



Martin Tuchman School of Management  
New Jersey Institute of Technology

# BACHELOR OF SCIENCE IN BUSINESS

## MARTIN TUCHMAN SCHOOL OF MANAGEMENT CURRICULUM COURSES

SEPTEMBER 2020

### Table of Contents:

|                                       |    |
|---------------------------------------|----|
| Core Curriculum Courses .....         | 1  |
| Concentration Courses .....           | 9  |
| Accounting Systems .....              | 9  |
| Finance .....                         | 12 |
| Financial Technology (FinTech).....   | 15 |
| Marketing .....                       | 18 |
| Innovation and Entrepreneurship ..... | 23 |
| Management Information Systems.....   | 27 |



# BACHELOR OF SCIENCE IN BUSINESS

## MARTIN TUCHMAN SCHOOL OF MANAGEMENT CURRICULUM COURSES

SEPTEMBER 2020

### ACCT115 - Fundamentals of Financial Accounting

**Description:** This is an introductory-level financial accounting course designed to develop fundamentals of financial accounting. This course will help students develop skills in applying financial accounting principles to record basic economic transactions, summarize and present such transactions in financial statements as well as to analyze reported accounting information from a user's perspective to make informed financial decisions. Students will also learn to appreciate accounting as a dynamic, changing discipline rather than an inflexible set of rules.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** Excel

---

### ACCT 215 - Managerial Accounting

**Description:** This course introduces fundamentals of cost and managerial accounting, including an introduction to job orders and process costing systems, cost allocation, cost behavior, managerial decision models, cost and budgetary planning and control, standard costing, analysis of variance, and responsibility accounting. The course is designed to develop the fundamentals of managerial accounting and provide students with a working knowledge of how accounting data are used by management in planning, decision-making and operational control.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 115

**Technology:** Excel

## ECON 265 - Microeconomics

**Description:** The theory of price determination and resource allocation under various market structures. The theory of demand, production, costs, factor and product pricing, income distribution, market failure, implications of government intervention in the market, and comparison of the free enterprise and alternative systems. Students who have received credit for ECON 201 may not subsequently receive credit for ECON 265.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MATH 135

**Technology:** None

## ECON 266 - Macroeconomics

**Description:** The theory of national income determination. The determinants of aggregate production, employment, and prices, as well as money and banking, business cycles and monetary and fiscal policy. Students who have received credit for ECON 201 may not subsequently receive credit for ECON 266.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** None

## FIN 218 - Financial Markets and Institutions

**Description:** This course provides an overview of the main features of financial markets and institutions in the United States, including interest rates and rates of return and how they are determined. It also covers securities traded on the U.S. financial markets including bonds, stocks, and derivatives and discusses how financial institutions, especially commercial banks work, along with the role of government in regulating financial markets and institutions.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 115, ECON 266, MGMT 116

**Technology:** Excel, Bloomberg

## FIN 315 - Fundamentals of Corporate Finance

**Description:** This course focuses on how companies invest in real assets and how they raise the money to pay for those investments. Topics covered include the firm and the financial manager, time value of money, bonds, stocks, and net present value. International finance, risk management, capital structure strategy and case studies of technology-based companies will be introduced.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 115, ECON 265, MGMT 116

**Technology:** None

---

## HRM 301 - Organizational Behavior (GER)

**Description:** A foundation course in individual and group behavior in organizations. Processes such as perception, motivation and leadership are examined with a focus on issues central to technology-based organizations (innovation, creativity, managing technical professionals).

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Upper Division Standing

**Technology:** None

---

## MGMT 116 - Quantitative Analysis with Business

**Description:** This course introduces statistical concepts, basic optimization modeling and tools that can be leveraged for business data analytics. The emphasis is on knowing what analytical techniques to use to address specific business questions, on the use of computer software to perform statistical analysis, and on the interpretation and communication of the results of such analysis. The use of Excel and other software tools is emphasized. The course covers statistical techniques that are often used to solve problems in business areas such as finance, marketing, and operations management.

