Supply Chain Management

Department Information

- **Program Coordinator:** Denver Tolliver, Ph.D.
- **Department Chair:** Joseph Szmerekovsky, Ph.D.
- **Academic Coordinator:** Jody Bohn Baldock
- **Email:** jody.bohn.baldock@ndsu.edu
- **Department Location:** Upper Great Plains Transportation Institute, Quentin Burdick Building 448
- **Department Phone:** (701) 231-7767
- **Department Web Site:** www.ndsu.edu/business/programs/masters/mscm/
- **Application Deadline:** July 1 for fall semester; December 1 for spring semester; April 1 for summer semester
- **Credential Offered:** M.S.C.M. - Program online only
- **English Proficiency Requirements:** TOEFL iBT 71, IELTS 6

Program Description

The Department of Transportation, Logistics and Finance offers a Master's degree in Supply Chain Management (MSCM). The degree is awarded through the College of Business in collaboration with the Upper Great Plains Transportation Institute to provide high-quality graduate programs for students. The program takes an interdisciplinary approach to transportation and logistics and attracts students with a multitude of backgrounds. The online MSCM program targets aspiring logisticians, industry professionals, military officers and DOD civilians who want to meet the logistical challenges of the 21st century. A wide range of career opportunities exists in the sectors of the logistics industry, including logistics and supply chain management, operations management, purchasing and demand management, emergency management, consulting, retail, and many more.

Core Competencies

The uniqueness of the Master of Supply Chain Management program is reflected in its core competencies, which are a direct derivative of the Army's National Logistics Curriculum and private industry needs. The following core competencies define a framework for expected outcomes and curricula:

- Supply chain management in the military and private sectors
- Global supply chain management and the design of international logistics systems
- Change management in a turbulent environment
- Hands-on experience with SAP software, including data analytics
- Spreadsheet modeling for transportation analysis and planning for logistics
- Crisis analysis and rapid logistical response
- Logistics support for homeland security
- Transportation systems cyber and physical security analysis

Admission Requirements

The Master of Supply Chain Management program is open to qualified graduates of universities and colleges of recognized standing. To be admitted with full standing, the applicant must:

1. Hold a baccalaureate degree from an educational institution of recognized learning with a minimum grade point average (GPA) of 3.0 or equivalent. For those with GPAs of 2.99 or less, the applicant consider submitting a GMAT/GRE score to be considered for acceptance.
2. Have shown the potential to undertake advanced study as evidenced by prior academic performance and has stated interest in logistics.
3. Submit official transcripts
4. Submit a two-page resume
5. Submit a one-page “Letter of Intent” outlying their reasons for pursuing the Master of Supply Chain Management degree
6. Submit three letters of recommendation
7. Submit online application through the NDSU Graduate School website
8. International applicants whose first language is not English and who do not possess a U.S. bachelor’s degree or higher are subject to additional requirements when they apply for admission. They must meet the minimum requirements on measures of general English language proficiency. The accepted measures of language proficiency are the TOEFL ibT 71 and IELTS 6.

Students who do not meet all requirements for admission or have deficiencies in prerequisite course work, but show satisfactory potential for graduate study, may be admitted conditionally. The conditional status may be changed to full graduate standing after the first or second semester of study, based on the student’s academic performance.

Apply for Admission

To apply for admission, please visit the Admission Information page (https://bulletin.ndsu.edu/graduate/admission-information).

Degree Requirements

The Master of Supply Chain Management (MSCM) is an online graduate program and is a non-thesis degree. A minimum of 30 credits is required for the MSCM and must be completed using the core courses below. Students will participate in a multitude of interdisciplinary courses that will enhance and develop their supply chain skills, research abilities, and their capacity to apply them in real world situations. An overall GPA of 3.0 or higher must be maintained to remain in good academic standing.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL 711</td>
<td>Logistics Systems</td>
<td>4</td>
</tr>
<tr>
<td>TL 715</td>
<td>Introduction to ERP</td>
<td>3</td>
</tr>
<tr>
<td>TL 719</td>
<td>Crisis Analysis and Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>TL 721</td>
<td>International Logistics Management</td>
<td>4</td>
</tr>
<tr>
<td>TL 723</td>
<td>Advanced Supply-Chain Planning Across the Enterprise</td>
<td>3</td>
</tr>
<tr>
<td>TL 725</td>
<td>ERP Configuration</td>
<td>3</td>
</tr>
<tr>
<td>TL 727</td>
<td>Organizational Change Management</td>
<td>3</td>
</tr>
<tr>
<td>TL 731</td>
<td>Logistics Decision Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TL 733</td>
<td>Case Studies in Logistics</td>
<td>3</td>
</tr>
<tr>
<td>TL 735</td>
<td>Practical Data Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

