

# Supply Chain Management (SCM)

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**SCM 320. Integrated Supply Chain Management. 3 Credits.**

Identification of the key elements in a firm's management of their supply chain. Theory and practical applications for analyzing and developing strategies to assist firms in obtaining and maintaining a competitive advantage. Prereq: Restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 325. Managing Inventory and Materials. 3 Credits.**

Managing inventory and materials is the cornerstone of supply chain management. The goal of this course is two-fold: (1) identify problems and challenges in managing inventory and materials, and (2) introduce main stream quantitative methods to solve these problems and challenges. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 330. Supply Chain Analysis and Analytics. 3 Credits.**

Introduction to quantitative tools for compiling, presenting, and analyzing, numerical data to make inferences and decisions in the face of uncertainty. In addition, an understanding and application of analytics to large data. These tools are needed by all supply chain professionals. Prereq: TL 116 and restricted to College of Business majors or minors and a 2.50 minimum NDSU grade point average.

**SCM 425. Procurement & Sourcing. 3 Credits.**

This course will explain the strategic importance of procurement and sourcing on an organization's successful supply chain operations. Also, this course emphasizes the impact of purchasing on the competitive success and profitability of the firm. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average. (Also offered for graduate credit - see SCM 625.).

**SCM 435. Transportation & Distribution. 3 Credits.**

This course provides an overview of the management of transportation and warehouse's core fundamentals within supply chain operations. In addition, it focuses on highlighting different modes of transportation and transportation technologies required for managing the national and international supply chain. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 450. Supplier & Customer Relations. 3 Credits.**

This course provides students with a knowledge of the principles and best practices for managing and collaborating with suitable suppliers for business. Also, the course will focus on highlighting the importance of maintaining appropriate customer relationships resulting in unsolicited testimonials and relationship annuities. Students learn to integrate vendors management, business processing, and customer relationship management with a decisive strategic plan. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 453. Financing the Supply Chain. 3 Credits.**

The flow of financing in the supply chain is fragmented, and sensitive due to frequent fluctuations in micro and macroeconomics indicators. Therefore, this course will highlight the need and importance of financial management within supply chain operations. In addition, this course will evaluate and highlights key enablers in financing the supply chain operations and recognize some of the factors impacting their future. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average. (Also offered for graduate credit - see SCM 653.).

**SCM 455. Supply Chain Technology Enablers. 3 Credits.**

This course will focus on highlighting the role of emerging technologies in supply chain management. In addition, the student will be able to understand how the organization integrates its supply chain operations, procurement, and enterprise resource planning (ERP) with the usage of different technologies to optimize its efficiency and lowering operational costs. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 457. Scheduling in Supply Chain Management. 3 Credits.**

This course will help students understand the various concepts used in planning and scheduling within supply chain operations. In addition, this will also provide insights into how the organization can incorporate and optimize its supplies, procurement, production cycle, warehouse management, and distribution efficiency by scheduling, along with cost-saving opportunities with efficient scheduling. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 460. Production & Operations Management. 3 Credits.**

Study and application of concepts and managerial techniques for manufacturing and service operations. Includes production technology, facility location/layout, inventory management, MRP, just-in-time manufacturing, and total quality management. Prereq: STAT 330 and MATH 144 or MATH 146. Restricted to College of Business professional major or minor and a 2.50 minimum NDSU grade point average.

**SCM 462. Modeling the Supply Chain. 3 Credits.**

Development of spreadsheet models representing different positions in the supply chain. The models can be used to enhance decision making and achieve a better understanding of how the different stages in a supply chain interact. Prereq: STAT 330 and at least a cumulative GPA of 2.50.

**SCM 465. International Supply Chain Management. 3 Credits.**

This course provides deep insights into how global trade can be facilitated through enhanced supply chain management. In addition, the course will evaluate the strategic relationships necessary for supply chain operations and the tactical activities of logistics, purchasing, and operations from a global perspective. Prereq: SCM 320 and restricted to College of Business major or minor and a 2.50 minimum NDSU grade point average.

**SCM 494. Individual Study. 1-5 Credits.**

**SCM 625. Procurement & Sourcing. 3 Credits.**

This course will explain the strategic importance of procurement and sourcing on an organization's successful supply chain operations. Also, this course emphasizes the impact of purchasing on the competitive success and profitability of the firm. {Also offered for undergraduate credit - see SCM 425.}.

**SCM 653. Financing the Supply Chain. 3 Credits.**

The flow of financing in the supply chain is fragmented, and sensitive due to frequent fluctuations in micro and macroeconomics indicators. Therefore, this course will highlight the need and importance of financial management within supply chain operations. In addition, this course will evaluate and highlights key enablers in financing the supply chain operations and recognize some of the factors impacting their future. {Also offered for undergraduate credit - see SCM 453.}.