**Credits:** 4 credits

**Contact Hours:** 4 contact hours

**Prerequisites:** None

**Technology:** Excel





## MGMT 190 - Introduction to Business

**Description:** Introduction to the Martin Tuchman School of Management and the Business major. Foundations of the business enterprise and ecosystem. Organizational structures, governance, financial systems, marketing, and government interactions. Economic, political, psychological, and social influences on business. This course is restricted to freshmen BUSINESS majors only except with permission of MTSM's undergraduate advisor.

**Credits:** 3 credits

**Contact Hours:** 4 contact hours

**Prerequisites:** None

**Technology:** None

---

## MGMT 216 - Business Data Analytics

**Description:** This course introduces statistical concepts and tools that can be leveraged for business data analytics. The emphasis is on knowing what analytical techniques to use to address specific business questions, on the use of computer software to perform business statistical analysis. In particular, it covers descriptive statistics, confidence interval estimation, hypothesis testing, inferential statistics, and regression analysis. It ends with a brief introduction to time-series analysis and forecasting.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 116 or MATH 105

**Technology:** Minitab, R, Excel

---

## MGMT 290 - Business Law I

**Description:** The basic principles of common and statutory law applicable to business and professional relationships, emphasizing contracts, negotiable instruments, sales of goods, agency and business organizations.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** None

## MGMT 316 - Business Research Methods

**Description:** This course covers business research methodologies with an emphasis on data collection/mining and data analysis. It offers the knowledge skills to conduct research in all applicable fields from the traditional areas of business, such as, marketing, finance, human resources, operations and service management, as well as web-based e-commerce related research applications. Upon completion, students will be able to: (1) understand business research methodologies, (2) conduct business research studies, (3) present the results, analyses and recommendations to management.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 216, MIS 245

**Technology:** Minitab, MS Project, R, Excel, Palaside Decision Tool Suite

## MGMT 391 - International Business

**Description:** A basic understanding of the activities in international business providing a framework for understanding them from the perspective of a company manager. Covers international trade, multinational enterprises, foreign exchange, foreign direct investment, international financial institutions, barriers to international trade, accounting of taxation, industrial relations, multinational enterprise, and world order.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 190 or HRM 301, FIN 315, ECON 266

**Technology:** None

## MGMT 399 - Career Planning and Major Field Test

**Description:** A one credit, satisfactory/unsatisfactory course that will allow students to get the career training they need prior to entering work force, as well as review for the Major Fields Test and to actually take the Major Field Test in the course. This course runs for the first 10 weeks of the semester.

**Credits:** 1 credit

**Contact Hours:** 1 contact hour

**Prerequisites:** Junior Standing

**Technology:** None

## MGMT 480 - Managing Technology and Innovation

**Description:** Introduction to an array of technologies affecting management functions to provide an appreciation and understanding of the importance of new technologies as critical success factors for modern organizations. An integrative approach is taken in analyzing how changes in technology affect individual, group, and organizational effectiveness.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Junior Standing

**Technology:** None

## MGMT 492 - Business Policy

**Description:** A capstone course in the area of business administration focusing on the integration of concepts taught in various functional courses such as marketing, finance, operations management, accounting, and organizational behavior. Issues related to corporate responsibilities and ethical behavior are also incorporated in this course. Emphasis on application of concepts to real life situation is achieved through case discussion and projects. All MTSM students need to earn a C or better in MGMT 492 in order to graduate.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Senior Standing

**Technology:** Simulation

## MIS 245 - Introduction to Management Information Systems

**Description:** Concepts of information systems, business process, hardware, software, systems analysis, e-commerce, enterprise systems and computer applications in organizations, techniques of systems analysis, systems designs, implementations, and information management (both technical and behavioral) are studied in the organizational context of management information needs.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** Excel, SPSS  
Modeler, IBM Watson, Tableau



