Master of Science in Management Science (STEM Program)

The Masters of Science in Management Science (MS MSc) is a 36 semester credit hours STEM (Science, Technology, Engineering and Mathematics) degree program. It is a flexible and customizable degree program so students may choose their own course of study, selecting a variety of graduate courses offered by JSOM to satisfy the elective requirements.

Program Highlights
- Design a customized program of study that fits your specific needs
- Market demanded core courses that form the foundation of today’s business management
- Select any graduate elective courses or choose any concentration to gain an in-depth knowledge
- Convenient class scheduling, including online classes
- Internships/job placements with 36 months of OPT (international students only)
- Apply for graduate scholarships and international study trips
- Personalized career coaching
  - Internships/job placements with 36 months of OPT (international students only)
  - Work with the Career Management Center for internships and job placements
  - Networking and professional development opportunities
  - Free access to all career related resources

Degree Requirements
To apply for this degree program, an undergraduate degree is required (all majors are considered). Students must maintain a 3.0 grade-point average (GPA) in both core courses and in aggregate courses to qualify for the MS in Management Science degree. Students also can obtain a dual MS MSc and MBA degree by successfully completing a minimum of 63 semester credit hours (if all prerequisites are met).

Transfer credits may be granted for equivalent graduate course work taken at other universities with a grade of “B” or better within the past six years. Up to nine semester credit hours of course work from other universities may be waived from or transferred to the MS MSc program.

Prerequisites
Students pursuing the Master of Science in Management Science (MS MSc) degree program are required to complete one semester credit hour of MAS 6102 Professional Development course or equivalent (except specialized Executive Education programs). In addition, knowledge of calculus is required and students who have not completed an undergraduate calculus course may satisfy the prerequisite by completing OPRE 6303 Quantitative Foundations in Business with a grade of "B" or better. Degree credit is not earned for program prerequisites, however, the grade achieved in prerequisites will count toward the student's grade-point average (GPA). All program prerequisites must be satisfied within the first 12 semester credit hours of graduate study as a degree-seeking student. For more information visit: jindal.utdallas.edu/student-resources/advising/.

Core Courses (11 credit hours)
- ACCT 6301 Financial Accounting
- MECO 6303 Business Economics
- MIS 6204 Information Technology for Management
- OPRE 6301 Statistics and Data Analysis
Elective Courses: (25 credit hours)
All students (except specialized Executive Education programs) are required to complete at least 15 semester credit hours of designated courses (BUAN, ENGY, MIS, or OPRE but not more than two courses from a single prefix). For the remaining 10 semester credit hours, students may take any graduate courses within JSOM. We also, encourage students to take one semester credit hour of internship.

Concentrations
Concentrations are informal collections of electives that address a student’s educational goals. It may be aligned with functional area specialties, or may cut across functional areas. Students may choose to concentrate in any of the areas listed below.

**Accounting:** Managers need skills to effectively analyze accounting information and make value-enhancing decisions. Students may select accounting courses to concentrate in financial analysis, consulting, corporate governance and tax management. This concentration can be further refined to the areas of assurance services, taxation and internal audit.

**Business Analytics:** Covers statistics and econometrics, predictive modeling, decision and optimization modeling, and data management. Prepares you for analytics in marketing, decision and operations, financial, healthcare and IT analytics.

**Energy Management:** The energy management concentration will provide students with skills critical to managerial decision making within energy companies, focusing on supply chain, operations, finance, and risk management.

**Finance:** Prepare for careers in corporate finance, investment management, or the management of financial institutions. Courses in this area emphasize creative solutions to business financing problems, the development of value maximizing investment and financing strategies, and the analysis and management of fixed income and equity investments.

**Healthcare Management:** This is cross-functional and industry focused and the primary goal is to prepare students for leadership positions in healthcare organizations. Courses include cases, projects and assignments that are centered on applying management skills to healthcare issues and organizations.

**Information Technology Management:** Information technology is integral to all business operations and permeates all aspects of modern business and our courses will enable students to fully utilize information technology to solve business problems and gain strategic advantage. Advanced courses provide skills necessary for IT consulting, software management and e-business.

**Innovation and Entrepreneurship:** Prepares students for successful business careers in entrepreneurial new ventures, entrepreneurial finance or innovation-related roles in mature organizations (product planning, marketing, development, and more).

**Internal Audit:** Covers internal audit from a broad perspective and addresses review of business processes, technology, governance, ethics, risk assessment and auditing standards, which allows individual to work in any industry or discipline.

**International Management:** Students can take a multidisciplinary approach to study international management, with courses in finance, marketing, strategic management, and legal and cross-cultural management. These integrate concepts/theories with international policies and business practices and prepare students to succeed in developing international ventures.

**Leadership in Organizations:** Provides a foundation of leadership theory, building and problem solving in interpersonal work relationships, group dynamics, organizational decision-making and change and ethics.

**Marketing:** Students learn to understand customers' needs and purchase behaviors, how to satisfy those needs, and how to make a profit in competitive industries and markets. Covers marketing strategy, developing new products, pricing, advertising and more.

**Real Estate:** Provides both a practical and educational basis to become skilled decision-makers within the industry. Courses cover real estate finance and capital markets, covering real estate loans, syndication, securitization, regulation, investment and more.

**Strategic Management:** Focuses on corporate level strategic management, including implementation of strategic designs, top management team leadership, the strategic implications of the social, governmental, technological, and international environments.

**Supply Chain Management:** Gain an analytical understanding of how to leverage profits by continuously improving business processes. Effective integration of customers, suppliers, factories and stores through the coordination of various functional areas.

**Systems Engineering and Management:** Designed to meet the need for formalized education in design, engineering and management of complex systems. Students gain a broad range of engineering and managerial skills to manage large projects.

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