



Martin Tuchman School of Management
New Jersey Institute of Technology

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MARTIN TUCHMAN SCHOOL OF MANAGEMENT
CURRICULUM COURSES
MARCH 2022

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Modes of Instructional Delivery for classes offered at MTSM

FF: Face to Face

DL: Distance Learning

Hy: Hybrid (Combines Face to Face and
Distance Learning)

OMBA: Online MBA Program Students
Only



Martin Tuchman School of Management
New Jersey Institute of Technology

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MARTINTUCHMAN SCHOOL OF MANAGEMENT CURRICULUM COURSES

MARCH 2020

MODULE I

ACCT 615 - Management Accounting

Description: This course builds upon traditional undergraduate level managerial accounting concepts, e.g. break-even analysis, alternate choice decisions, profit planning, and transfer pricing and develops executive skills necessary to conduct strategic cost analyses. Furthermore, it explores strategic decision-making pertaining to value chain and activity-based management. Emphasis is placed upon utilizing managerial accounting data in executive planning and control.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: Excel

ECON 610 - Managerial Economics

Description: This course covers the role of economic theory in management analysis and decisions. The study of demand, cost, and supply theories from a business viewpoint are also covered. This course is about economic principles and their relevance to business decision-making. The course examines the interaction of information, economic incentives and market competition and how these interact to determine prices, products available, profits, and patterns of trade and organization.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

FIN 600 - Corporate Finance

Description: This course introduces concepts and analytical tools to identify and solve Financial Management problems. After introducing the corporation, the course focuses on how firms invest in real assets (capital budgeting) and how they raise money to pay for assets (financing). Practical problems in valuing bonds, stocks and other investments will be based on the time value of money. The trade-off between risk and return will be introduced with the Capital Asset Pricing Model.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: Excel

HRM 601 - Organizational Behavior

Description: Analysis of key organizational components; individual perception; learning ability; conflict resolution models; group processes in decision making; motivation; problem diagnosis, and the organization as the mechanism for joining into a coherent productive system. Organizational assessment for innovation, leadership styles, and environmental interaction.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 630 - Decision Analysis

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MGMT 680 - Entrepreneurial Strategy

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 691 - Legal and Ethical Issues

Description: This course 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 692 - Strategic Management

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MIS 645 - Information Systems Principles

Description: The management of information processing resources, including: role of information processing, estimates of personnel resources and budgets, integration of corporate and MIS plans, organizational alternatives for MIS departments and support staffs, management of computer operations, equipment and general software acquisitions, intermediate and long-range MIS plans, integration of personal computers, minicomputers, and mainframes, and security and controls.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MRKT 620 - Global Marketing Management

Description: Designed to help prepare students to become effective managers overseeing global market activities in an increasingly competitive environment. It will examine the impact of global economic, financial, cultural, political, and legal factors on the development of marketing programs and on the marketing/R&D and marketing/manufacturing interfaces.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MODULE II

HRM 630 - Managing Technological and Organizational Change

Description: Managing planned and unplanned change in organizations. The change process is studied in relation to technology-driven changes in the workplace and to other environmental factors. Focuses on planned and unplanned systemic change, such as downsizing, re-engineering, mergers, and acquisitions.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: Excel

MGMT 620 - Management of Technology

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 635 - Data Mining and Analysis

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MGMT 640 - New Venture Management

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 516

Technology: None

MGMT 641 - Global Project Management

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 650- Knowledge Management

Description: 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. **Credits:** 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MGMT 699 - ST in Management

Description: Not Available

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 670 - International Business

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MIS 648 - Decision Support Systems for Managers

Description: Covers the use of decision support systems to support management decision making in a real world environment. Topics include: establishing and measuring decision support systems success criteria, software tools, model management, elements of artificial intelligence, and statistics. Justification, design, and use of decision support systems.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: MIS 645

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MODULE III

AREA I: MANAGEMENT INFORMATION SYSTEMS (MIS) CONCENTRATION

MGMT 630 - Decision Analysis

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 635 - Data Mining and Analysis

Description: This course introduces 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MGMT 641 - Global Project Management

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MGMT 650- Knowledge Management

Description: 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. **Credits:** 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MIS 648 - Decision Support Systems for Managers

Description: Covers the use of decision support systems to support management decision making in a real world environment. Topics include: establishing and measuring decision support systems success criteria, software tools, model management, elements of artificial intelligence, and statistics. Justification, design, and use of decision support systems.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: MIS 645

Technology: None

AREA II: FINANCE CONCENTRATION

FIN 611 - Intro to Topics in Fin Tech

Description: The financial services industry is presently undergoing dramatic changes as recent technological advances have enabled the automation of former workflows. This course will survey current trends in the Financial Technology (FinTech) industry. Students will have the opportunity to develop their own software related to FinTech ideas discussed during this course. **Credits:** 3 credits

Contact Hours: 3 contact hours

Prerequisites: Students must have taken an introductory programming course prior to enrolling in FIN 611 that concentrated on learning at least one of Python, Java, MATLAB, C/C++, or R.