### MIS 363 - Project Management for Managers

**Description:** This course covers theories, tools, and techniques to manage projects in organizations. Students will learn how to put together a project charter, define project goals, and develop project teams, schedules, and budgets. The course will illustrate the key aspects of project lifecycles (initiation, planning, execution, monitor and control, and closing). It will also emphasize aspects of team, performance, risk, and quality management.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Junior Standing

**Technology:** MS Project

### MIS 385 - Database Systems for Managers

**Description:** This course introduces fundamentals of database systems for business applications. The course will also introduce the concepts of database evaluation, assessment and governance issues for business needs, as well as, database privacy, security and visualization for managerial applications. Students will gain hands-on experience on database systems management through course assignments.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** CS 103, MIS 245

**Technology:** None

### MIS 445 - Decision Support Tool & Tech Mngrs

**Description:** Introduces students to the use of decision support systems (DSS) to support management decisions. Topics include: DSS software tools, model management, and DSS design and use.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MIS 245, OM 375

**Technology:** None





## MRKT 330 - Principles of Marketing

**Description:** Provides an understanding of how environmental factors (political, legal, economy, competition, socio-cultural, and technology) influence the design of product, pricing, promotion and distribution strategies. Topics discussed include strategies to satisfy target markets, market segmentation, buyer behavior, marketing ethics, and an introduction to global marketing issues. Fundamentals of marketing are integrated using cases, videos, and class projects.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 190

**Technology:** Salesforce,  
Simulations

## OM 375 - Management Science

**Description:** The course emphasizes decision modeling and how to apply modeling and process simulation techniques to solving various classes of problems that arise in operational functions in business settings. It covers decision modeling techniques that range from deterministic to probabilistic models. It also emphasizes the ability to recognize what modeling skills and techniques to use to answer specific business operation and process questions, the use of computer tools and process simulation techniques to solve problems, and on the interpretation and communication of model solutions.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 216

**Technology:** Excel, Lingo

---

## ACCOUNTING CONCENTRATION

### ACCT 325 - Intermediate Accounting I

**Description:** This course provides an in-depth study of generally accepted accounting principles in the classification, presentation and disclosure of assets required by external users of financial statements. Students will learn to complete accounting cycle activities; prepare and evaluate financial statements with data from an accounting information system; apply financial accounting functions and theory to recognize and measure different types of assets; calculate earnings per share; carry out income tax accounting; and understand the nature and effect of accounting errors.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 215

**Technology:** Excel

---

### ACCT 335 - Managerial Accounting II

**Description:** A study of the concepts and techniques used by cost accountants to assist decision-makers within the organization. In-depth, real-world scenarios will be discussed including process accounting, job-order accounting, measuring quality costs, activity-based costing, and evaluating performance. Students will be introduced to methods currently being used by American businesses, including service firms, as well as manufacturers.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 215

**Technology:** Excel

---

### ACCT 403 - Financial Statement Analysis

**Description:** This course offers comprehensive coverage of analysis of financial statements so that students can: a) evaluate the financial position of a firm; b) assess the firm's inherent value and the value of its securities; c) assess the firm's obligations and its ability to meet them; and d) analyze sources and uses of cash.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** Excel

## **ACCT 415 - Auditing**

**Description:** An examination of current auditing theory and procedures employed in carrying out the audit. The course will cover the life cycle of the audit from accepting an audit, gathering evidence to giving an opinion on a company's financial reports.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 435

**Technology:** Excel, IDEA

Professional Auditing Software

---

## **ACCT 425 - Tax Accounting I**

**Description:** This course is the first part of the two tax accounting courses, with a focus on federal individual income taxation. It is designed to give the students a comprehensive understanding of personal income tax laws and to able him to prepare personal income tax returns of considerable complexity. Topics covered in this course will include gross income, property transactions, capital gains/losses, itemized deductions employee expenses, depreciation, accounting methods and tax credits, among others.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 215

