OPERATIONS AND TECHNOLOGY MANAGEMENT (OTM)

OTM 300 – OPERATIONS AND SUPPLY CHAIN MANAGEMENT
3 credits.

Managing operations and supply chains is about people, information, equipment, and materials and how these are combined to produce and/or deliver goods and services to customers. Emphasis is on how systems and processes can be designed, managed, and improved to achieve operations excellence and competitive advantage.
Requisites: Not open to graduate/professional students
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Identify the basics of firm strategy and determine how to align operational and strategic decisions.
Audience: Undergraduate

2. Analyze a manufacturing or service process quantitatively and generate opportunities for improvement.
Audience: Undergraduate

3. Manage quality statistically and describe strategies for maintaining and improving quality.
Audience: Undergraduate

4. Determine effective inventory policies for various product and customer demand characteristics.
Audience: Undergraduate

5. Develop sourcing and design strategies to mitigate risk in supply chains.

Audience: Undergraduate

OTM 351 – BUSINESS PROCESS IMPROVEMENT
3 credits.

Introduction to the terminology, concepts, principles, and techniques for managing and improving business processes.
Requisites: OTM 300
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Explain how to use root cause analysis to deconstruct a complex problem.
Audience: Undergraduate

2. Identify and apply continuous improvement tools and techniques to production, administrative, distribution, and service-related functions.
Audience: Undergraduate

3. Demonstrate strategic thinking and project management methodologies to establish and measure multi-year improvement strategies to reach a desired future state.
Audience: Undergraduate

4. Create improvement loops to maximize value, eliminate waste and reach an ideal future state for cross-functional organizational activities.
Audience: Undergraduate

5. Analyze large and complex data sets to find patterns, identify key improvements, and substantiate improvement choices in process improvement projects.
Audience: Undergraduate

OTM 365 – CONTEMPORARY TOPICS
1-3 credits.

An exploration of subject areas possibly to be introduced into the business curriculum.
Requisites: Sophomore standing and OTM 300
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2025

OTM 370 – SUSTAINABLE APPROACHES TO SYSTEM IMPROVEMENT
3 credits.

Organizations employ a variety of improvement approaches to develop sustainable practices. Sustainability concerns such as natural capital, emission buildup, and base of the pyramid are directly addressed by examining innovative system-improvement concepts, while simultaneously strengthening mission-central concerns such as cost, quality, customer, market, revenue, profit, brand, reputation sourcing, and quality of work life.
Requisites: None
Repeatable for Credit: No
Last Taught: Summer 2025
Learning Outcomes: 1. Identify the forces in an organization's ecosystem that drive sustainability
Audience: Undergraduate

2. Determine the capabilities needed to utilize forces that drive sustainability
Audience: Undergraduate

3. Recommend sustainability improvements that strengthen the organization's core mission
Audience: Undergraduate

4. Apply sustainability principles and/or frameworks to address the challenge of improving an organization's core mission
Audience: Undergraduate

5. Analyze sustainability issues and/or practices using a systems-based approach to support organizational or societal sustainability strategies
Audience: Undergraduate

OTM 399 – READING AND RESEARCH-OPERATIONS AND INFORMATION MANAGEMENT
1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.
Requisites: Consent of instructor
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2022

OTM/MARKETNG 421 – FUNDAMENTALS OF SUPPLY CHAIN MANAGEMENT
3 credits.

Supply chain management (SCM) is a dynamic, cross-functional discipline that encompasses the areas of strategy, product development/innovation, marketing, finance, sourcing, production, logistics, and technology in both product and service industries. The supply chain is responsible for the sustainable and efficient movement of products, services, funds, and data along the value chain. Companies must effectively coordinate these functions not only within the firm, but with business partners and customers around the world. SCM is a critical, strategic component of any business or organization, from high-tech to healthcare, and it is a fundamental knowledge base for any student of business.
Requisites: Sophomore standing and (MARKETNG 300 or OTM 300) or declared in undergraduate Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Identify the business purpose and primary functions of supply chain management and their cross-functional linkages/interdependencies across an organization
Audience: Undergraduate

2. Apply supply chain management in strategic and tactical frameworks to optimize financial, operational, and customer objectives
Audience: Undergraduate

3. Analyze the influence of supply chain management on business performance and its role in delivering competitive advantage to an organization
Audience: Undergraduate

4. Identify and apply the economic, political, and business issues that impact how companies develop and execute supply chain strategy including globalization, sustainability, risk management, and ethics/society

Audience: Undergraduate

OTM/MARKETNG 422 – LOGISTICS MANAGEMENT
3 credits.

