

Supply Chain Management (SCM)

Courses

SCM 3040. Principles of Supply Chain Management. Units: 3

Semester Prerequisite: ADMN 2100. Quarter Prerequisite: ADMN 210
Introduction to supply chain management concepts and techniques. Methods that aid the manager in making rational decisions in manufacturing and service industries are discussed. Emphasis is on the application of models to managerial decision making. Formerly offered as SCM 304.

SCM 3500. Problem Solving and Decision Making. Units: 3

Semester Prerequisite: ADMN 2100 and IST 3110
This course covers many approaches in solving business problems from a managerial point of view. Students experiment with typical techniques and learn why/how these techniques work. Spreadsheets are used to experiment with such techniques. Emphasis is placed on input requirements and interpretation of results. Topics include: what-if analysis, networks, decision trees, sensitivity analysis, and goal seeking. Formerly offered as SCM 350. Also offered as IST 3500 and SCM 3500; credit cannot be awarded for both.

SCM 4000. Strategic Supply Chain and Logistics Management. Units: 3

This course provides an in-depth exploration of logistics and supply chain management, emphasizing its critical role in driving operational efficiency and achieving a competitive advantage in today's global business environment. Students will gain a comprehensive understanding of the strategies and practices involved in effectively managing the forward and reverse flow of goods, services, information, and capital between various supply chain entities, including suppliers, manufacturers, distributors, retailers, customers, and third-party logistics providers. This course applies strategic supply chain management to real-world scenarios, solving practical industry problems.

SCM 4100. Project Management: Principles and Practices. Units: 3

This course introduces the core principles of project management, focusing on defining projects, organizing project structures, and understanding the project life cycle. Students will explore essential methodologies, such as Agile, Critical Path Methods, Earned Value Management and other modern approaches. The course emphasizes best practices for mitigating risks, aligning budgets and schedules, and fostering effective teamwork. It covers the ethical and social responsibilities of project management teams. Practical experience includes developing a project plan, identifying and managing the project's critical path, and applying strategies to ensure successful project outcomes.

SCM 4400. Logistics and Transportation Management. Units: 3

Semester Prerequisite: SCM 3040

Logistics operations including demand management, inventory management, facility location, warehouse management, packaging and material handling, transportation management, and international freight movement planning in global supply chains. Formerly SCM 440.

SCM 4450. International Logistics. Units: 3

Semester Prerequisite: SCM 3040. Quarter Prerequisite: SCM 304

Logistics management involving goods and services in different countries. International business environment, international transportation, intermediaries, import/export regulations, payment and risks, and cultural differences of the global supply chain. Formerly offered as SCM 445.

SCM 4700. Advanced Supply Chain and Logistics Management. Units: 3

Semester Prerequisite: SCM 3040. Quarter Prerequisite: SCM 304

Comprehensive study of all activities and processes to supply products or services to final customers. Topics include: purchasing, logistics and supply chain optimization, risk management, inventory control, warehouse and distribution management. Formerly offered as SCM 470.

SCM 4750. Supply Chain Business Analytics. Units: 3

Semester Prerequisite: ADMN 2100. Quarter Prerequisite: IST 274

Comprehensive practice of the Business Analytics process, including forecasting, data extraction and mining, analytical modeling, detailed analysis, and reporting utilizing business cases. Formerly offered as SCM 475.

SCM 5030. Enterprise Resource Planning. Units: 3

Semester Prerequisite: SCM 3040 or SCM 6070. Quarter Prerequisite: SCM 304 or consent of instructor

This course introduces students to the concept and usage of Enterprise Resource Planning (ERP) to support organizational processes. It emphasizes how businesses are using ERP systems to integrate their business processes. Students will learn and understand business process data flows, and how that impacts the functional areas of an organization. Students will have hands-on experience using an ERP system. Formerly known as SCM 305/IST 3050/SCM 3050. Course is offered as IST 5030 and SCM 5030; credit cannot be awarded for both.

SCM 5050. Advanced Enterprise Resource Planning. Units: 3

Semester Prerequisite: SCM/IST 3050

This course will discuss the concepts, principles, and techniques for configuring and implementing organizational processes in enterprise resource planning (ERP). Emphasis will be placed on the cross-functional business processes and critical integration points that are necessary for the success of a company. Students will learn how to create relevant databases and configure an ERP system from the ground up. Formerly SCM 505. Also offered as IST 5050.

SCM 5150. Project Management. Units: 3

Semester Prerequisite: IST 3110

This course introduces students to project management theory, terms and concepts. Students will learn about project management constraints and their impact on a project's ability to meet business goals: time, cost, and performance. Students will learn techniques to manage people and how the workforce will impact, and be impacted by, the project management constraints. Topics include: project life cycle, how to build a successful project from pre-implementation to completion, sequencing and budgeting, project evaluation and control, project feasibility, risk analysis, resource allocation and project management tools. Formerly offered as SCM 515. Course is offered as IST 5150 and SCM 5150; credit cannot be awarded for both.

