

# DECISION SCIENCE AND OPERATIONS MANAGEMENT (DSOM)

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## Courses

DSOM 5509 Business Analytics Residency Credits: 3

Business analytics has become a key component in accomplishing strategic and operational goals. Students will become familiar with the concepts and principles of analytics. Utilizing real world cases, students will apply current analytical concepts to help solve managerial problems and support decision processes.

**Prerequisites:** Admission to Executive MBA Program.

DSOM 5511 Global Supply Chain and Operations Management Credits: 3

Global Supply Chain and Operations Management (SCOM) provides a holistic investigation of how businesses produce goods and offer services. Strategic approaches to planning, scheduling, and controlling cost, time, and quality are discussed. Students are exposed to the full circle of supply chain management, including demand planning, sourcing and procurement, production decisions, inventory and handling, MRP and ERP systems, Lean/JIT, quality management, CSR and sustainability. Spreadsheet models for managing operations, analyzing performance, and forecasting expectations are examined.

**Prerequisites:** MIS 5507

DSOM 5543 Project Management Credits: 3

Planning and control of projects, to include network models, risk analysis, time reduction, resource scheduling, leadership, and evaluation.

DSOM 5545 Strategic Sourcing & Supplier Relationship Management Credits: 3

This course explores the roles of procurement and strategic sourcing as components of an overall supply chain strategy, and the impact this strategy has on the competitive success and profitability of organizations. The course will be structured into three segments: before you source, how to source, and after sourcing. Topics will include spend analysis, supplier research, market analysis, supplier evaluation, global sourcing considerations, negotiating, and supplier relationship management. The students will also gain an appreciation of the ethical, contractual, risk management, sustainability, and legal issues faced by purchasing professionals.

DSOM 5558 Data Visualization Credits: 3

Data visualization is the art and science of turning raw data into graphics that are easily understandable to a broad audience. This course provides techniques for creating effective visualizations based on principles from graphic design, psychology, and cognitive science. Emphasis will be placed on the narrative structure of telling a story and communicating with visualizations. Students will develop visualization literacy with hands-on activities and by designing their own visualizations using course-taught methods. Design methods including color choice, data encoding and pre-attentive attributes will be discussed. The course culminates with the creation and presentation of a data storytelling project.

**Prerequisites:** Restricted to student admitted to a Bloch School graduate program

DSOM 5566 Supply Chain and Operations Management Credits: 3

An examination of the basic principles and strategies used to manage the production and distribution of goods and services. This course positions operations management (OM) as an important tool for achieving strategic leadership through competitive advantage, and illustrates how the managerial integration of OM functions with corporate strategy improves business processes.

**Prerequisites:** DSOM 5509 or equivalent; Admission to the Executive MBA program.

DSOM 5587 Special Topics Credits: 3

Special topics in decision science and operations management.

DSOM 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

**Prerequisites:** Departmental consent required

DSOM 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

**Prerequisites:** Departmental consent required.

DSOM 5899 Required Graduate Enrollment Credit: 1