Provides a management perspective on the fundamental activities, concepts, and current practices in logistics. Transportation management, order fulfillment, warehousing, global logistics, key performance indicators, outsourcing, and introduction to radio frequency identification and barcoding. Use of case studies and industry speakers.
Requisites: MARKETNG 300, OTM 300, and sophomore standing, or declared in undergraduate Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Demonstrate understanding of fundamental logistics principles and fluency in the language of logistics.
Audience: Undergraduate

2. Articulate key activities performed by the logistics function including distribution, transportation, global logistics and inventory control.
Audience: Undergraduate

3. Demonstrate understanding of order fulfillment processes and best practices utilized in supply chain operations.
Audience: Undergraduate

4. Analyze and utilize supply chain data to make business decisions and expand applied data analysis skills.
Audience: Undergraduate

OTM/MARKETNG 423 – PROCUREMENT AND SUPPLY MANAGEMENT
3 credits.

Procurement and supply management is the business function concerned with an organization's acquisition of required materials, services, and equipment. Explores the key aspects of modern supply management including the purchasing process, cost management, negotiation, sourcing strategies, supplier management, category management, acquisition methods for materials and services, and outsourcing.
Requisites: Sophomore standing and (MARKETNG 300 or OTM 300) or declared in undergraduate Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Identify the importance of supply management, its functions and impact within firms, and the managerial strategies and operational tactics required of entry-level professionals in supply change management.
Audience: Undergraduate

2. Analyze a scenario to determine the appropriate sourcing strategy, [and] propose the most effective supplier management processes.
Audience: Undergraduate

3. Apply, at a foundational level, the necessary legal and ethical considerations to the examination and implementation of supply management.
Audience: Undergraduate

4. Apply a proper process in evaluating a decision to outsource and utilize a rigorous approach to the development of service contracts.
Audience: Undergraduate

5. Assess which of the generic purchasing and P2P process steps add value, explain the basis for that assessment, and suggest possible improvement methods.
Audience: Undergraduate

6. Demonstrate how to operationalize cost management and use it to make decisions.
Audience: Undergraduate

7. Prepare a risk assessment utilizing the knowledge and tools acquired in class.
Audience: Undergraduate

OTM/MARKETNG 427 – INFORMATION TECHNOLOGY IN SUPPLY CHAINS
3 credits.

Explores the concepts and practices of using information technology to effectively manage and operate supply chains of businesses and other organizations. Topics include supply chain processes, enterprise resource planning (ERP) system implementation, and supply chain simulations using SAP software.
Requisites: MARKETNG 300, OTM 300, and sophomore standing, or declared in undergraduate Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Describe key business processes related to supply chain management
Audience: Undergraduate

2. Effectively utilize an ERP system to execute key business processes related to supply chain management and have an intermediate level of ability to navigate within an ERP system
Audience: Undergraduate

3. Identify and analyze appropriate data and information from an ERP system as a means to making measurable improvements in the performance of a business
Audience: Undergraduate

4. Understand and recognize principles and best practices of implementing enterprise systems and have the ability to articulate common implementation mistakes
Audience: Undergraduate

OTM/MARKETNG 428 – SUPPLY CHAIN CAPITAL MANAGEMENT
3 credits.

Introduce the set of activities and solutions available to finance an organization's supply chain infrastructure. Define and study the related influencers. Investigate risks and mitigation techniques relative to associated metrics and strategies. Analyze multiple cases in group study work. Identify and recommend improvement opportunities.
Requisites: Junior standing and (MARKETNG 300 or OTM 300), or declared in the Business Exchange program
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Analyze multiple aspects of a supply chain network and provide recommendations on how to improve operations and efficiency of a business.
Audience: Undergraduate

2. Recognize and compose appropriate business contract language.
Audience: Undergraduate

3. Recognize and interpret financial statements to understand the current financial state of the organization; identify improvement opportunities and develop solutions to improve the entity's performance.
Audience: Undergraduate

4. Construct specific actions to take to improve working capital efficiency and release.
Audience: Undergraduate

5. Articulate the impact of geopolitical and international issues on supply chains.
Audience: Undergraduate

OTM/MARKETNG 429 – GLOBAL EXPERIENCE: SUPPLY CHAIN MANAGEMENT
1-2 credits.