SCM 5250. Quality Management. Units: 3

Semester Prerequisite: SCM 3040 or SCM 6070

Description and analysis of quality assurance programs and techniques and their many applications in supply chain management from a total quality management perspective. Topics include quality planning, statistical quality control, quality design and measurement, management of quality and reliability, employee involvement for total quality management, and management of six sigma quality and inspection. Formerly offered as SCM 480 and 4800.

SCM 5753. Apprenticeship. Units: 3

Supervised work and study in private or public organizations in a department of labor registered apprenticeship. May be taken two times for six units. A total of six units of IST/SCM 5753 courses may be applied toward graduation. Graded credit/no credit.

SCM 5755. Internship. Unit: 1

Semester Prerequisite: Consent of college internship coordinator. Quarter Prerequisite: senior standing preferred; consent of instructor and the departments internship coordinator

Supervised work and study in private or public organizations. May be repeated for credit. A total of six units of Jack H. Brown College of Business and Public Administration 5753 or 5755 courses may be applied toward graduation. Graded credit/no credit.

SCM 5915. Seminar in Supply Chain Management. Unit: 1

Semester Prerequisite: SCM 3040 and consent of instructor. Quarter Prerequisite: SCM 304 and consent of instructor

An intensive study of some phase of supply chain management to be developed by the instructor. May be repeated for credit as topics change.

SCM 5930. Seminar in Supply Chain Management. Units: 3

Semester Prerequisite: SCM 3040 and consent of instructor. Quarter Prerequisite: SCM 304 and consent of instructor

An intensive study of some phase of supply chain management to be developed by the instructor. May be repeated for credit as topics change. Formerly offered as SCM 590.

SCM 5951. Independent Study. Unit: 1

Semester Prerequisite: Junior status, or graduate status

Special topics involving library and/or field research. A total of 8 units in any Jack H. Brown College of Business and Public Administration 5951, 5952, 5953, 5955 may be applied toward graduation. Consent of instructor and approval by the department of a written project/proposal submitted to the appropriate department in the Jack H. Brown College of Business and Public Administration on a standard application filed in advance of the semester in which the course is to be taken. Course is cross-listed across different departments within the college.

SCM 5952. Independent Study. Units: 2

Semester Prerequisite: Junior status, or graduate status

Special topics involving library and/or field research. A total of 8 units in any Jack H. Brown College of Business and Public Administration 5951, 5952, 5953, 5955 may be applied toward graduation. Consent of instructor and approval by the department of a written project/proposal submitted to the appropriate department in the Jack H. Brown College of Business and Public Administration on a standard application filed in advance of the semester in which the course is to be taken. Formerly offered as 595B. Course is cross-listed across different departments within the college.

SCM 5953. Independent Study. Units: 3

Semester Prerequisite: Junior status, or graduate status

Special topics involving library and/or field research. A total of 8 units in any Jack H. Brown College of Business and Public Administration 5951, 5952, 5953, 5955 may be applied toward graduation. Consent of instructor and approval by the department of a written project/proposal submitted to the appropriate department in the Jack H. Brown College of Business and Public Administration on a standard application filed in advance of the semester in which the course is to be taken. Formerly offered as 595D. Course is cross-listed across different departments within the college.

SCM 5955. Independent Study. Unit: 1

Semester Prerequisite: Junior status, or graduate status

Special topics involving library and/or field research. A total of 8 units in any Jack H. Brown College of Business and Public Administration 5951, 5952, 5953, 5955 may be applied toward graduation. Consent of instructor and approval by the department of a written project/proposal submitted to the appropriate department in the Jack H. Brown College of Business and Public Administration on a standard application filed in advance of the semester in which the course is to be taken. Course is cross-listed across different departments within the college.

SCM 6070. Managing the Supply Chain. Units: 3

Integration and application of analytical techniques used in logistics and supply chain management. Concepts of decision models are examined for planning, control, forecasting, scheduling, and analysis within an enterprise. Formerly offered as SCM 607.

SCM 6110. Global Supply Chain Management and Logistics. Units: 3

Semester Prerequisite: SCM 6070. Quarter Prerequisite: SCM 607

Development, implementation and integration of global supply chain management and operations management strategy with business and other functional strategies of an organization. Topics include: decisions involving positioning, structuring and managing for superior competitive performance. Formerly offered as SCM 611.

SCM 6200. Integrated Logistics Management. Units: 3

Semester Prerequisite: SCM 6070 or consent of instructor

This course is a comprehensive study of integrated logistics including: supply chain strategy, competitiveness and sustainability, strategic procurement, material management, purchasing and supply management, third-party relationships, logistics information systems technologies, demand management, order processing systems and customer service management, inventory management, packaging and material handling systems, transportation modes, and forward and reverse logistics. #.