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

FIN 624 - Corporate Finance II

Description: The trade-off between risk and return will be examined in the context of historical analysis, portfolio optimization, the Capital Asset Pricing Model and other alternative models. The course will begin with the understanding of the Modigliani and Miller results and introduce bankruptcy, taxes, information asymmetries and other market imperfections. Financial options, put-call parity and option pricing will be introduced.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 600

Technology: Excel

FIN 626 - Financial Investment Institutions

Description: Introduces the role of banking institutions and investment banks in the domestic and international money market and capital environment to the financial managers. Covers instruments and services of financial intermediaries that are crucial to business management. Discussions range from the financial services and facilities of regional banks to money-center banking institutions. Alternatives of project financing, lending requirements and regulations, project financing, and role of intermediaries in local and international transactions. Focuses on the private placement procedures of all types of securities in the capital market and the unique role undertaken by the investment banking firms. Provides an insight about the public offering process for existing and venture capitalized firms.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 600

Technology: Excel, Palisade
Decision Tools Suite

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

FIN 634 - Mergers, Acquisitions, and Restructuring

Description: Focuses on identifying and evaluating potential and international companies for mergers and acquisitions as well as structuring of deals. The financial, social and managerial implications of these changes in corporate ownership will be examined. Topics are: financing M&As, dealstructuring, tax implications, valuation, broker/finder agreements, merger negotiations, and post-merger integration.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 600

Technology: Excel, Palisade Decision
Tools Suite

FIN 641 - Derivatives Markets

Description: This course introduces students to futures, options, and other derivative securities. Topics include option valuation models, principles of forward and futures pricing, structure of markets for derivative securities, and strategies for hedging and speculation.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 600

Technology: Excel, Palisade
Decision Tools Suite

FIN 650 - Investment Analysis and Portfolio Theory

Description: This is a basic course in the theory and practice of investing. We will study in depth why and how to form portfolios of securities. A significant amount of mathematical and statistical analysis will be used in answering these questions. Theories of asset pricing based on the relationship between risk and return will be included. We will also discuss criteria for selecting specific securities in different asset classes, such as, stocks, bonds, and derivatives.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 600

Technology: Excel, Palisade
Decision Tools Suite

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

AREA III: MARKETING CONCENTRATION

MRKT 631 - Marketing Research

Description: Provides a research and managerial perspective on advanced marketing research methods and analytical techniques. Topics include problem formulation, research design, data collection and analysis, managerial report writing. Students will acquire experience by developing and executing their own marketing research project using sophisticated computerized analytical techniques.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MRKT 636 - Design and Development of High Technology Products

Description: Covers the use of decision support systems to support management decision making in a real world environment. Topics include: establishing and measuring decision support systems success criteria, software tools, model management, elements of artificial intelligence, and statistics. Justification, design, and use of decision support systems.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MRKT 638 - Sales Management for Technical Professionals

Description: Focuses on the promotion and sales of products in the business-to-organization market. All elements of the marketing communications mix are covered according to their importance in that market: selling, sales promotion, trade advertising, and publicity. The latest techniques are reviewed and discussed using case histories and student projects. Issues of global competitiveness, high technology products, and the role of total quality management in marketing communications are emphasized.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MRKT 645 - Digital Marketing Strategy

Description: Introduction to the use of the Internet and electronic commerce in the development of marketing strategy. Examines the characteristics of electronic markets, the use of Internet for data collection and market research, the Internet as a communication and distribution medium, and the development of Internet-based marketing strategies.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

AREA IV: INNOVATION AND ENTREPRENEURSHIP CONCENTRATION

HRM 630 - Managing Technological and Organizational Change

Description: Managing planned and unplanned change in organizations. The change process is studied in relation to technology-driven changes in the workplace and to other environmental factors. Focuses on planned and unplanned systemic change, such as downsizing, re-engineering, mergers, and acquisitions.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: Excel

MGMT 620 - Management of Technology

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MGMT 640 - New Venture Management

Description: 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: FIN 516

Technology: None

MGMT 691 - Legal and Ethical Issues

Description: This course 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.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MRKT 631 - Marketing Research

Description: Provides a research and managerial perspective on advanced marketing research methods and analytical techniques. Topics include problem formulation, research design, data collection and analysis, managerial report writing. Students will acquire experience by developing and executing their own marketing research project using sophisticated computerized analytical techniques.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT TECHNOLOGY (MBA)

MRKT 636 - Design and Development of High Technology Products

Description: Covers the use of decision support systems to support management decision making in a real world environment. Topics include establishing and measuring decision support systems success criteria, software tools, model management, elements of artificial intelligence, and statistics. Justification, design, and use of decision support systems.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

MRKT 645 - Digital Marketing Strategy

Description: Introduction to the use of the Internet and electronic commerce in the development of marketing strategy. Examines the characteristics of electronic markets, the use of Internet for data collection and market research, the Internet as a communication and distribution medium, and the development of Internet-based marketing strategies.

Credits: 3 credits

Contact Hours: 3 contact hours

Prerequisites: None

Technology: None