Companies and organizations operate globally - sourcing, producing, and distributing to/from markets around the world. For business leaders in this environment, political, economic, historical, and cultural frameworks are critical to understand and navigate. Learn and explore these themes via classroom and applied experiences in global supply chain management.
Requisites: Consent of instructor
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Spring 2026
Learning Outcomes: 1. Apply supply chain management theory and practice in a global and industry-specific context
Audience: Undergraduate

2. Analyze how cultural, political, economic, and historical factors impact global business generally and industry-specific
Audience: Undergraduate

3. Develop cultural awareness and appreciation through interactions with students, faculty, and business professionals in the host country
Audience: Undergraduate

OTM 451 – SERVICE OPERATIONS MANAGEMENT
3 credits.

Application of operations management principles to the analysis of service-delivery systems in profit and nonprofit organizations. Topics include designing service-delivery systems, location and layout, operations planning and control, yield management, technology and information systems, and service quality management.
Requisites: OTM 300
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Utilize qualitative frameworks and quantitative tools to explain the tradeoffs involved in achieving a timely, high-quality, profitable service operations.
Audience: Undergraduate

2. Describe the function and importance of each element in the design of a service utilizing the Service Design Framework: Service Act, Strategic Priorities, Delivery System, Funding Mechanism.
Audience: Undergraduate

3. Evaluate service strategies and delivery systems in real companies utilizing the Service Design Framework, including identification of the service strategy being applied and explaining how facets of the service delivery system support or weaken this strategy.
Audience: Undergraduate

4. Recognize how to manage variability and uncertainty in delivery systems through appropriate capacity planning, queue design, and revenue management.
Audience: Undergraduate

OTM 452 – PROJECT MANAGEMENT
3 credits.

During their careers, managers spend a significant amount of time either participating in or leading projects. While every project is unique, some concepts and tools in project management apply to a wide range of projects. The aim of this course is to equip students with these concepts and tools, and to develop them into successful project managers (and team members). With that aim in mind, the course will emphasize quantitative aspects of project management while also discussing more qualitative aspects. Key topics include Project Initiation, Scheduling, Resource Management, Monitoring, Valuation, Rework, Agile Project Management, Project Management Analytics and Contracting.
Requisites: Sophomore standing
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Evaluate a project's benefits utilizing net present value and other analysis tools.
Audience: Undergraduate

2. Initiate a project including task breakdown and estimation, stakeholder analysis, resource allocation, and creating a project schedule.
Audience: Undergraduate

3. Monitor and track projects utilizing Earned Value Analysis and other project management tracking tools.
Audience: Undergraduate

4. Utilize and compare Agile and Waterfall project management methodologies.
Audience: Undergraduate

5. Demonstrate use of collaborative project management tools such as GANTT charts and related software tools (i.e. SmartSheet), and others for project tracking and resource planning.
Audience: Undergraduate

6. Collaborate in a team environment while applying various project management techniques to a real-world project.
Audience: Undergraduate

OTM 453 – OPERATIONS ANALYTICS
3 credits.

Focuses on the application of analytical methodologies to problems that arise in the context of a company's operations and supply chains. Touches on all three dimensions of analytics (descriptive, predictive, and prescriptive). Emphasis on data and real industry data collected from the university, alumni, and executive board members when possible. Explore, analyze, and utilize such data in a hands-on way, using a variety of software tools. Significantly driven by a set of case problems as opposed to systematic coverage of methodologies.
Requisites: OTM 300 and (GEN BUS 306, ECON 310, MATH 331, STAT/MATH 309, or 431), or declared in undergraduate Business Exchange program
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Recognize patterns and relationships that provide insights into business problems.
Audience: Undergraduate

2. Choose and apply data-based forecasting methods, and evaluate the performance of such methods to inform operations decisions.
Audience: Undergraduate