SCM 6300. Warehouse and Distribution Management. Units: 3

Semester Prerequisite: SCM 6070 or consent of instructor

This course covers order fulfillment management, distribution, omnichannel network design, warehouse design, materials handling, movement of goods and packaging in the warehouse, freight transportation, demand and cost factors, market structure, domestic and global policies and regulations, warehouse cost management, LEEDS, optimization, social and environmental impacts warehouse management systems, robots and technologies, inbound processes, storage, and outbound processes. Consent required.

SCM 6400. Supply Chain Security and Blockchain. Units: 3

Semester Prerequisite: IST 6090

Supply chain security is the part of supply chain management that focuses on minimizing risk for supply chain, logistics, and transportation management systems. The distributed ledger-driven blockchain technology has the potential to enhance supply chain visibility and transparency. Students will learn the importance of creating a secure end-to-end supply chain infrastructure and the use of blockchain-enabled smart contracts to integrate business processes, promote data standardization and protect operational technologies, systems, and resources. Additional topics include the purpose and requirements of ISO 28000, NIST-Cyber Supply Chain Risk Management (C-SCRM), and C-TPAT Supply Chain Risk Management System.

SCM 6600. Transportation and Supply Chain Management. Units: 3

Semester Prerequisite: SCM 6070. Quarter Prerequisite: SCM 607

Comprehensive study of managing transportation and the supply chain. Logistics of managing the pipeline of goods from initial contracts with suppliers and control of work-in-process to the movement of finished goods through the channels of distribution. Formerly offered as SCM 660.

SCM 6620. Business Analytics and Decision Making. Units: 3

Semester Prerequisite: IST 6090 or consent of instructor. Quarter Prerequisite: IST 609

The course provides an overview of the wide area of data analytics, with a particular focus on the tools required to store, clean, manipulate, visualize, model, and ultimately extract information from various sources of data as well as an introduction to deterministic decision-making, decision making under uncertainty/risk, and application of optimization decision analysis tools. Topics include the analytics life cycle, data integration and modeling, the use of univariate and multivariate statistical methods to analyze data, relational databases and SQL, text processing and sentiment analysis, data visualization and the use of Business Intelligence Tools for modeling and decision support. Offered as IST 6620 and SCM 6620, students may not receive credit for both. Formerly offered as IST 650.

SCM 6755. Internship. Unit: 1

Semester Prerequisite: Consent of college internship coordinator. Quarter Prerequisite: senior standing preferred; consent of instructor and the departments internship coordinator

Supervised work and study in private or public organizations. May be repeated for credit. A total of six units of Jack H. Brown College of Business and Public Administration 5753 or 5755 courses may be applied toward graduation. Graded credit/no credit.

SCM 6910. Culminating Experience Project. Units: 3

Semester Prerequisite: Completion of 24 semester equivalent units or consent of the Program Director

The culminating experience will be a comprehensive logistics/e-commerce project to be directed, reviewed, and assessed by faculty and selected professionals to ensure students ability to integrate the knowledge of the area and to show critical and independent thinking and demonstrate mastery of the subject matter. Can be taken in fall or spring semester after advancement to candidacy.

SCM 6990. Continuous Enrollment for Graduate Candidacy Standing. Units: 0

Quarter Prerequisite: advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.

SCM 6991. Continuous Enrollment for Graduate Candidacy Standing. Unit: 1

Quarter Prerequisite: Advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.

SCM 6992. Continuous Enrollment for Graduate Candidacy Standing. Units: 2

Quarter Prerequisite: advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.

SCM 6993. Continuous Enrollment for Graduate Candidacy Standing. Units: 3

Quarter Prerequisite: advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.

SCM 6994. Continuous Enrollment for Graduate Candidacy Standing. Units: 4

Quarter Prerequisite: advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.

SCM 6995. Continuous Enrollment for Graduate Candidacy Standing. Units: 5

Quarter Prerequisite: advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.

SCM 6996. Continuous Enrollment for Graduate Candidacy Standing. Units: 6

Quarter Prerequisite: advancement to candidacy and approval of program graduate coordinator or, if an interdisciplinary studies major, consent of the Dean of Graduate Studies

Independent study leading to completion of requirements (other than course work) for the master's degree. To retain classified standing in the master's program, a student must enroll in a Continuous Enrollment for Graduate Candidacy Standing course each quarter until the project or thesis is accepted or the comprehensive examination passed. Students who enroll through the university have full use of all university facilities. See Culminating Experience: Exam, Thesis, or Project in Graduate Degree and Program Requirements section of the Bulletin of Courses. Continuous Enrollment for Graduate Candidacy Standing is a variable unit course, see fee schedule in the Financial Information section of the Bulletin of Courses. Earned units are not degree-applicable nor will they qualify for financial aid.