**Technology:** Excel

---

## **ACCT 435 - Intermediate Accounting II**

**Description:** This is the second part of the two intermediate level financial accounting courses designed to review the basic financial required statements and provide accounting students with in-depth study of accounting principles advanced by responsible professional organizations. Topics covered include the classification, presentation and disclosure of assets, liabilities and stockholders' equity for external users of financial information.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ACCT 325

**Technology:** Excel



## MGMT 360 – Business Law 2

**Description:** The course will cover concepts required for the CPA Exam. Current cases will illustrate legal principles and how courts make decisions. Topics include corporate information and termination, agency and employment issues and forms of discrimination, comparisons of U.S. laws with those in other countries, the ethical context for business decisions, insider trading, online securities fraud, and disclosure of financial information on corporate blogs and tweets, including the tax consequences.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

---

## MGMT 310 - Co-op Work Experience I

**Description:** Students gain major-related work experience and reinforcement of their academic program. Work assignments facilitated and approved by the co-op office. Mandatory participation in seminars and completion of a report.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Completion of at least 30 credits at NJIT, approval of the school and permission of the Office of Cooperative Education and Internships

**Technology:** Excel



## FINANCE CONCENTRATION

### ENTR 320 - Financing New Venture

**Description:** The course is organized around three fundamental issues that entrepreneurs need to understand: 1) how innovations evolve over time, 2) how and why some innovations are successful and some are not and 3) how one manages a new venture that was formed to develop new technologies. It is intended to help students understand the issues associated with a new venture and to develop a business plan to launch a technology based firm.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 315, ENTR 410

**Technology:** Excel

---

### FIN 403 - Financial Statement Analysis

**Description:** This course offers comprehensive coverage of analysis of financial statements so that students can: a) evaluate the financial position of a firm; b) assess the firm's inherent value and the value of its securities; c) assess the firm's obligations and its ability to meet them; and d) analyze sources and uses of cash.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** Excel

---

### FIN 416 - Advanced Corporate Finance

**Description:** Advanced corporate finance with an emphasis on the financial management of technology-based organizations. Case studies are used for comparative analysis. Emphasis is on organizational productivity and profitability.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** None

---



## FIN 417 - Advanced Portfolio Analysis

**Description:** The course is intended to introduce students to key concepts, valuation methods and models and practical issues in investments from an investor's perspective. The course has two main components. First, the course will cover the theories of investments where the students will learn the main ideas proposed in academic literature to construct well-diversified portfolios. Second, the course will provide students the necessary tools to put the theoretical concepts covered in this course into practice.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 315

**Technology:** None

---

## FIN 422 - International Finance

**Description:** Introduction to the international financial management of the firm with an emphasis on technology-based organizations. Topics covered include hedging currency risk, capital budgeting internationally, raising funds internationally. Global competitiveness is addressed with comparative analysis of the financial management practices of American, European and Japanese firms.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** Kaltura

---

## FIN 430 - Options and Future Markets

**Description:** This course covers options, forward contracts, futures contracts and swaps, and will give students a working knowledge of how these contracts work, how they are used, and how they are priced. Students will learn how corporations and portfolio managers can hedge different kinds of risks or alter the distribution of returns on their portfolios using various techniques.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315, MATH 135

**Technology:** None



## MGMT 310 - Co-op Work Experience I

**Description:** Students gain major-related work experience and reinforcement of their academic program. Work assignments facilitated and approved by the co-op office. Mandatory participation in seminars and completion of a report.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Completion of at least 30 credits at NJIT, approval of the school and permission of the Office of Cooperative Education and Internships

**Technology:** None

## FINANCIAL TECH CONCENTRATION

### ENTR 320 - Financing New Venture

**Description:** The course is organized around three fundamental issues that entrepreneurs need to understand: 1) how innovations evolve over time, 2) how and why some innovations are successful and some are not and 3) how one manages a new venture that was formed to develop new technologies. It is intended to help students understand the issues associated with a new venture and to develop a business plan to launch a technology-based firm.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ENTR 210