3. Engineer spreadsheet models for decision-support leveraging optimization and simulation tools.
Audience: Undergraduate

4. Apply critical thinking to complex real-world problems by formulating appropriate questions, making implementable assumptions, and interpreting results of analyses.
Audience: Undergraduate

5. Work effectively in teams on analytics projects.
Audience: Undergraduate

6. Communicate analytics and insights through presentations and written reports.
Audience: Undergraduate

7. Develop basic skills using Tableau visualization software and the statistical software R.
Audience: Undergraduate

8. Develop intermediate skills using Excel.
Audience: Undergraduate

OTM/I SY E/MATH/STAT 632 – INTRODUCTION TO STOCHASTIC PROCESSES
3 credits.

Topics include discrete-time Markov chains, Poisson point processes, continuous-time Markov chains, and renewal processes. Applications to queueing, branching, and other models in science, engineering and business.
Requisites: (STAT/MATH 431, 309, STAT 311 or MATH 531) and (MATH 320, 340, 341, 375, 421 or 531) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program
Course Designation: Breadth - Natural Science
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Recall and state the formal definitions of the mathematical objects and their properties for stochastic processes (e.g., discrete space Markov chains, Poisson processes, renewal processes, branching processes, etc.).
Audience: Both Grad & Undergrad

2. Use such definitions to argue that a mathematical object does or does not have the condition of being a particular type or having a particular property (e.g., irreducibility, aperiodicity, recurrence, transience, the Markov property, etc.).
Audience: Both Grad & Undergrad

3. Recall and state the standard theorems of stochastic processes. (e.g., laws of large numbers for Markov chains, existence of limiting/stationary distributions, law of large numbers for renewal processes, etc.) and recall the arguments for these theorems and the underlying logic of their proofs.

Audience: Both Grad & Undergrad

4. Construct mathematical arguments related to the above definitions, properties, and theorems, including the construction of examples and counterexamples.
Audience: Both Grad & Undergrad

5. Convey arguments in oral and written forms using English and appropriate mathematical terminology, notation and grammar.
Audience: Both Grad & Undergrad

6. Model simple real life situations by means of discrete-space stochastic processes and calculate probabilities associated with those processes.
Audience: Both Grad & Undergrad

7. Identify applications of course content in current areas of research.
Audience: Graduate

OTM 654 – PRODUCTION PLANNING AND CONTROL
2-3 credits.

The role of materials and capacity planning and control in business operations. Manufacturing Resource Planning Systems: aggregate planning, material requirements planning, capacity planning, operations scheduling. Procedures for cellular manufacturing systems. Costing issues in modern planning and control systems.
Requisites: Sophomore standing and OTM 300
Repeatable for Credit: No
Last Taught: Spring 2022
Learning Outcomes: 1. Recognize how inventory planning and replenishment, materials requirements planning, sales & operations planning, master scheduling, capacity resource planning and management, and scheduling execution activities work within a Supply Chain Management framework.
Audience: Undergraduate

2. Apply world class ERP software (SAP) to conduct Supply Chain Management.
Audience: Undergraduate

3. Identify the dynamics of Enterprise Resource Planning (ERP) systems that interface within a Supply Chain Management (SCM) framework.
Audience: Undergraduate

4. Explain MA5 ERP implementation methodology (visioning, planning, design, construction and delivery).
Audience: Undergraduate

5. Explain how to integrate various methodologies for replenishment planning.
Audience: Undergraduate

6. Analyze complex operations projects as a means to understand the strategic thinking framework for Supply Chain Management (SCM).
Audience: Undergraduate

7. Demonstrate how real Supply Chain Management is variable.
Audience: Undergraduate

OTM 700 – OPERATIONS AND SUPPLY CHAIN MANAGEMENT
2-3 credits.

