply chain theory and technology.
Supply chain management impacts every level of business activity. As we move the discussion from the traditional “supply chain” to the even more comprehensive “value chain,” you are ready for the next step, too.

At Michigan State University, we see the “big picture.” Our faculty know how to bring their research and innovations back to students. Our faculty’s research in integrated supply chain management, security/risk management, sustainability — and a host of other timely topics — leads the nation in addressing the issues that matter to you as you develop the skills to strategically manage your supply chain career.

We offer an expansive curriculum that provides you the opportunity to improve upon your analytical capabilities, acquire new methods to measure your supply chain operations and learn to manage increasingly global and dispersed supply chain organizations.

Our facilities are the best a major research university can offer. The Henry Center for Executive Development is a state-of-the-art learning facility on the southern end of the beautiful MSU campus. Technology-enabled classrooms make our learning experience world-class.

As a graduate of the Master of Science in Supply Chain Management Program you will know how to:

• Develop new processes to deliver predictable results
• Measure your supply chain accurately and effectively
• Consistently apply the latest in SC technology
• Understand risk management
• Ensure sustainability
• Strategically manage change within your company

Most importantly — you will leave MSU as an effective supply chain manager who can articulate the correct supply chain vision for your organization.
Our faculty know what should be taught. They excel at communicating the results of their research and innovation back to the MS-SCM students.
Michigan State University’s faculty are some of the world’s leading researchers and writers on the supply chain topics of today. Articles, cases and textbooks recently published by MSU faculty cover the following areas:

- Global Supply Chain Design and Logistics
- Network Optimization
- Product Safety and Risk Management in Global Supply Chains
- Manufacturing Flexibility
- Sustainability
- Order Fulfillment Responsiveness
- Reverse Logistics
- Environmentally Conscious Manufacturing
- Supply Chain Security Practices
- Integrated Supply Management
- Collaboration and Supplier Development
- Strategic Sourcing Decisions
- Modeling and Information Systems for Logistics Operations
- Customer Relationship Management
- Service Supply Chains

Please see our faculty website for links to each of our talented faculty — learn more on what they are writing about and teaching to MS-SCM students.

Learn more at: http://broad.msu.edu/facultystaff/?ps_d=supply+chain+management
## 19 Month Program

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<th>1st Summer Semester</th>
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**August**

| SCM 872             | SCM 875           | SCM 886             |
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## 2nd Summer Semester

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(Rail Management track to be added soon)

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## Extended Program

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**August**

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| 6 credits           |                   |                     |

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**MS-SCM FAQs**

**What do I need before I apply?**
- GMAT results, where necessary
- Undergraduate transcripts
- Essays
- Résumé
- 3 recommendations
- TOEFL (for international students)

**Where do I apply?**
- Visit the MS-SCM site at: [http://supplychain.broad.msu.edu/msscm/](http://supplychain.broad.msu.edu/msscm/)
- or
- Go directly to the Apply Yourself site at: [https://app.applyyourself.com/?id=MSU-MBA](https://app.applyyourself.com/?id=MSU-MBA)

**Is work experience required?**
Yes. The program requires at least two years of supply chain work experience. All of our students are working supply chain management professionals and the program integrates the work experiences of our students into the classroom experience. We will consider internship experience as meeting part of the two-year requirement; a waiver may be granted after a review of each applicant’s résumé.

**Do I need to have a supply chain undergraduate degree?**
No. Many of our students come from other academic backgrounds, but all share SCM as their career ambition.

**Do I need a campus interview?**
No. Since many of our students are located outside of Michigan and its neighboring states, we do not require travel here for the application process. We will be happy to schedule a campus visit if you are able to do so — but, more often, phone interviews are scheduled to discuss the program and your application.

**How is the schedule different between the 19 month and the extended version?**
All students begin the cohort together and attend all on-campus classes together in the same summer sessions. The only difference in scheduling is for the on-line portions of the program. On-line credits are distributed over an extra semester for those in the extended version — adding one more semester. Students complete the degree in spring of the 3rd calendar year, in the extended version, rather than December of the 2nd year.

**Does the tuition amount vary for each format?**
No. The total amount is the same. Tuition payments are adjusted to reflect the differing credit load during the on-line portions.

**Is the curriculum set for each session — how do the tracks fit in?**
The MS-SCM degree is a lock-step program with one exception. During the second May in-residency session, students may choose one of the following tracks: Logistics, Operations or Procurement — or the soon-to-be-added Rail Management. Students take a unique set of classes for the track they select.

**How can I find information concerning financial aid?**
Please visit the MSU Financial Aid page with specific information on the MS-SCM degree: [www.finaid.msu.edu/wmba.asp](http://www.finaid.msu.edu/wmba.asp)
The curriculum is specifically designed to prepare students for advancement in supply chain management careers — including supply management, manufacturing operations, logistics, SCM consulting, service-supplier business development and operations and SCM software support.

SCM 870 Introduction to Logistics and Supply Chain Management (3 credits)
Integrated view of procurement, operations and logistics management. Management of the flow of products from raw material sourcing and acquisition through delivery to the final user.

SCM 871 Applied Data Analysis (3 credits)
Quantitative and statistical methods for decision-making. Hypothesis testing, regression and correlation analysis, forecasting, linear programming, decision analysis and project management.

SCM 872 Distribution Fulfillment (2 credits)
Management of the firm’s value creation process from product development through order receipt and delivery to consumer. Alternative approaches to developing customer value and the role of the demand and supply chain in providing it.

