Operations & Supply Chain Mgmt (OSCM)

OSCM 3001 Operations and Supply Chain Management (3 credits)

Examination of the operations and supply chain function in manufacturing and service firms from a managerial perspective. Core concepts and issues include planning, designing and managing operations, and the flow of materials and information from suppliers to customers. *Prerequisite:* Soph. stnda.

Level of Study: Undergraduate

Marquette Core Curriculum: NSM Crossing Boundaries

Last four terms offered: 2023 Summer Term, 2023 Spring Term, 2022 Fall Term, 2022 Summer Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%203001)

OSCM 3986 Internship Work Period (0 credits)

SNC/UNC grade assessment.

Prerequisite: OSCM 3001; cons. of prog. dir. and cons. of Business Career Center.

Level of Study: Undergraduate

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=OSCM%203986)

OSCM 4005 Digital Supply Chain Technologies (3 credits)

Industry 4.0 is a term that supports the evolution of a new industrial revolution – one that sees the convergence of both existing and new technologies in creating a digital supply chain, that is connected, analyzes all available information to derive insight, and drive optimal decision making back into the physical world.

Prerequisite: OSCM 3001. Level of Study: Undergraduate Last four terms offered: 2023 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204005)

OSCM 4010 Manufacturing Planning and Control (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: OSCM 3001.

Level of Study: Undergraduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2022 Spring Term, 2021 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204010)

OSCM 4015 Service Management (3 credits)

Particular problems and issues of designing, managing and delivering services will be addressed. Issues include service challenge and breakthrough design, productivity, quality, innovation and flexibility, demand and capacity management, manpower planning, scheduling, technology management, strategy and integration.

Prerequisite: OSCM 3001.

Level of Study: Undergraduate

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=OSCM%204015)

OSCM 4020 Quality and Process Management (3 credits)

A foundation to quality philosophies, principles, techniques and tools is provided. The interrelationship of each is highlighted through addressing customer focus, value and satisfaction; leadership and organizational change; process design, measurement and improvement; and bench marking. Application of decision making, planning and measurement tools will occur.

Prerequisite: OSCM 3001.

Level of Study: Undergraduate

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=OSCM%204020)

OSCM 4025 Purchasing and Supply Management (3 credits)

Focuses on the understanding of operational, tactical and strategic role of purchasing and supply management function in an organizational and supply chain management context. Students are taken systematically through an entire process of design and execution of sourcing strategies, supplier evaluation and selection process and design and execution of buyer-supplier relationship strategies. Throughout this process students also learn basics of negotiations and contracting, supply risk management and costing techniques that help them with their careers in purchasing and supply chains. *Prerequisite:* OSCM 3001.

Level of Study: Undergraduate

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=OSCM%204025)

OSCM 4035 Supply Chain Sustainability (3 credits)

We will explore companies' efforts to consider the environmental and human impact of their products or services as they journey 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: OSCM 3001.

Level of Study: Undergraduate

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204035)

OSCM 4040 Global Logistics Management (3 credits)

Focuses on global logistics and global trade management, and relates these practices to global supply chain management. Key objectives are to help students think critically about the ways in which global logistics and trade management concepts are fundamental to the overall functioning of the business (regardless of which other disciplines a student may study), and to provide a "vocabulary" for students to carry forward into the rest of their studies and beyond. During the course linkages between operations and other business functions (particularly, finance, accounting, marketing and information technology) will be made.

Prerequisite: OSCM 3001.

Level of Study: Undergraduate

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=OSCM%204040)

OSCM 4045 Globalization and Global Operations (3 credits)

Provides an overview of the recent rapid growth of the so-called emerging economies of the world. These include the BRICS nations (Brazil, Russia, India, China, and South Africa) and other countries that are collectively changing the landscape of the global economy. Emerging nations now account for fifty percent of global output and are poised to be the growth markets of the 21st century. Also includes several perspectives on the critical role played by corporations in this fascinating growth story and also material on global operations from the strategic, supply chain, and marketing perspectives. Relevant to business students interested in studying the role of globalization in economic growth. *Prerequisite*: OSCM 3001.

