Master of Business Administration in Management of Technology

NJIT’s MBA in the Management of Technology is designed to prepare a new generation of technology savvy business leaders. The curriculum integrates fundamental business knowledge with applications of technology to business to prepare students to think strategically about business and technology. The program is built upon four themes that are transforming business:

1. the transition to a knowledge based economy;
2. the emergence of the digital firm;
3. the globalization of business; and
4. innovation as the primary source of competitive advantage.

Concentration areas are offered in Management Information Systems, Marketing, and Finance.

Admission Requirements

Applicants to the MBA must submit complete transcripts of all undergraduate work and scores on the Graduate Management Admissions Test (GMAT). The GMAT is required of all applicants except those holding master’s or doctoral degrees from an accredited U.S. university. Up to nine credits of graduate work may be transferred from another school, provided that they are not counted towards a terminal degree at that school.

MBA Pre-Qualifying Requirements: Students are expected to demonstrate competency in the area of accounting, finance, quantitative methods, information systems, and economics. Depending on the applicant’s undergraduate degree program all or part of the pre-qualifier requirements can be met with prior undergraduate course work. Applicants who do not meet pre-qualifying requirements will be required to complete a bridge course.

Master of Science in Management

The Master of Science in Management is designed to allow students to build specialized knowledge in one of four concentration areas: Management Information Systems, Organization Management, Management of Technology, and Finance. Specialized knowledge is augmented with a 15 credit management core that provides the general knowledge needed to manage technical and specialized units.

Admission Requirements

Applicants to the MSM must submit complete transcripts of all undergraduate work and scores on the Graduate Management Admissions Test (GMAT). The GMAT is required of all applicants except those holding master’s or doctoral degrees from an accredited U.S. university. Up to nine credits of graduate work may be transferred from another school, provided that they are not counted towards a terminal degree at that school.

MSM Pre-Qualifying Requirements: Students are expected to demonstrate competency in the area of accounting, finance, quantitative methods, information systems, and economics. Depending on the applicant’s undergraduate degree program, all or part of the pre-qualifier requirements can be met with prior undergraduate course work. Applicants who do not meet pre-qualifying requirements will be required to complete a bridge course.

Executive Master of Business Administration

Tailored to the demanding schedules of working professionals, the solution-focused 18-month, 48-credit program is customized for career advancement without interruption of professional obligations. Built upon the hallmarks of Innovation, Immersion, and Integration, this practical and results-oriented option emphasizes the application of advanced management strategies to traditional business challenges. With the added bonus of Saturdays and online flexibility, the EMBA offers both breadth and depth of business experience in an accelerated mode of delivery. Students are assigned independent and group projects emphasizing the employment of innovative management strategies in traditional corporate settings. Further, the students represent diverse industries and job functions, providing an enriching experience and balanced perspective. The curriculum consists of 4 Thematic Areas: Leadership, Globalization, Creativity and Innovation, and Business and Government Relations.

EMBA candidates have the opportunity to participate in a 7-10 day international study tour. Meeting with business leaders in their work environments, students learn first-hand the opportunities and issues posed by today’s volatile-yet-exciting international business climate. Recent tours have included Brazil, France, The Czech Republic, Russia, Estonia, Chile, Argentina, and China. Students have called the trips “invaluable.” “I gained critical insight….we would never have learned in any classroom or textbook.”

Professional Leverage

The program offers the additional benefit of PMP or Risk Management certification training. This new program feature represents an integration of the EMBA with industry recognized professional qualifications.

Admission Requirements

These criteria are standard admission guidelines; however, each candidate is evaluated based upon his/her individual profile.
Candidates must have an earned bachelor’s degree (4 year US equivalent) and must take the GMAT (minimum score of 500); the GRE (with a comparable score) is also acceptable.

**GMAT Waivers**

- Candidates with an earned Master’s or PhD from a US or Canada based “accredited” program
- Candidates with a minimum GPA of 2.8 from a US based research intensive University
- Candidates [without masters degrees], who have “significant” management experience, may appeal to the EMBA admission committee for a GMAT waiver; **there is no waiver guarantee**.

**Master of Science in International Business**

The Master of Science in International Business is designed for students to gain an understanding of the activities in international business providing a framework for understanding them from the perspective of a company manager. The MSIB is a 30 credit program (which is 10 courses).

**Admission Requirements**

Applicants to the MSIB must submit complete transcripts of all undergraduate work and scores on the Graduate Management Admissions Test (GMAT). The GMAT is required of all applicants except those holding a master's or doctoral degree from an accredited U.S. university. Up to nine credits of graduate work may be transferred from another school, provided that they are not counted towards a terminal degree at that school.