Faculty

Raj Bridgelall, Ph.D.
North Dakota State University, 2015
Research Interests: Big Data Analytics, Internet-of-Things (IoT), Cloud Computing; Connected and Autonomous Vehicles (CAV), Shared Mobility, Intelligent Transportation Solutions; Signal Processing and Mathematical Modeling of Transportation Systems; Remote Sensing with Unmanned Aircraft Systems; Hyperspectral Image Analysis; Radio Frequency Identification (RFID); Real-Time Locating Systems (RTLS); Energy Harvesting and Massive Scale Autonomous Wireless Sensor Networks
Department: Transportation, Logistics and Finance

Alan Dybing, Ph.D.
North Dakota State University, 2013
Research Interests: Asset Management, Energy Impacts, Freight Transportation, Agricultural Transportation, Supply Chain Management, Transportation Economics, Spatial Analysis, Transportation Systems Modeling
Department: Transportation, Logistics and Finance

Ranjit Godavarthy, Ph.D.
Kansas State University, 2012
Research Interests: Public Transportation in Small Urban and Rural Areas, Demand Response Transit and Paratransit, Bike Share, Roundabouts, Traffic Engineering and Operations, Transportation and Highway Safety
Department: Transportation, Logistics and Finance

Jill Hough, Ph.D.
University of California-Davis, 2007
Research Interests: Public Transportation in Rural and Small Urban Locations, Workforce Development, Mobility of the Aging, Transportation Planning and Policy, Intelligent Transportation Systems
Department: Transportation, Logistics and Finance

Pan Lu, Ph.D.
North Dakota State University, 2011
Research Interests: Connected and Autonomous Vehicles, Smart Material and Structure Health Monitoring, Big Data Analytics for Transportation, Smart Transportation, Transportation System, Asset Management, Multimodal Transportation, Geospatial Transportation Modeling
Department: Transportation, Logistics and Finance

Jeremy Mattson, Ph.D.
North Dakota State University, 2017
Research Interests: Public Transportation, Transportation Economics, Demand Modeling, Travel Behavior, Built Environment
Department: Transportation, Logistics and Finance

Diomo Motuba, Ph.D.
North Dakota State University, 2009
Research Interests: Transportation and Land Use Planning, Freight Modeling, Transportation Economics, Connected Automated Vehicles, Logistics and Supply Chain Management, Transportation Safety
Department: Transportation, Logistics and Finance

Tim O. Peterson, Ph.D.
Texas A&M University, 1988
Research Interests: Managerial Leadership, Application of Information Technology to Organizational Issues, Scholarship of Teaching
Department: Management and Marketing

Fred Riggins, Ph.D.
Carnegie Mellon University, 1994
Research Interests: Economics of Information Systems, Interorganization Systems, Adoption of New Technology, Radio Frequency Identification (RFID), Internet-of-Things (IoT), Blockchain, Cryptoeconomics, Information and Communication Technology in Microfinance
Department: Accounting and Information Systems

Joseph Szmerekovsky, Ph.D.
Case Western Reserve University, 2003
Research Interests: Project Management and Scheduling, Supply Chain Management and Technology, Energy Supply Chain Management, Healthcare Logistics
Department: Transportation, Logistics and Finance

Denver Tolliver, Ph.D.
Virginia Polytechnic Institute and State University, 1989
Research Interests: Highway Systems Modeling, Multimodal Transportation Planning, Freight Transportation, Energy and Environmental Analysis
Department: Transportation, Logistics and Finance

Kimberly Vachal, Ph.D.
George Mason University, 2005
Department: Transportation, Logistics and Finance