Level of Study: Undergraduate

Last four terms offered: 2022 Spring Term, 2021 Spring Term, 2020 Spring Term, 2019 Spring Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204045)

OSCM 4057 Enterprise Systems in Supply Chain Management (3 credits)

Focuses on how an information system like ERP supports and integrates core business processes within an organization and across its supply chains. A combination of lectures and in-class exercises using SAP's ERP system. Includes a discussion of key ERP concepts and issues from functional, technical and implementation viewpoint. 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. This is the same course as INSY 4057 and credit cannot be earned for both INSY 4057 and OSCM 4057.

Prerequisite: OSCM 3001 and INSY 3001.

Level of Study: Undergraduate

Last four terms offered: 2022 Spring Term, 2021 Spring Term, 2020 Spring Term, 2019 Spring Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204057)

OSCM 4060 Supply Chain Analytics (3 credits)

Introduction to spreadsheet-based decision modeling in operations and supply chain management, primarily using Microsoft Excel. Exposed to relevant decision models widely applied in industry. Focuses on relevance and application rather than theory. Topics include network and transportation models, linear programs, decision trees, and simulation.

Prerequisite: OSCM 3001.

Level of Study: Undergraduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2021 Fall Term, 2020 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204060)

OSCM 4065 Supply Chain Risk and Resilience (3 credits)

We are witnessing an unprecedented increase in supply chain disruptions, which have been adversely impacting not only businesses but communities of people around the globe. Global trends and forecasts are strongly indicating that the magnitude and frequency of supply chain disruptions are on the rise and that supply chain risk management must become one of the central topics in designing and managing our supply chains. *Prerequisite:* OSCM 3001.

Level of Study: Undergraduate

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204065)

OSCM 4080 Applied Procurement (3 credits)

Combines comprehensive classroom work on the tasks, processes and procedures involved in the procurement function with on-the-job work which executes key procurement functions against real world priorities in a local company or Marquette University Purchasing Department. Student in-class work will be evaluated by the instructor. On-the-job work will be reviewed and supported by professional procurement staff from a local company. The key objectives of the course are (1) to help students understand and think critically about the essential functions of procurement; (2) to execute those functions in a real-world environment; and (3) to add value to their assigned company. By linking the classroom work with applied work addressing real-world needs, the value to both the student and the university will be enhanced.

Prerequisite: OSCM 3001 and consent of instructor.

Level of Study: Undergraduate

Last four terms offered: 2022 Fall Term, 2022 Spring Term, 2021 Fall Term, 2021 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204080)

OSCM 4082 Applied Lean Six Sigma (3 credits)

An advanced survey course in Operations and Supply Chain Management (OSCM) that brings together the two most prevalent continuous improvement methodologies – Lean and Six Sigma – into a single comprehensive approach. Students are exposed to the Lean Six Sigma methodology and thinking that underscores the necessity for process standardization, target management and problem solving. Around this framework, the various tools that are application specific are covered. Demonstrates how using Lean and Six Sigma together at the appropriate times can be a big benefit to a company's processes. There is an ever increasing amount of content and material related to these continuous improvement strategies and the classroom instruction includes the concepts, processes, tools, analyses and procedures conveyed through presentation formats. There is also hands-on application and training, as well as, business case learning, real world examples and best practice review. The required project involves working directly in the sponsoring company's business area or in a Marquette University department, applying the skills learned in class. In this setting, the students facilitate actual Lean Six Sigma events, activities and projects, with the focus being on completing a semester long project approved and mentored by the sponsor. The ultimate goal is to have each student emerge from the class fully prepared and comfortable in setting up, managing, facilitating and monitoring continuous improvement projects and programs.

Prerequisite: OSCM 3001 and cons. of instr.

Level of Study: Undergraduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2022 Spring Term, 2021 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204082)

OSCM 4085 Applied Logistics (3 credits)

Entails a combination of traditional classroom lectures with applied work in a real-world setting. The objectives are to provide students with the theoretical foundations of network design and modeling and expose students to the nuances and complexities of network modeling and application in the real world. To these ends, students work in teams on a real-world project in an area company under the supervision of a professional designated by the company. Classroom work will be evaluated by the instructor and applied work will be evaluated by both the work supervisor and the instructor. *Prerequisite:* OSCM 3001, OSCM 4040, OSCM 4060 and cons. of instr.