MSIB Pre-Qualifying Requirements: Students are expected to demonstrate competency in the area of accounting, finance, quantitative methods, information systems, and economics. Depending on the applicant's undergraduate degree program all or part of the pre-qualifier requirements can be met with prior undergraduate course work. Applicants who do not meet pre-qualifying requirements will be required to complete up to 6 credits of course work.

**NJIT Faculty**

**A**
Anandarajan, Asokan, Professor

**B**
Bandera, Cesar, Assistant Professor
Bonitsis, Theologos H., Associate Professor

**C**
Casal, Jose C., Senior University Lecturer
Chakrabarti, Alok K., Distinguished Professor Emeritus
Chen, Yi, Associate Professor
Chou, Porchiung B., Senior University Lecturer
Cicon, James E., Assistant Professor
Cordero, Rene, Associate Professor Emeritus

**E**
Egbelu, Pius J., Distinguished Professor
Ehrlich, Michael A., Associate Professor

**F**
Fjermestad, Jerry L., Professor

**G**
Gopalakrishnan, Shanthi, Professor
Guilbault, Melodi D., Senior University Lecturer
K
Kudyba, Stephan P., Associate Professor

L
Lawrence, Kenneth D., Professor

M
Mehta, Rajiv, Professor

P
Passerini, Katia, Professor

R
Rapp, William V., Research Professor
Rotter, Naomi G., Professor Emeritus

S
Schachter, Hindy L., Professor
Schoenebeck, Karen P., Senior University Lecturer
Shi, Junmin, Assistant Professor
Somers, Mark, Professor
Sverdlove, Ronald, Assistant Professor
Sylla, Cheickna, Professor

T
Thomas, Ellen J., Assistant Professor

W
Walsh, Diana, Senior University Lecturer

X
Xu, Wei, Assistant Professor

Y
Yan, Zhipeng, Associate Professor

Programs

• Management - M.S. (http://catalog.njit.edu/graduate/management/management/ms)

Executive Program (http://catalog.njit.edu/graduate/academic-policies-procedures/executive-program)


Programs

• Finance for Managers (http://catalog.njit.edu/graduate/management/management/finance-for-managers-cert)
NJIT Courses

**MGMT 501. Management Foundations. 3 credits, 3 contact hours.**
This course provides foundation knowledge for MSM and MBA students whose undergraduate coursework does not include coursework in accounting and finance. It therefore, serves as a pre-qualifier for the MSM and MBA programs.

**MGMT 590. Coop Work Experience I. 1 credit, 1 contact hour.**

**MGMT 591. Coop Work Experience II. 1 credit, 1 contact hour.**

**MGMT 592. Coop Work Experience III. 1 credit, 1 contact hour.**

**MGMT 593. Coop Work Experience IV. 0 credits, 0 contact hours.**
Prerequisites: One immediately prior 3-credit registration for graduate co-op work experience with the same employer. Requires approval of departmental co-op advisor and the Division of Career Development Services. Must have accompanying registration in a minimum of 3 credits of course work.

**MGMT 610. Foundations of Management in Organizations. 3 credits, 3 contact hours.**
Presented during the residence week for the Executive Program. Includes management accounting, managerial economics, statistics, operations research, marketing, MIS, and finance.

**MGMT 620. Management of Technology. 3 credits, 3 contact hours.**
Technology as a main component of an organizational entity. Generation, development, and implementation of technology are outlined. Influence of technology on global competitiveness is also discussed.

**MGMT 625. Distribution Logistics. 3 credits, 3 contact hours.**
Distribution logistics emphasizing techniques used to optimize corporate profit and customer service; transportation modes; inventory policies; warehousing and order processing; and the best logistics gross margin. Same as EM 640 and TRAN 640.

**MGMT 630. Decision Analysis. 3 credits, 3 contact hours.**
Introduction to the methodology of decision analysis using computer based techniques and systems analysis. Introduces concepts of modeling, probability, and choice. Addresses the philosophy and detailed methods involved in decision analysis. Methods are applied to address routine and special business decisions.

**MGMT 635. Data Mining and Analysis. 3 credits, 3 contact hours.**
This course provides an introduction to data mining with an emphasis on large scale databases as a source of knowledge generation and competitive advantage. Specific topics include: framing research questions; data modeling; inferential data mining techniques; and evaluation and deployment of data mining systems.

