

Operations Management

Overview

Operations Management involves working within an organization to oversee the quality and speed of processes. Students in Operations Management study a firm's profitability, improving process flows, enhancing output quality, and managing the supply chain. Possible careers for Operations Management students include working in service and manufacturing firms to manage the transformation of inputs into outputs. The operations function also plays a role in developing new products and in product pricing. The Operations Management program the David Eccles School of Business trains students how to think analytically and logically, using both quantitative and qualitative frameworks.

**These course offerings are subject to change. Please check with your Assigned Advisor frequently.*

OM Major Courses (NEED FIVE):

The Operations Management major consists of two quantitative courses (MATH 1100 & OIS 3440), five elective courses and two Global Perspectives courses. Please note that the course offerings listed below are typically offered in the semester indicated; however, these are subject to change.

OIS 4650 – Principles of Quality Management This course offers an introduction to the principles of quality management, with an emphasis on cross- functional problem solving. Topics include customer driven quality, leadership, employee participation and training, continuous process improvement, design quality and error prevention, management by fact, and strategic quality planning. **(Spring)**

OIS 5450 – Simulation of Business Processes This course concentrates on building simulation models of business practices, and on using the models to improve processes. Simulation software Promodel is used to build models of complex situations in many areas of business. **(Fall)**

OIS 5610 – Practical Management Science This course takes a practical approach to management science by using popular business software (e.g. Microsoft Excel) to solve analytical models. Management-decision problems covered in the course include linear and integer programming, goal programming, transportation models, specialized network models, inventory models, critical-path method, project management networks, and queuing models. **(Spring)**

OIS 5620 – Global Supply Chain Management (IR) Production of services and goods typically involves many process steps that are spread across multiple firms or departments. In supply chain management (SCM) students examine how to improve performance by considering the actions of multiple members within this chain of activities. SCM addresses not only the flow of materials from upstream to downstream members in the supply chain, but also the flow of information and funds. **(Spring)**

OIS 5630 – Operations Resource Planning Operations resource planning deals with the management of material flows within an emphasis. The course focuses on understanding the fundamental issues and decisions in manufacturing planning and control with an emphasis on the role of information systems in integrating these concepts together to create an integrated manufacturing management system. **(Spring)**

OIS 5640 – Project Management Project management has become the way of life in many industries. In this course students discuss all three phases of project management: project conception, execution, and closure. Issues related to project leadership, budgeting, and scheduling are also addressed in the course. **(Fall)**

OIS 5650 – Six Sigma Six Sigma is a philosophy and set of concrete tools designed to reduce variation in all critical processes to achieve continuous and breakthrough improvements that impact the bottom line of an organization and increase customer satisfaction. In this course, students study the five phase DMAIC (Design-Measure-Analyze-Improve-Control) approach in detail with a combination of lecture, small group breakout sessions, and hands-on practice. **(Fall)**

OIS 5660 – Operations Strategy What makes some operations succeed while others die a quick or miserable death? Why do some of the best product or service ideas in the world fizzle instead of sizzle? These are just some of the intriguing questions explored in this course in applying strategy development and execution to operations management. **(Spring)**

OIS 5670 – Managing Service Operations Service companies constitute the largest and fastest-growing segment of the economies of the United States and many other countries. This course aims to develop a better understanding of best practices in the service sector through analysis of leading-edge firms and the strategies they have employed. **(Summer)**

Global Perspectives Requirement: All OM students are required to complete two global perspectives courses. The first, OIS 5620, is required. The second can be any university approved IR course. However, the OIS department strongly recommends OM students take FINAN 4550 as the second global perspectives course.

Operations Management Major Application

The application process for the OM major is two-fold. First, students must have completed all pre-business courses and been admitted to upper division status. Second, students must meet with the OM Major Director, Tariq Mughal, to discuss their career goals. A meeting may be scheduled via email to Tariq.Mughal@business.utah.edu. Admission to the major will be based on a student's overall fit with the program based on the student's goals and grades in OIS 2340 and OIS 3440 (if completed).

Course Sequencing

Four semester option

Semester 1 (Fall)	Semester 2 (Spring)	Semester 3 (Fall)	Semester 4 (Spring)
OIS 3440 MATH 1100	*OIS 4650 GP I- OIS 5620 (spring only)	*OIS 5640 *OIS 5650 GP II- can be any IR (FINAN 4550 recommended)	*OIS 5610 *OIS 5660

Three semester option

Semester 1 (Fall)	Semester 2 (Spring)	Semester 3 (Fall)
OIS 3440 *OIS 5640 MATH 1100	*OIS 4650 *OIS 5610 GP I- OIS 5620 (spring only)	*OIS 5650 *OIS 5450 GP II- can be any IR (FINAN 4550 recommended)

**These courses can be chosen from any of the electives from the list on page 1.*

Student Organizations and Opportunities

It is highly recommended that School of Business students become involved with student groups in order to network with industry professionals. Additionally, students have the opportunity to develop leadership, problem solving and critical thinking skills through their involvement experiences. There is an operations management club that currently meets. Please contact the OM club further information at: UofU.omclub@gmail.com. There are also many groups that are open to all majors.

Undergraduates are welcome and encouraged to become involved. Employers highly value participation in student groups. To see a list of business student groups visit: <http://www.business.utah.edu/undergraduate-program/student-life>.

Students may also earn valuable professional certifications while completing the Operations Management major. For instance, after completing OIS 5650 (Six Sigma for Managers), students qualify to work on a project with their instructor, who is a Master Black Belt, to receive Green Belt Six Sigma certification. Similarly, after completing OIS 5640 (Project Management), students are eligible to apply for the Certified Associate in Project Management (CAPM)[®] certification exam even before completing their bachelor's degrees in Operations Management.

Career Services

Success on the job market requires early preparation; therefore students should begin investing in career skills as early as the freshman year. Professionals in the Campus Career Services (801-581-6186) and the Business Career Management Center (801-581-3061) assist students in understanding vocational options, finding internships, and preparing for a successful career.

Graduate Study in Business

There are a variety of degree options for Operations Management majors to pursue at the graduate level in the David Eccles School of Business. Perhaps the two most closely related degrees are the Master of Science in Information Systems and the Master of Business Administration. Other options include: Master of Science in Finance, Master of Real Estate Development and Master of Accounting. Each program has specific requirements for admission.

For more information about graduate programs in the Eccles School call Graduate Admissions at (801) 581-7785 or e-mail mastersinfo@business.utah.edu.