Management of operations throughout an organization or supply chain. Emphasizes the coordination of resources to improve cost, quality, and customer service. Topics include capacity and materials management, operations strategy, and process improvement.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Assess the alignment of operational capabilities with firm strategy and decisions made in other parts of the organization, and articulate how operations can deliver value to customers and the firm.
Audience: Graduate

2. Understand key operations principles and tools, and how they can be used to support process improvement.
Audience: Graduate

3. Evaluate an organization's work processes to assess system capacity and responsiveness.
Audience: Graduate

4. Understand the impact that variability has on process performance, and choose appropriate capacity levels to manage this impact.
Audience: Graduate

5. Utilize appropriate models to identify good inventory ordering policies, and identify forces that drive inventory management decisions.
Audience: Graduate

6. Work effectively in a team to solve complex operational problems.
Audience: Graduate

OTM 701 – PRODUCT MANAGEMENT
2-3 credits.

Introduction to both the technical and interpersonal sides of developing and managing a product, from ideation to application and revision and launch. Key tools and frameworks including agile software development, product road mapping and design thinking are included.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Describe the roles and responsibilities of product managers in high-tech businesses
Audience: Graduate

2. Apply key skills for managing all aspects of the product management life cycle
Audience: Graduate

3. Articulate key principles and concepts for comparative analysis of different product management strategies
Audience: Graduate

4. Apply concepts in decision-theoretic frameworks to enhance business efficacy
Audience: Graduate

5. Demonstrate how to effectively communicate product management strategies and plans to various stakeholders across a business enterprise
Audience: Graduate

OTM 702 – DIGITAL STRATEGY
2 credits.

Helps develop the critical thinking skills necessary to assess how digitization shapes business strategy, innovation, and operations in firms. Prepares students to analyze and evaluate business challenges for maximizing the impact of digitization on products, processes, and services in different settings.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Define the digital economy and identify current and emerging technologies
Audience: Graduate

2. Summarize digitization and illustrate its influence on innovation, transformation, and disruption
Audience: Graduate

3. Describe the emerging models of competition and entrepreneurship in the digital economy
Audience: Graduate

4. Analyze digital investments and integrate them with other business processes and activities
Audience: Graduate

5. Apply managerial practices to leverage digital platforms effectively in organizations
Audience: Graduate

OTM 703 – COMPETING THROUGH ANALYTICS
2 credits.

Introduction to business analytics, machine learning and artificial intelligence from a managerial perspective. Covers identifying opportunities to capture data, learning about the current trends in and possibilities with data mining, converting analytics insights into action and evaluating your organization's readiness to compete with analytics.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Describe different types of analytics and their uses in relation to their industries: descriptive, predictive and prescriptive.
Audience: Graduate

2. Articulate the value of different types of structured and unstructured data from varying sources such as social media, CRM systems, IoT sensors, etc.
Audience: Graduate

3. Identify the strategic opportunities for improving efficiency, growth, and innovation using data and analytics.
Audience: Graduate

4. Explain the new-found challenges related to Ethical AI and Algorithmic Bias.
Audience: Graduate

OTM 714 – SUPPLY CHAIN ANALYTICS
2-3 credits.

The ability to extract information from data has become essential for companies that want to remain competitive - and therefore essential for students aspiring to become successful managers. Provides an understanding of various analytics methodologies and concepts, and the ability to apply these to business problems related to supply chain management and operations management. Key topics include Data Visualization, Time Series Forecasting, Linear Regression, Classification Methods, Association Rules, Cluster Analysis and Text Mining.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Examine data sets to recognize patterns and relationships in the data that provide insights into business problems
Audience: Graduate

2. Apply principles of data visualization and presentation to real business problems
Audience: Graduate

3. Develop basic skills using Tableau visualization software
Audience: Graduate

4. Apply methods of forecasting product demand and measure the performance of such methods
Audience: Graduate

5. Apply a variety of machine learning techniques (such as logistic regression, K nearest neighbors classification, association rules, cluster analysis, text mining) to perform analysis and/or make predictions and help solve business problems
Audience: Graduate

6. Develop basic skills using the statistical analysis language R
Audience: Graduate

OTM/MARKETNG 722 – LOGISTICS MANAGEMENT
2-3 credits.

A foundation in transportation, order fulfillment, warehousing, materials planning including MRP, demand planning, import/export fundamentals, ERP systems, supply chain metrics, and leading supply chain technologies such as RFID.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Demonstrate an understanding of fundamental logistics principles and fluency in the language of logistics.
Audience: Graduate

2. Recognize the key activities performed by the logistics function including distribution, transportation, global logistics, and inventory control.
Audience: Graduate

3. Demonstrate an introductory level of understanding of information technology used in logistics operations.
Audience: Graduate

4. Analyze and use supply chain data to make business decisions in order to expand their applied data analysis skills.
Audience: Graduate

OTM/MARKETNG 724 – STRATEGIC GLOBAL SOURCING
2-3 credits.

