Operations refers to the design, operation, and improvement of the systems that create and deliver a firm's primary products and services. It integrates all aspects of the product and service lifecycle, from product and process design, procurement, planning, and production, to logistics, distribution, and returns. From start to finish, this execution process makes a direct, significant impact on a firm's competitive advantages and financial performance.

Courses in the operations area equip students with a solid understanding of core operations concepts and decisions, rigorous analytical thinking and skills, and a creative mindset so they can deal with all of the complex issues of a supply chain. Moreover, courses incorporate new elements such as sustainability, risk management, and innovation, making them especially relevant to today's increasingly interdependent and competitive global economy.

For students interested in specific business settings, the area also provides courses that explain the operations function in those industries, such as Operations in Health Care.

Programs

Students interested in Operations coursework can pursue the interdisciplinary M.S. in Management.

Courses

OPGB 6627. Operations Management. (3 Credits)
MBA FLEX CORE COURSE. Studies the operations of both manufacturing and service organizations with the objective of simultaneously optimizing the quality and productivity of the operations systems. Develops techniques for strategic planning and system design, such as quality control, aggregate and capacity planning, project planning, scheduling and control, material and inventory management and just-in-time production.

OPGB 8999. Independent Study. (3 Credits)
Independent Study.

OPGB 76AA. Transnational Mgt&Sys Oper. (3 Credits)
The operations function for both manufacturing and service organizations is studied with the objective of the simultaneous optimization of the quality and productivity of the operating systems. Techniques for strategic planning and system design.

OPGB 76AP. Project Management. (3 Credits)
Provides the skills project managers need to complete projects on time and on budget. Technology improvements in organizations are implemented through projects, and strong project management skills are a key success factor from companies to achieve the expected benefits from their technology investments. Topics include setting and maintaining project scope, developing work plans, estimating required resources, developing work programs, organizing project teams, super-users, monitoring and controlling projects, maintaining relationships with users and management, status reporting, and key factors for realizing the anticipated benefits from the investment. Students use a computer-based project management tool as part of this course.

OPGB 76BB. Studies in Quality Management. (3 Credits)

OPGB 76BR. Health Care Operations Mgt. (3 Credits)
Health Care Operations Management is a discipline that integrates scientific principles of operations management to determine the most effective and efficient methods to support patient care delivery. The biggest challenge in health care is to provide high quality care while at the same time keeping costs down. As such, all health care sectors must be driven by process management, quality improvement, information technology, knowledge management, and resource alignment. This course addresses these challenges in many ways, from the design of patient flow to streamlined process, from resource management to supply chain management, from quality control to patient safety, from forecasting to capacity planning, and from continuous improvement to project management.

OPGB 76CA. Accounting Controls. (3 Credits)
The primary focus of the class will be on the use of data-driven analytics to help managers make key operating and strategic decisions. A secondary focus will be on the use of data-driven analytics for the purpose of internal control.

OPGB 76CB. Process Management and Six Sigma. (3 Credits)
A process is the collection of activities and operations that transform inputs into outputs. This course focuses on learning how to improve organizational processes by using the globally recognized problem-solving methodology known as Lean Six Sigma. Students in this course will learn the five phases of the Lean Six Sigma method and will have the chance to apply the techniques and tools learned in class in real-world projects. Students that meet the requirements of classroom lectures and tests, case studies, and projects will earn Six Sigma White/Yellow Belt Certificates issued by Ernst & Young; students are also encouraged and supported to get Six Sigma certificates from the American Society for Quality (ASQ).