

# Supply Chain Management (SCMM)

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## **SCMM 6500 Supply Chain Workshop 1 (1 credits)**

A 4-day, in-residence workshop that introduces the students to the Supply Chain program and provides an initial view of the purpose of the master's, i.e., the transition from traditional to digital supply chains. During the 4-days students experience a manual supply chain game which helps to familiarize them with the dynamics of the supply chain and the dynamic nature of information sharing across the supply chain. The 4-day workshop concludes with a case competition where the students compete in teams during a live case study.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206500>)

## **SCMM 6501 Supply Chain Foundation (1 credits)**

Provides a holistic overview of the supply chains, and the various functions (e.g. Sourcing and Procurement; Manufacturing and Operations; Logistics and Distribution) and cross-functional processes (e.g. balancing supply and demand), that when integrated can provide firms with a sustainable competitive advantage.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Summer Term, 2022 Summer Term, 2021 Summer Term, 2021 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206501>)

## **SCMM 6502 Supply Chain Management (1 credits)**

Provides an overview of the key elements of supply chain management, with a focus on supply chain dynamics. In addition to the recorded lectures, there is an online simulation that will expose students to the various challenges and issues related to the Bullwhip Effect.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206502>)

## **SCMM 6504 Negotiations (1 credits)**

Provides an overview of the key elements of negotiation and related skills. In addition to the recorded lectures, there is an online simulation that will allow students to practice negotiation skills against one another.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206504>)

## **SCMM 6505 Logistics - Methods and Systems (2 credits)**

Provides an overview of the key elements of a successful logistics function that meets both customer and company objectives. Topics include: an introduction to location analysis (warehouses and distribution centers) and network design, transportation management, inventory management, international logistics, logistics technology and warehouse management.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Spring Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206505>)

## **SCMM 6510 Sourcing in the Digital Supply Chain (2 credits)**

Students are taken systematically through an entire process of designing sourcing strategies, supplier evaluation and selection process; as well as design and execution of buyer-supplier relationship strategies. Students learn basics of negotiations and contracting, supply risk management and costing techniques that will help them with their careers in purchasing and supply chain management.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206510>)

## **SCMM 6515 Industry 4.0 (2 credits)**

The term Industry 4.0 encompasses a promise of a new industrial revolution—one that marries advanced manufacturing techniques with the Internet of Things (IoT) to create a digital manufacturing enterprise that is not only interconnected, but communicates, analyzes and uses information to drive further intelligent action back in the physical world.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206515>)

**SCMM 6520 Additive Manufacturing (1 credits)**

An overview of additive manufacturing (3D Printing), the various approaches and applications of additive manufacturing. Highlights the various challenges of deploying additive manufacturing in a supply chain context.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206520>)

**SCMM 6525 Transportation and Network Design (2 credits)**

Provides a holistic view of how to design a distribution network, including the factors that influence the design; various strategies relating to where inventories are held and how they are shipped to customers and consumers; role of carriers and 'last mile' delivery issues; and importance of product/information flows and the rise of Digital Networks.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Summer Term, 2022 Summer Term, 2021 Summer Term, 2020 Summer Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206525>)

**SCMM 6530 Supply Chain Workshop 2 (1 credits)**

A 4-day, in-residence workshop that provides an intense overview and application of commercial negotiations practices, from both supplier and customer perspectives.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Summer Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206530>)

**SCMM 6535 Supply Chain Collaboration (2 credits)**

Provides a broad view of the opportunities for collaboration, internally within an organization and with customers and suppliers; including the many layers of collaboration. Reviews the emerging technologies that enable and support collaboration. Finally, considers the regulatory and legal challenges which limit collaboration and the impact of geographical, cultural and legal jurisdictions on the ability to fully collaborate.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206535>)

**SCMM 6540 Transportation (1 credits)**

Focuses on fundamental principles and role of transportation systems, costing and pricing. Explores motor carrier, railroad and airline transportation. Students learn about transportation risk management and global transport planning and execution.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Fall Term, 2021 Fall Term, 2020 Fall Term, 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206540>)

**SCMM 6542 Supply Chain Sustainability (1.5 credits)**

Explores companies' efforts to consider the environmental and human impact of their products as they travel across the entire supply chain, from the sourcing of raw materials to manufacturing, storage, distribution, and every transportation link in between, until final delivery to the end consumer.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206542>)

