

# OPERATIONS MANAGEMENT (OM)

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**OM 2040 (s) Special Topics (1-16 credits, max 99)**  
Credit arranged

**OM 2980 (s) Internship (1-3 credits, max 6)**  
Graded Pass/Fail.

**OM 2990 (s) Directed Study (1-16 credits, max 99)**  
Credit arranged

**OM 3700 Introduction to Operations and Supply Chain Management (3 credits)**

Examines the concepts and tools used to design, implement, manage, evaluate, and improve the business operations used to create and deliver value to customers through supply chains. Globalization, ethics, social responsibility, and sustainability issues associated with operations will also be considered. May involve evening exams. Typically Offered: Fall, Spring and Summer.

**Prereqs:** STAT 2510 or STAT 3010 or BUS 2530 or MATH 1143 or MATH 1160 or MATH 1170 or MATH 1750 or MATH 2750

**OM 3780 Project Management (3 credits)**

Planning, organizing, staffing, controlling, and directing an organization's resources for special projects; topics include matrix organizations, cross functional teamwork, budgeting, work breakdown structures, critical path method (CPM), program evaluation and review techniques (PERT), capacity planning, and project control. May involve evening exams. Typically Offered: Fall, Spring and Summer.

**OM 3980 Internship (1-3 credits, max 6)**

**OM 4040 (s) Special Topics (1-16 credits, max 99)**  
Credit arranged

**OM 4390 Systems and Simulation (4 credits)**

Distribution theory, random numbers, modeling concepts, and simulation of queuing and inventory systems. Students must have access to a laptop computer for use in class. Three lectures and one 3-hour lab a week. May involve evening exams. May involve field trips. Typically Offered: Fall and Spring.

**Prereqs:** OM 3700, CHE 4530, or ME 3130; or Permission

**OM 4560 Enterprise Quality Management (3 credits)**

Cross-listed with STAT 4560

Principles of quality management, with a focus on Lean Six Sigma concepts and Define-Measure-Analyze-Improve-Control (DMAIC) approach to managing and improving enterprise quality. Additional work required for graduate credit. May include evening exams. May involve field trips. Typically Offered: Varies.

**Prereqs:** STAT 2510 or STAT 3010 or Permission

**OM 4650 Procurement and Resource Management (3 credits)**

This course examines the principles, strategies, and practices involved in acquiring goods, services, and resources essential for effective business operations. Students will learn how procurement aligns with organizational objectives, supports value creation, and ensures ethical, sustainable, and cost-effective sourcing. Topics include supplier selection and evaluation, contract negotiation, category management, global sourcing, risk management, and the integration of technology in procurement. The course also explores resource allocation strategies that optimize capacity, inventory, and financial investment, enabling organizations to meet customer demands while maintaining competitive advantage. Through case studies, simulations, or applied projects, students will develop practical skills in supplier relationship management, procurement analytics, and total cost of ownership analysis. Typically Offered: Spring.

**Prereqs:** OM 3700

**OM 4700 Supply Chain Analytics (3 credits)**

Prepares students with descriptive, diagnostic, predictive, and prescriptive analytics tools, including mathematics programming and simulation, to explore key issues associated with the design, implementation, and management of various supply chains, with emphasis on strategic planning, sourcing, logistics, inventory management, sales and operation planning, and distribution. May involve evening exams. Typically Offered: Fall and Spring.

**Prereqs:** BUS 3540 and OM 3700

**OM 4720 Enterprise Planning and Scheduling (3 credits)**

In-depth analysis and application of planning and scheduling techniques in enterprise operations, with emphasis on key modules of manufacturing, planning, and control systems and their implications on companies' supply chains. ERP software will be introduced. May involve evening exams and field trips. Typically Offered: Varies.

**Prereqs:** OM 3700

**OM 4850 Managing and Operating Growth Enterprises (3 credits)**

This course investigates how fast-growing enterprises design and evolve operations and supply chains under pressure. It is tailored for undergraduates with a focus on the executional aspects of scaling a business. Through real-world case studies, interactive simulations, and practitioner guest speakers, students will develop a practical understanding of how growth ventures design and evolve operations, supply chains, organizational structures, and resource allocation strategies to scale sustainably. Students will work in teams to analyze high-growth companies and present operational solutions addressing growth bottlenecks. Typically Offered: Fall.

**Prereqs:** OM 3700

**OM 4980 (s) Internship (1-16 credits, max 99)**

Credit arranged Graded Pass/Fail.

**OM 4990 (s) Directed Study (1-16 credits, max 99)**

Credit arranged