Level of Study: Undergraduate

Last four terms offered: 2016 Spring Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204085)

OSCM 4130 Integrated Supply Chain Strategy (3 credits)

Presents a synthesis of the principles in strategic and supply chain management, and how supply chain strategies are developed and executed. Developing an appropriate supply chain strategy, one that if correctly executed will help deliver a competitive advantage to a firm, has become a critical process for most, if not all organizations.; OSCM 4010 and one additional course from OSCM 4020, OSCM 4025 or OSCM 4040. *Prerequisite:* OSCM 3001 and Sr. stndg.

Level of Study: Undergraduate

Last four terms offered: 2023 Spring Term, 2022 Fall Term, 2022 Spring Term, 2021 Fall Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204130)

OSCM 4931 Topics in Operations and Supply Chain Management (3 credits)

Topics vary. Specific topics are designated in the Schedule of Classes.

Prerequisite: OSCM 3001.

Level of Study: Undergraduate

Last four terms offered: 2017 Spring Term, 2016 Spring Term, 2015 Spring Term, 2014 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204931)

OSCM 4986 Operations and Supply Chain Management Internship - Grading Period (3 credits)

S/U grade assessment.

Prerequisite: OSCM 3986; cons. of prog. dir. and cons. of Business Career Center.

Level of Study: Undergraduate

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

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204986)

OSCM 4989 Operations & Supply Chain Management Internship Work and Grading Period (3 credits)

S/U grade assessment.

Prerequisite: OSCM 3001; cons. of prog. dir. and cons. of Business Career Center.

Level of Study: Undergraduate

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

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%204989)

OSCM 4995 Independent Study in Operations and Supply Chain Management (1-4 credits)

Faculty-supervised, independent study/research of a specific area or topic in Operations and Supply Chain Management.

Prerequisite: Cons. of dept. ch.

Level of Study: Undergraduate

Last four terms offered: 2020 Fall Term, 2017 Summer Term, 2017 Spring Term, 2015 Spring Term Schedule of Classes (https://bulletin.marguette.edu/class-search/?details&code=OSCM%204995)

OSCM 5931 Topics in Operations and Supply Chain Management (3 credits)

Topics vary. Specific topics are designated in the Schedule of Classes. Other prerequisites may vary by topic. *Prerequisite:* Admitted to graduate ACCO, BUAD, ECON or NURS program; MBA 6010 and MBA 6090; or cons. of M.B.A. prog. dir. *Level of Study:* Graduate

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%205931)

OSCM 6200 Operations and Supply Chain Management (3 credits)

An advanced core course in operations and supply chain management, focusing on the design, planning, coordination and improvement of operations and supply chains. Topics are examined from an integrative and managerial perspective.

Prerequisite: Admitted to graduate ACCO, BUAD, CCOM, ECON, or MGMT; MBA 6010 and MBA 6090; or cons. of M.B.A. prog. dir. Level of Study: Graduate

Last four terms offered: 2019 Summer Term, 2019 Spring Term, 2018 Summer Term, 2018 Spring Term

Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%206200)

OSCM 6931 Topics in Operations and Supply Chain Management (1-3 credits)

Topics vary. Other prerequisites may vary depending on topic.

Prerequisite: Admitted to the graduate ACCO, BUAD, ECON or NURS program; MBA 6010 and MBA 6090; or cons. of M.B.A. prog. dir. Level of Study: Graduate

Last four terms offered: 2020 Spring Term, 2019 Spring Term, 2016 Fall Term, 2016 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%206931)

OSCM 6995 Independent Study in Operations and Supply Chain Management (1-3 credits)

Faculty-supervised, independent study/research of a specific area or topic in Operations and Supply Chain Management. *Prerequisite:* Admitted to the graduate ACCO, BUAD, ECON or NURS program; MBA 6010 and MBA 6090; and cons. of M.B.A. prog. dir. *Level of Study:* Graduate

Last four terms offered: 2018 Fall Term, 2018 Spring Term, 2015 Summer Term, 2014 Spring Term Schedule of Classes (https://bulletin.marquette.edu/class-search/?details&code=OSCM%206995)