**SCMM 6545 Applied Project (2 credits)**

Students work in teams on applied projects with local companies, taking their understanding from the previous courses in the program and applying these to a real business problem.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Spring Term, 2022 Summer Term, 2022 Spring Term, 2021 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206545>)

**SCMM 6547 Applied Project 2 (3 credits)**

Enables student teams to work on applied projects (company or case study-based), taking the skills developed throughout the program and applying them to real-world business issues.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206547>)

**SCMM 6550 Supply Chain Workshop 3 (1 credits)**

A 4-day, in-residence workshop, in which students present the results of their applied projects to the project-sponsoring organizations in the form of a case competition.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Spring Term, 2022 Spring Term, 2021 Spring Term, 2020 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206550>)

**SCMM 6555 Supply Chain Planning (3 credits)**

Focuses on leading edge techniques used in developing a manufacturing strategy, inventory management, cycle time reduction, production scheduling ERP, JIT/Kanban, synchronous manufacturing, supply chain management and advanced manufacturing systems.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2019 Fall Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206555>)

**SCMM 6559 Supply Chain Risk and Resilience (1.5 credits)**

Introduces a systematic approach to supply chain risk management and its application through the use of cutting-edge software tools and case-based learning. Presents the basics of multi-tier supply chain mapping, risk exposure evaluation, supply chain resilience practices and techniques, and principles of crisis management and supply chain continuity planning. Uses mini cases and supply chain mapping, risk monitoring and capacity/inventory management digital tools. Students work on a case study, which focuses on de-risking of a supply chain.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206559>)

**SCMM 6560 Global Strategic Sourcing (3 credits)**

Focuses on strategic sourcing in the global economy. Explores the process of segmenting third-party external spend for ensuring that scarce procurement resources are directed to the most important categories. Spend analysis is used to establish categories or commodities on which to focus where the greatest impact can be made.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206560>)

**SCMM 6565 Lean Enterprise (3 credits)**

Focuses on the key concepts of lean and leading cultures of continuous improvement. Explores how to engage others in the lean thinking transformation process. Also explores a broad range of lean tools and how to use these in a lean transformation.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206565>)

**SCMM 6570 Supply Chain Finance (1 credits)**

Understanding supply chain financial performance and management. Includes the following: understanding financial statements, cost of goods sold, strategic inventory planning, capital equipment planning and implications of operating versus outsourcing.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

*Last four terms offered:* 2022 Summer Term, 2021 Summer Term, 2020 Summer Term, 2019 Summer Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206570>)

**SCMM 6575 Enterprise Systems (3 credits)**

Focuses on how an IT system like ERP supports and integrates core business processes within an organization and across its supply chains. Format includes a combination of lectures and in-class exercises using SAP's ERP system. Discusses key ERP concepts and issues from functional, technical and implementation viewpoints. Also includes hands-on working experience (through simulation) in manufacturing and distribution using SAP in the following areas: Sales Order Process, Purchasing, MRP, Production Ordering, Accounting and Forecasting. Investigates the reasons why many ERP installations are considered "failures" and ways to circumvent these unfortunate outcomes, competing ERP platforms, and business intelligence tools available within SAP. To demonstrate an understanding of course-related ERP content, students experience a "real world" market simulation requiring knowledge derived from this course and previous courses. Data from this simulator are used for data modeling and analytics.

*Prerequisite:* Admitted to SCMM; or cons. of M.B.A. prog. dir.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206575>)

**SCMM 6931 Topics in Supply Chain Management (1-3 credits)**

Topics vary.

*Prerequisite:* Admitted to SCMM.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Spring Term, 2022 Spring Term, 2021 Fall Term, 2021 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206931>)

**SCMM 6995 Independent Study in Supply Chain Management (1-3 credits)**

Faculty-supervised, independent study/research of a specific area or topic in finance.

*Prerequisite:* Admitted to the graduate SCMM program; and cons. of prog. dir.

*Level of Study:* Graduate

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206995>)

**SCMM 6997 Supply Chain Capstone (3 credits)**

Brings together all the major concepts covered in the SCMM program and how each is interconnected and related to one another. Adopting a strategic perspective, the capstone explores how organizations develop and implement a variety of supply chain strategies.

*Prerequisite:* Admitted to SCMM.

*Level of Study:* Graduate

*Last four terms offered:* 2023 Spring Term, 2022 Summer Term, 2022 Spring Term, 2021 Spring Term

Schedule of Classes (<https://bulletin.marquette.edu/class-search/?details&code=SCMM%206997>)