Supply management (procurement) is widely recognized as one of the most critical elements in global supply chain management. The function plays a major role in maximizing the value and the integration of supply chain operations. Explores the key aspects of modern supply management including functional responsibilities and exemplary practices for major industry sectors.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Identify the functions, strategies, tactics, and analytical tools utilized in the sourcing function.
Audience: Graduate

2. Analyze scenarios to determine appropriate sourcing strategies and the most effective supplier management processes.
Audience: Graduate

3. Explain and apply components of sourcing strategy including supplier collaboration, risk assessment, ethics, make or buy considerations, and cost-plus modeling.
Audience: Graduate

4. Evaluate outsourcing decisions and utilize a rigorous approach to the development of service contracts.
Audience: Graduate

5. Demonstrate how to operationalize cost management for sourcing decisions.
Audience: Graduate

OTM/MARKETNG 726 – SUPPLY CHAIN STRATEGY
3 credits.

Focuses on strategic issues and current theory and practice in supply chain management. Effective design and management of supply chain resources is a key source of competitive advantage for organizations. Supply chain management is a cross-functional discipline that concentrates on the management of goods, services, and information among all links in the value chain.
Requisites: (MARKETNG 300 and OTM 300) or (MARKETNG 700 and OTM 700) and graduate/professional standing, or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Summarize the current theory and practice of supply chain management (SCM)
Audience: Graduate

2. Describe the emergence of SCM as a management function and academic discipline in a global economy
Audience: Graduate

3. Recognize the role of supply chain management in emerging business models
Audience: Graduate

4. Identify supply chain networks and the drivers of supply chain design
Audience: Graduate

5. Describe the impact of product design and innovation on supply chain design and costs
Audience: Graduate

6. Apply the importance of internal coordination and external collaboration to firm performance
Audience: Graduate

7. Demonstrate understanding of the critical and integrative role of supply chain management in business and society
Audience: Graduate

OTM/MARKETNG 727 – INFORMATION TECHNOLOGY IN SUPPLY CHAINS
3 credits.

Explores the concepts and practices of using information technology to effectively manage and operate supply chains of businesses and other organizations. Topics include supply chain processes, enterprise resource planning (ERP) system implementation, and supply chain simulations using SAP software.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Describe key business processes related to supply chain management.
Audience: Graduate

2. Effectively utilize an ERP system to execute key business processes related to supply chain management and have an intermediate level of ability to navigate within an ERP system
Audience: Graduate

3. Identify and analyze appropriate data and information from an ERP system as a means to making measurable improvements in the performance of a business
Audience: Graduate

4. Understand and recognize principles and best practices of implementing enterprise systems and have the ability to articulate common implementation mistakes
Audience: Graduate

OTM/MARKETNG 728 – SUPPLY CHAIN CAPITAL MANAGEMENT
2-3 credits.

Supply chain capital management refers to the set of activities and solutions available to finance an organization's supply chain infrastructure. As supply chains become more extended and complicated a need has developed to both manage and fund the supply network. Define and study the various influencers on the supply chain capital structure. Investigate risks, mitigation techniques, metrics and themes relating to the topic.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Analyze multiple aspects of a supply chain network and provide recommendations on how to improve operations and efficiency of a business.
Audience: Graduate

2. Recognize and compose appropriate business contract language.
Audience: Graduate

3. Recognize and interpret financial statements to understand the current financial state of the organization; identify improvement opportunities and develop solutions to improve the entity's performance.
Audience: Graduate

4. Construct specific actions to take to improve working capital efficiency and release.
Audience: Graduate

5. Articulate the impact of geopolitical and international issues on supply chains.
Audience: Graduate

OTM 737 – GLOBAL SUPPLY CHAIN
2 credits.