**MGMT 640. New Venture Management. 3 credits, 3 contact hours.**
Prerequisite: FIN 516. For the student who is considering starting or managing a new business. The course combines classroom instruction in business management and a term project involving the analysis of a business case. The course is designed to build upon and integrate the student's previously acquired business knowledge and skills into an understanding of how to start and run a new business.

**MGMT 641. Global Project Management. 3 credits, 3 contact hours.**
The course reviews key elements of project management frameworks with a particular focus on global projects, which include people from various organizations working in different countries across the world, both face-to-face and virtually. Such projects vary in complexity based on the number of organizations, locations, cultures, languages and time-zones involved. It discusses people, technology and processes relevant to managing global projects and virtual teamwork.

**MGMT 645. New Venture Finance. 3 credits, 3 contact hours.**
Prerequisite: FIN 516. This course is designed to provide students with understanding of the problems and opportunities posed by the financing of a new and growing technology-based business. Students will study the financial conditions of new businesses and examine the effect of growth upon cash flow while exploring optimal sources of capital.

**MGMT 648. Distribution Channel Managemnt. 3 credits, 3 contact hours.**
Prerequisite: MRKT 330 Utilizing a strategic perspective, this course augments the understanding of how a firm can effectively manage the distribution system or network of alliances among agents, wholesalers, distributors and retailers to attain a sustainable competitive advantage. This course focuses on developing and implementing strategies for planning, organizing and controlling the various external institutions, agencies as well as in-house units that ultimately deliver products and services to consumer and business-to-business markets. In addition to electronic channels, the topics studied in the distribution process include channel strategy, channel design, channel management, as well as the selection, motivation, and performance assessment of resellers.

**MGMT 649. Convention, Creativity and Innovation. 3 credits, 3 contact hours.**
This course explores the role of creativity and disruptive thinking in relation to the development of new products, processes, technologies and industries. It begins with a focus on the behavioral aspects of creativity and disruptive thinking and includes exercises and tools to challenge conventional thinking. Disruption is them studies through a strategic lens with emphasis on understanding the conditions under which radical change is appropriate and when it is not.
MGMT 650. Knowledge Management. 3 credits, 3 contact hours.
Students will learn the principles of the knowledge management process. At the end of the course, students will have a comprehensive framework for designing and implementing a successful knowledge management effort and be able to assist in the development of knowledge.

MGMT 655. Global Competitiveness. 3 credits, 3 contact hours.
Improves knowledge of the issues involved in international business operations and their management. Develops skills in selecting key issues and familiarization with emerging methods for organizing and managing international operations. Emphasis will be on companies with technological, product, production, or design focus.

MGMT 656. Public Policy and Business. 3 credits, 3 contact hours.
This course explores the relationship between business and government with a focus on regulatory policies and public/private partnerships. Areas of focus include sustainability and environmental regulations, trade policies and their influence on international commerce, public policy concerning the Internet and emerging digital technologies, patent rights, and opportunities for public/private partnerships with regard to fostering economic development.

MGMT 660. Managing Supply and Value Chains. 3 credits, 3 contact hours.
This course is focused on the flow of products, information and revenue across supply and value chains in organizations. Special emphasis is placed on emerging e-business models and their effects on supply and value chains, and customer relationship management. The course also includes a survey of relevant information technologies.

MGMT 670. International Business. 3 credits, 3 contact hours.
Covers the scope and the essential characteristics of international business in the world economy; MNEs as economic, political, and social institutions; national and international control; functional management and operations; country evaluation; and regional market analysis.

MGMT 680. Entrepreneurial Strategy. 3 credits, 3 contact hours.
For the student who is considering starting and/or managing a new business. Integrates knowledge of the different aspects of business that have been learned as separate subjects. Provides an understanding of the decisions that guide the overall operations of an entrepreneurial business organization and how it interacts with its markets, competitors, and suppliers. Combines classroom instruction in business strategy along with case analysis of small firms. Should be taken in the last semester of the program, unless prior arrangement has been made with the instructor or the graduate advisor. Taken in the final semester only.

MGMT 682. Business Research Methods I. 3 credits, 3 contact hours.
A comprehensive introduction to business research methods covering the fundamental concepts of problem definition and the research process including quantitative and qualitative research, survey research, observation methods and experimental research methods. The course also covers data analytics, including advanced descriptive and predictive analysis models, involving inferential statistics, regression and correlation analyses and non-parametric methods. The course emphasizes problem solving using advanced quantitative software tools such as SPSS, Minitab, SAS, MathLab, and R. Students will be required to work on business research case studies and projects involving the collection and/or treatment of large data sets, as well as to develop research constructs and hypotheses and to write and present reports documenting research findings and recommendations.

