

# MS in Management Science and Supply Chain Management

The Master of Science in management science and supply chain management (MSSCM) is an interdisciplinary program collaboratively offered by the Barton School of Business and the College of Engineering. The program targets a wide range of diverse domestic and international applicants. The supply chain curriculum is designed in a manner that students will acquire mastery in the managerial and analytics aspects of supply chain operations and develop contemporary competencies via innovative hands-on activities and industry practices.

The Master of Science in management science and supply chain management offers two tracks:

1. Management track focuses on developing capabilities and mastery leading to value creation in global management of procurement, logistics, and operations.
2. Analytics track aims to build capabilities in the use of innovative tools and techniques in decision-making processes from design to planning phases.

## Program Requirements

Students are able to earn a Master of Science in global supply chain management by choosing one of the following four options:

Item	Cost
Coursework Option	33 credit hours of coursework
Certification Option	30 credit hours of coursework and receiving an external certification related to operations and supply chain management from ISM, ASQ, APICS or SME
Project Option	30 credit hours of coursework and at least 3 credit hours of degree project
Thesis Option	24 credit hours of coursework and at least 6 credit hours of master's thesis

Students must submit a plan of study by the end of the first semester of enrollment.

The degree requires 15 credit hours of core courses, 9 credit hours of courses from a track, and electives to satisfy the degree requirements. There is a maximum of 9 credit hours of 500 – 600 level courses can be taken in this program. The core courses and courses in each track are listed below.

### Core Courses. Required for all Tracks

Course	Title	Hours
DS 850 or IME 553	Operations Management Production Systems	3
DS 865 or IME 783	Supply Chain Mgmt Supply Chain Management	3
DS 625	Global Procurement and Outsourcing	3
IB 836	International Business and Competitiveness	3
MIS 750	Business Intelligence and Analytics	3
Total Credit Hours		15

Students must Specialize in either the management or analytics track.

### Management Track

A student specializing in the management track is required to take DS 890N Global Logistics and Transportation Management or DS 890G Risk Management in Global Supply Chains and a minimum of 6 credit hours from the management track.

Course	Title	Hours
<b>Required</b>		
DS 890N or DS 890G	Global Logistics and Transportation Management Risk Management in Global Supply Chains	3
<b>Directed Electives</b>		
Select a minimum of 6 credit hours from the following		6
DS 860	ERP: Enterprise Resource Planning	
BLAW 810	Law and Ethics for Business	
ECON 804	Managerial Economics	
FIN 625	International Financial Management	
MKT 803	Marketing Analysis	
ENTR 706	Seminar in New Product and Technology Development	
MGMT 885	Advanced Strategic Management	
IB 601	International Marketing	
IME 890	Independent Study in Industrial Engineering	
<b>Electives</b>		
The remaining hours for the degree can be taken from either track.		6-9
Total Credit Hours		15-18

### Analytics Track

A student specializing in the analytics track is required to take IME 883 Supply Chain Analytics and a minimum of 6 credit hours from the analytics track.

Course	Title	Hours
<b>Required</b>		
IME 883	Supply Chain Analytics	3
<b>Directed Electives</b>		
Select a minimum of 6 credit hours from the following		6
DS 875	Spreadsheet Modeling in Business	
IME 550	Operations Research I	
DS 755	Project Management	
MIS 874	Management Information Systems	
MIS 884	Database Planning & Management	
MIS 600	Database Management Systems	
ECON 731	Applied Econometrics	
IME 880K	Adv Facil Plan	
IME 865	Modeling and Analysis of Discrete Systems	
IME 724	Statistical Methods for Engineers	
<b>Electives</b>		
The remaining hours for the degree can be taken from either track.		6-9
Total Credit Hours		15-18