SCM 875 Manufacturing Planning & Control (2 credits)
Planning and control functions required to match supply and demand in a manufacturing firm. Tools and methods for planning production; the role of information systems in planning and control.

SCM 886 Strategic Sourcing (2 credits)
Fundamentals of strategic sourcing and supply chain management. Integration and coordination of product innovation, sourcing, manufacturing, distribution and logistics for global competitiveness.

SCM 877 Supply Chain Management Information Technology (2 credits) (ALL TRACKS)
Role of information technology in logistics and supply chain management, planning and operations. Requirements, capabilities and considerations for using IT applications in logistics.

LOGISTICS TRACK:

SCM 876 Logistics Operations Methods and Systems (2 credits)
Microanalysis of logistics and transportation services: customer service and order fulfillment, distribution operations, purchasing or operation of transportation services, 3PL providers and network design.

SCM 878 Logistics Systems Analysis (2 credits)
Define the role and application of technology in logistics and supply chain decision making. Expand students’ understanding of SCM decision techniques and how to successfully implement SCM technologies.

OPERATIONS MANAGEMENT TRACK:

SCM 883 Technology and Product Innovation Management (2 credits)
Examination of various aspects of analysis and decision-making for innovation, product planning concepts and tools and techniques for effective new product development processes in both manufacturing and service industries.

SCM 893 Global Operations and Supply Chain Strategy (2 credits)
Exploration of critical issues of importance to global manufacturing firms. Understanding strategic thinking; the role of global operations in creating sustainable competitive advantage for organizations; key technological and management issues; and the linkage between managing the global supply chain and other functional areas of the firm.
SUPPLY MANAGEMENT TRACK:

SCM 848 Analysis of Supply Markets and Supplies (2 credits)
Methods for supply market analysis to support sourcing strategy development, contract negotiations and cost management initiatives. Analysis of supply market conditions.

MGT 863 Negotiations (2 credits)
Strategic negotiations, negotiation preparation, buyer-supplier relationship assessment, international negotiations and negotiation simulation.

RAIL MANAGEMENT TRACK:

SCM 866 Railway Business Management (3 credits)

SCM 867 Railway Operations Management (3 credits)
Discussion of railway infrastructure. Railway management techniques in train control, locomotive management, scheduling, dispatching and signaling. Operational strategies for labor, regulation, safety, security and technology.

SCM 874 Total Quality Management and Lean Enterprise (3 credits)
Total quality management principles, practices and techniques. Implementation of quality improvement programs. Relationship to manufacturing and competitive strategies.

SCM 879 Supply Chain Management – Strategy and Applications (3 credits)
Analysis and solution of SCM cases and simulations. Teamwork, communication and job skills. Situations involving purchasing, manufacturing, logistics and transportation as an integrated supply chain.

SCM 881 Global Supply Chain Management (3 credits)
Requirements for global operations and strategy development. Similarities and differences of international and domestic operations.

SCM 882 Field Study/Research Project (5 credits)
Practical application of course material to a problem or situation in the student’s organization.

COM 874 Communication in Supply Chain Management (2 credits)
Development of effective interpersonal communication skills. Oral communication in business settings. Use of appropriate technology for management presentations.

MGT 875 Change Management (2 credits)
Role and process of organizational change management, types of change, identifying need for change and the change management process.

SCM 884 Marketing Management (2 credits)
Strategic and decision-making aspects of marketing functions. Analysis, coordination, execution of marketing programs. Development of strategies and tactics. Segmentation, marketing mix, market response modeling and ethics in a global context.
...turning their MS-SCM education into the next step in their supply chain careers and leading the way in the supply chain industry.

Jessica Westerhof, 2011/2012 Cohort

“I have already started to realize tangible benefits outside of the classroom. The comprehensive field study...has turned into an invaluable opportunity for me in the context of my organization. My management has been extremely supportive...linking the study to a global company project of which I have been named a co-lead. Not only will this project provide me with real organizational data and insight upon which to base my field study, but it will also allow me to broaden my organizational knowledge.”

Stephanie Maybore, 2010/2011 Cohort

“The Masters in Supply Chain program has given me the breadth of supply chain exposure I was looking for to take my career to the next level. The professors are committed to student success and the caliber of students enhances the learning experience. The practical application of the MS-SCM program focuses on how to articulate supply chain’s role and purpose within an organization and create the business case to demonstrate value. This degree will separate me from others in my company and in the industry.”

Ben Benate, 2009/2010 Cohort

“As a young professional in the supply chain industry I needed a graduate program that would challenge me to think outside the norms of traditional supply chain techniques. In conjunction with a knowledgeable faculty, this program utilizes the latest technology along with challenging case studies in order to promote individual thought. Being able to maintain your full-time career while taking advantage of this experience makes this opportunity impossible to pass up.”

Chad Swindall, 2010/2011 Cohort

“As someone who came into the MS-SCM program without a supply chain educational background, I thought the experience was tremendous. Not only was I able to learn from top-notch faculty who are leaders in the supply chain industry, I was also able to learn from a talented group of students who brought diverse skill sets and backgrounds to the program. I give MSU’s MS-SCM program nothing but the highest marks.”
The James B. Henry Center for Executive Development is a lifelong learning center that supports the educational needs of the Broad College of Business and many graduate and executive education programs.

It has been recognized for its professional atmosphere and state-of-the-art facilities. The Henry Center is a 96,000 square-foot building which provides a top-notch learning environment in 30+ meeting rooms with built-in technology and a deluxe atmosphere.

The Center is located at 3535 Forest Road in Lansing, just minutes from the main MSU campus.