Strategies, techniques, and best practices of global supply chain management through the lens of recent supply chain disruptions. Topics include global logistics strategy, supply chain risk management, international transportation methods, international terms of commerce, outsourcing strategy, and supply chain IT systems.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. Demonstrate understanding of fundamental global supply chain principles and fluency in the language of supply chain management.
Audience: Graduate

2. Articulate business challenges related to recent supply chain disruptions and relate strategies and frameworks from the course to address these challenges.
Audience: Graduate

3. Describe key management functions performed by supply chain practitioners including establishing a global logistics strategy, setting supply chain metrics, assessing and building supplier resilience, managing global transportation systems, and establishing outsourcing relationships.
Audience: Graduate

4. Utilize an enterprise resource planning (ERP) system to execute global supply chain business processes while analyzing appropriate data and information as a means to make measurable improvements in the performance of a business.
Audience: Graduate

5. Identify country-specific aspects of this country’s supply chain infrastructure and logistics service providers.
Audience: Graduate

OTM 751 – SERVICE OPERATIONS MANAGEMENT
3 credits.

Application of operations management principles to the analysis of service-delivery systems in profit and nonprofit organizations. Topics include designing service-delivery systems, location and layout, operations planning and control, yield management, technology and information systems, and service quality management.
Requisites: OTM 700 and GEN BUS 704
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Utilize qualitative frameworks and quantitative tools to explain the tradeoffs involved in achieving a timely, high-quality, profitable service operations.
Audience: Graduate

2. Describe the function and importance of each element in the design of a service utilizing the Service Design Framework: Service Act, Strategic Priorities, Delivery System, Funding Mechanism.
Audience: Graduate

3. Evaluate service strategies and delivery systems in real companies utilizing the Service Design Framework, including identification of the service strategy being applied and explaining how facets of the service delivery system support or weaken this strategy.
Audience: Graduate

4. Recognize how to manage variability and uncertainty in delivery systems through appropriate capacity planning, queue design, and revenue management.
Audience: Graduate

OTM 752 – PROJECT MANAGEMENT
1-3 credits.

During their careers, managers spend a significant amount of time either participating in or leading projects. While every project is unique, some concepts and tools in project management apply to a wide range of projects. Equips students with these concepts and tools, and to develop them into successful project managers (and team members). Focuses on broadly applicable concepts and methods and will cover both qualitative and quantitative aspects of project management. Key topics include Project Initiation, Scheduling, Resource Management, Monitoring, Valuation, Risk Management, Agile Project Management, Project Portfolio Management and Contracting.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2026
Learning Outcomes: 1. How to manage time and resources in a project.
Audience: Graduate

2. How to develop a project charter.
Audience: Graduate

3. How to deal with risk and uncertainty in a project.
Audience: Graduate

4. How to monitor and control a schedule and budget.
Audience: Graduate

5. Differentiate between traditional and agile project management approaches.
Audience: Graduate

6. Understand the complexity and strategic nature of project portfolio decisions.
Audience: Graduate

7. Understand details of contracting in a project.
Audience: Graduate

OTM 753 – HEALTHCARE OPERATIONS MANAGEMENT
2-3 credits.

Healthcare delivery systems around the world struggle with three fundamental issues: patient access to care, quality and safety in the care process (including patient and staff satisfaction), and cost of care. These issues will be examined along with selected analysis and improvement approaches that the discipline of Operations Management can offer. Different types of both clinical and non-clinical processes in hospital settings are illustrated.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Apply common terminology and concepts as used in various healthcare delivery environments.
Audience: Graduate

2. Describe commonly recognized operational and financial problems with healthcare delivery systems.
Audience: Graduate

3. Explain different ways to design, organize, and manage healthcare delivery systems.
Audience: Graduate

4. Identify various key measures used to assess healthcare system performance.
Audience: Graduate

5. Explain various process types in healthcare delivery systems.
Audience: Graduate

6. Understand how to improve the success of sustaining and spreading healthcare system performance and practices.
Audience: Graduate

7. Map patient and information flows, analyze system capacity, and apply operational performance metrics.
Audience: Graduate

8. Analyze problems in healthcare delivery systems and apply A3 Thinking and selected operations management/Lean Tools in developing proposals for solution.
Audience: Graduate

9. Analyze delivery systems from an operational perspective, while also considering patient experience and staff satisfaction.
Audience: Graduate

10. Recognize managerial issues surrounding attempts to resolve problems in healthcare delivery and adapt solution implementations accordingly.
Audience: Graduate

OTM 758 – MANAGING TECHNOLOGICAL AND ORGANIZATIONAL CHANGE
3 credits.