**Technology:** Excel

### FIN 306 – Blockchain Technology for Business

**Description:** In this course, students will delve into the world of blockchain technology and the promise it holds for business. In particular, students will study how cryptocurrencies like Bitcoin make use of the blockchain to facilitate peer-to-peer digital transactions. With a solid understanding of the mechanics of the cryptocurrency blockchain protocol, students will discover the problems blockchain technologies aim to solve and determine how they can support the business goals. Student will do this by learning about smart contracts and the most important use cases. Students will analyze how smart contracts work, how they're used today, and how to reason about their capabilities, and what ongoing technical challenges they pose. In the course project, students will come up with their own application and outline the challenges that might exist in its adoption. For the practical skill of Blockchain leverage, the blockchain techniques and system development will be illustrated by IBM Skills Academy Platform through Blockchain Design and Lab sessions.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 216 and FIN 218

**Technology:** Hyperledger Fabric and related programs from IBM website, Ethereum and Excel





## FIN 310 - Data-Driven Financial Modeling

**Description:** This course equips students with new analytic and modeling tools to tackle rapidly changing and dynamic financial markets. In particular, this course delivers modelling frameworks such as regression analysis, forecasting, Monte-Carlo simulation, optimization, and binomial trees; and it illustrates how to apply these frameworks in financial contexts such as portfolio management, term-structure estimation, capital budgeting, risk measurement, risk analysis in discounted cash flow models, and pricing of European, American, exotic, and real options.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 216, MGMT 316, FIN 218, FIN 315

**Technology:** R, SAS, Python,  
MATLAB

---

## FIN 320 - Financial Data Analytics

**Description:** This course covers data analytics for common finance applications using Python as primary languages. It consists of two stages: Stage1 for introducing Python programming basics; Stage2 for covering commonly used analytical skills for applications in finance. Two real-data applications will strengthen the students' hands-on experiences. The course provides students with essential analytics training as needed for financial applications.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** CS 100 or CS 103, MGMT 216, FIN 218

**Technology:** Python

## FIN 403 - Financial Statement Analysis

**Description:** This course offers comprehensive coverage of analysis of financial statements so that students can: a) evaluate the financial position of a firm; b) assess the firm's inherent value and the value of its securities; c) assess the firm's obligations and its ability to meet them; and d) analyze sources and uses of cash.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** None

---

## FIN 410 - Data Mining and Machine Learning

**Description:** Provides an in-depth study of data mining and machine learning, with a focus on finance applications. This course is practice-oriented and develops the required skills to apply contemporary analysis tools of data mining & machine learning tools in financial data and facilitate decision making in stock market. Coverage includes data mining and machine learning concepts, processes, methods, and techniques; tools and metrics; and integration with Big Data.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MATH 111, MATH 135, FIN 310, FIN 320

**Technology:** Python

## FIN 430 - Options and Future Markets

**Description:** This course covers options, forward contracts, futures contracts and swaps, and will give students a working knowledge of how these contracts work, how they are used, and how they are priced. Students will learn how corporations and portfolio managers can hedge different kinds of risks or alter the distribution of returns on their portfolios using various techniques.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315, MATH 135

**Technology:** None

## MGMT 310 - Co-op Work Experience I

**Description:** Students gain major-related work experience and reinforcement of their academic program. Work assignments facilitated and approved by the co-op office. Mandatory participation in seminars and completion of a report.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Completion of at least 30 credits at NJIT, approval of the school and permission of the Office of Cooperative Education and Internships

**Technology:** None

## MARKETING CONCENTRATION

### ENTR 210 – Introduction to Entrepreneurship

**Description:** Provides an understanding of the process of start-up and early stage management of new, technology based, small firms. Emphasis is on recognizing, evaluating, and deciding on a new business idea, as well as preparation for and management of the start-up process. Preparation and execution of a new business plan.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** None

---

### MRKT 331 – Customer Insights

**Description:** Provides coverage of frameworks, concepts, tools, and techniques to discover and communicate business-relevant customer insights. Included are strategies for understanding the customer journey to gain insights from customer behavior (including Business to Business, Business to Customer, and Business to Me [individual]), and from experiences that allow marketers to understand buyer propensity and behavior.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 116 or MATH 105, MRKT 330