MGMT 685. Operations Research and Decision Making. 3 credits, 3 contact hours.
Introduces the concepts of objective functions and constraints, concepts of value and utilities, optimization algorithms, networks, and game theory. Covers models of linear programming, inventory systems, multi-criteria decision-making, project management, and transportation planning. Topics discussed from probabilistic and deterministic approaches.

MGMT 686. Corporate Governance. 3 credits, 3 contact hours.
Prepares inter-disciplinary perspectives on the rights, responsibilities and roles of the corporation in society. Focuses on the relationships among owners, managers, and other stakeholders. Analyzes corporate control mechanisms including ownership concentration, executive compensation, boards of directors, and the market for corporate control. Includes changes in political/legal/regulatory institutional environments over time, and develops a comparative international framework.

MGMT 688. Information Technology, Business and the Law. 3 credits, 3 contact hours.
Includes historical and constitutional foundations, crimes, and torts in cyberspace, virtual property (patents online, copyrights in digital information, trade secrets in cyberspace, and cybermarks), electronic commerce contracting, electronic commerce, electronic money and the law, and information technology and online infringement of rights of intellectual property.

MGMT 691. Legal and Ethical Issues. 3 credits, 3 contact hours.
Explores the legal and ethical responsibilities of managers. Analyzes extent to which shareholders should be allowed to exercise their legitimate economic, legal, and ethical claims on corporate managers; extent of regulation of a particular industry, individual rights of the employee and various corporate interests, and corporate responsibility to consumers, society, and conservation of natural resources and the environment.

MGMT 692. Strategic Management. 3 credits, 3 contact hours.
This course focuses on the Strategic Integration of the different functional areas in management providing a top management perspective to the role of chief executive in an organization. An integral part of this course is to understand the roles of both competitive environment and the organization's experience in developing corporate strategy to gain competitive advantage. We also emphasize ethical issues related to corporate strategies.

MGMT 699. ST in Management. 3 credits, 3 contact hours.
Prerequisite: approval of the assistant dean for graduate programs. For students who desire to complete a thesis in management. Students must register every semester until the thesis is completed. Only 6 credits indicated for the thesis is applied to degree credit.
MGMT 710. Forecasting Methods for Business Decisions. 3 credits, 3 contact hours.
Covers the application of forecasting techniques to various phases of business and management decision making. Topics include forecasting with cyclical and seasonal series; Box-Jenkins modeling; regression modeling; use of stochastic models; and the linkage of management forecasts to macro forecasts. Actual models in use will be reviewed and evaluated.

MGMT 725. Independent Study. 3 credits, 3 contact hours.

MGMT 726. Independent Study II. 3 credits, 3 contact hours.

MGMT 735. Deep Learning in Business. 3 credits, 3 contact hours.
Prerequisites: FIN 620 or instructor's approval or advanced graduate standing. This course provides an in-depth study of data mining and machine learning, with a focus on business applications. As the business market becomes increasingly complicated and depends on data, analysts and fund managers must make better and faster decisions using available data. Data mining and machine learning make use of powerful tools and techniques to unlock the value inherent in available market data and routinely help managers uncover hidden patterns and correlations in data and gain insights to improve the decision-making in the market. The course is practice-oriented and develops the required skills to apply machine learning in the stock market and other business areas. Students will better understand the techniques for data mining and machine learning as well as gain hands-on knowledge of the contemporary analysis tools of data mining and machine learning. The course will enable students to better understand the major concepts, approaches, and techniques for data mining and machine learning. The included learning material provides adequate technical depth for students to know how data-driven technologies work. Coverage includes data mining and machine learning processes, methods, and techniques; the role and management of data; tools and metrics; and integration with Big Data.

MGMT 740. Innovation & Entrepreneurship. 3 credits, 3 contact hours.
Prerequisites: MGMT 640 (or equivalent) or permission of instructor. This course is designed to introduce the Ph.D. students to the extensive literature in innovation and entrepreneurship. The course builds on the early works by economists and sociologists, and progresses towards the most recent research. By discussing the early works and latest research, the course explores extant knowledge in Innovation and Entrepreneurship, the boundary conditions of the theories in Innovation and Entrepreneurship, and the possible avenues for future research.

MGMT 782. Business Research Methods II. 3 credits, 3 contact hours.