Issues surrounding stretegic decisions to adopt new technologies and modern improvement philosophies, the impact these will have on the organization and its members, obstacles preventing successful implementations, and the effective management of change processes. Change triggered by process technologies, and models of change management, form the core of the course.
Requisites: OTM 700
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2023

OTM 760 – MANAGING BY DESIGN
2-3 credits.

Exploration of design as a new practice in management that serves the need for identifying innovation opportunities in all types of organizations. Includes readings and cases in design/management and a set of creative projects that advance design skills in the context of management.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2025
Learning Outcomes: 1. Explain the relevance of design ideas to management practice – how to do more with less, to align and lead teams through a lean, efficient and vetted process for creative innovation.
Audience: Graduate

2. Describe the role and potential of digital technologies in delivering novel experiences.
Audience: Graduate

3. Describe how synthetic thinking complements analytic thinking.
Audience: Graduate

4. Practice considering the human experience of products, services, and systems.
Audience: Graduate

5. Explain how design can operate at all levels in an organization and is not limited to obvious domains, such as product development or communications department.
Audience: Graduate

6. Apply creative ideas and methods of design that develop management skills and techniques, i.e., make small bets fast, evaluate failure intelligently and harness breakthroughs to propel company growth or social good.
Audience: Graduate

7. Develop skills and perspectives on in-market experiments that save time and resources while revealing smarter outcomes.
Audience: Graduate

8. Reflect on how you can become a more innovative thinker and leader.
Audience: Graduate

OTM 765 – CONTEMPORARY TOPICS
1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2026

OTM 770 – SUSTAINABLE APPROACHES TO SYSTEM IMPROVEMENT
4 credits.

Innovative system-improvement concepts and approaches that sustainably strengthen mission-central concerns such as quality, cost, customers, markets, revenue, profit, brand, reputation, sourcing, quality of work life, natural capital, buildup of concentrations and base of the pyramid.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2021

OTM 777 – TECHNOLOGY STRATEGY AND PRODUCT MANAGEMENT APPLIED LEARNING
1 credit.

Exposure to emerging and current topics in Technology Strategy and Product Management (TSPM) through applied learning experiences that may include case studies, guest speakers, industry meetings, and career and leadership development exercises and workshops.
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, for 2 number of completions
Last Taught: Spring 2026
Learning Outcomes: 1. Expand professional network and reflect on interactions with industry professionals
Audience: Graduate

2. Identify career pathways and roles within TSPM (Technology Strategy and Product Management)
Audience: Graduate

3. Demonstrate professional skills, both written and verbal
Audience: Graduate

OTM/E P D/GEN BUS 784 – PROJECT MANAGEMENT ESSENTIALS
1 credit.

Techniques that will help to plan, execute, and deliver projects with desired scope on time and on budget. Learn to document clear project objectives and goals, accurately estimate project time and costs, schedule and allocate time-critical resources, and establish feedback systems for optimal project control.
Requisites: Graduate/professional standing or declared in graduate Business Exchange program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Summer 2023
Learning Outcomes: 1. Plan and manage successful engineering projects using appropriate methods, tools, and techniques
Audience: Graduate

2. Estimate project costs, resources, and schedules
Audience: Graduate

3. Immediately apply project management principles regarding the five major project stages: initiate, plan, execute, control, and close
Audience: Graduate

4. Apply or customize the project management framework to engineering organizational needs
Audience: Graduate

5. Assess and improve the current project management system
Audience: Graduate

OTM 799 – READING AND RESEARCH-OPERATIONS AND INFORMATION MANAGEMENT
1-6 credits.

Individual work suited to the needs of graduate students.
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2025

OTM 990 – OPERATIONS AND INFORMATION MANAGEMENT-INDEPENDENT RESEARCH PH.D. THESIS
1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2026

OTM 999 – READING AND RESEARCH-OPERATIONS AND INFORMATION MANAGEMENT PHD
1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged both during regular sessions and during the intersession periods.
Requisites: Declared in Business PHD
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2024