**Technology:** Salesforce, Hubspot, Simulations

---

### MRKT 338 - New Product Design and Development

**Description:** The course focuses on the marketing aspects of designing and launching new products. It covers key activities carried out by product managers: product positioning, market opportunity identification, demand and growth forecasting, marketing research for testing and improving new products, product launch management, and product portfolio decisions. This course should also be useful in providing a marketing perspective to students planning an entrepreneurial career.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** None



### MRKT 339 - Selling

**Description:** Provides an understanding of multifaceted roles salespeople play and prepares students for sales careers in business-to-business firms. Discusses the personal selling process that include prospecting and qualifying, sales call planning, approaching prospects, giving sales demonstrations and presentations, negotiating sales resistance, confirming and closing "win-win" agreements. Places emphasis on building customer relationships and partnerships by providing customer service and to ensure satisfaction and build customer loyalty.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** Salesforce

### MRKT 360 - Digital Marketing

**Description:** Provides an overview of fundamental principles of digital marketing for the contemporary business environment. Topics include digital marketing fundamentals and digital user behavior, online market research, digital marketing strategies, digital marketing plan, and development of digital marketing programs.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** Simulator Mimic Pro

### MRKT 378 - Marketing Analytics

**Description:** The goal of this course is to immerse students in the technical challenges associated with contemporary marketing analytics as applied to business processes and data-driven decision making. To achieve this mission, the course will introduce modules covering the state-of-the-art in R programming applied to data analysis for marketing problems.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330, MGMT 216, MGMT 316

**Technology:** R, SPSS, Excel



## MRKT 420 - Product and Brand Management

**Description:** The aim of the course is to equip students with theoretical and practical knowledge necessary for the successful and efficient management of products and brands. It provides the framework for the analysis of the main factors determining success of a brand in the market and introduces techniques and tools necessary for management of products and brands. This course will provide a fundamental understanding of how to build, measure, and manage a brand. The course will also provide an understanding of the role of product management/manager.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** None

## MRKT 430 - Marketing Research

**Description:** The process of marketing research is studied in detail from study design through report preparation. A hands-on, experiential approach is taken with an emphasis on primary and secondary data and multivariate statistical methods such as regression and ANOVA. Data are analyzed using SAS or SPSS.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** SPSS

## MRKT 432 - Sales Management

**Description:** This course helps the student to understand the various sales management activities that sales managers are responsible for in their important role as revenue generation managers. Key topics that are discussed within the realm of organizing, managing and controlling the sales force include sales forecasting, budgeting, sales force organization, time and territory management, recruitment, selection and training the salespeople, leadership, motivation, compensation, and sales force performance evaluation. Sales ethics and customer relationship management issues are also addressed.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 339

**Technology:** Salesforce

## MRKT 434 - Business to Business Marketing

**Description:** Industrial or business-to-business (B2B) markets account for more than half the economic activity in the US. They differ from consumer markets in characteristics such as number and size of buyers, demand, buying patterns, and processes. Thus, understanding the distinction between business markets and consumer markets and the impact these differences have will be discussed during the course. Various industrial contexts and ethical issues are also discussed as are other course concepts using cases, videos and role playing.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** None

## MRKT 435 - International Marketing

**Description:** This course will help students understand how the product, pricing, promotion, and distribution elements of the marketing mix are influenced by international forces (cultural, political-legal, economic, competitive, and technological environment). Topics discussed include global market segmentation, marketing ethics, standardization or adaptation of the marketing mix as well as global information systems and market research, segmentation, targeting, and foreign market entry strategies (importing, exporting, licensing, and strategic alliances). Course concepts are integrated using cases, videos, and class projects.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** None

## MRKT 485 - Special Topics in Marketing

**Description:** The study of new and/or advanced topics in the various fields of business and their application not regularly covered in any other business course. The precise topics to be covered, along with prerequisites, are announced in the semester prior to the offering of the course.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** None



## MGMT 310 - Co-op Work Experience I

**Description:** Students gain major-related work experience and reinforcement of their academic program. Work assignments facilitated and approved by the co-op office. Mandatory participation in seminars and completion of a report.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Completion of at least 30 credits at NJIT, approval of the school and permission of the Office of Cooperative Education and Internships

**Technology:** None

---

## INNOVATION & ENTREPRENEURSHIP CONCENTRATION

### ENTR 210 – Introduction to Entrepreneurship

**Description:** Provides an understanding of the process of start-up and early stage management of new, technology based, small firms. Emphasis is on recognizing, evaluating and deciding on a new business idea, as well as preparation for and management of the start-up process. Preparation and execution of a new business plan.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** None

---

### ENTR 320 - Financing New Venture

**Description:** The course is organized around three fundamental issues that entrepreneurs need to understand: 1) how innovations evolve over time, 2) how and why some innovations are successful and some are not and 3) how one manages a new venture that was formed to develop new technologies. It is intended to help students understand the issues associated with a new venture and to develop a business plan to launch a technology-based firm.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 315, ENTR 410

**Technology:** Excel

---

### ENTR 330 - Entrepreneurial Strategy

**Description:** Integrates knowledge of the different aspects of business learned in previous course work. In addition, provides an understanding of the decisions that guide the overall operations of a business organization and how the organization interacts with its markets, competitors, and suppliers. For the student who is considering starting or managing a small business. Combines classroom instruction in business strategy along with case analysis of small firms.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** ENTR 210

**Technology:** Excel



## FIN 403 - Financial Statement Analysis

**Description:** This course offers comprehensive coverage of analysis of financial statements so that students can: a) evaluate the financial position of a firm; b) assess the firm's inherent value and the value of its securities; c) assess the firm's obligations and its ability to meet them; and d) analyze sources and uses of cash.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** None

---

## FIN 416 - Advanced Corporate Finance

**Description:** Advanced corporate finance with an emphasis on the financial management of technology-based organizations. Case studies are used for comparative analysis. Emphasis is on organizational productivity and profitability.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** FIN 218, FIN 315

**Technology:** None

---

## HRM 310 - Managing Diversity in Organizations

**Description:** Analyzes issues that arise in managing a diverse work force. After examining the demographic environment of contemporary organizations, significant attention is paid to developing strategies to recruit, train, motivate, and retain employees with diverse personal characteristics. While the emphasis is on developing broad-based interpersonal skills, the impact of federal and state laws and regulations is also studied. In addition, students examine the implications of technological developments for managing a diverse population (e.g., the use of new technologies in retaining the differently abled).

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** None

**Technology:** None

## HRM 415- Organizational Design and Development

**Description:** Focuses on the design of modern organizations with an emphasis on effectively responding to environmental and technological change. Design issues include analyzing organizational structures, understanding the process of organizational learning, and evaluating organizational cultures. Development issues focus on employee empowerment, vertical and horizontal communication in organizations, and self-managed work teams.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** HRM 301

**Technology:** None

---

## MRKT 338 - New Product Design and Development

**Description:** The course focuses on the marketing aspects of designing and launching new products. It covers key activities carried out by product managers: product positioning, market opportunity identification, demand and growth forecasting, marketing research for testing and improving new products, product launch management, and product portfolio decisions. This course should also be useful in providing a marketing perspective to students planning an entrepreneurial career.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** None

---

## MRKT 432 - Sales Management

**Description:** This course helps the student to understand the various sales management activities that sales managers are responsible for in their important role as revenue generation managers. Key topics that are discussed within the realm of organizing, managing and controlling the sales force include sales forecasting, budgeting, sales force organization, time and territory management, recruitment, selection and training the salespeople, leadership, motivation, compensation, and sales force performance evaluation. Sales ethics and customer relationship management issues are also addressed.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 339

**Technology:** None



## MGMT 310 - Co-op Work Experience I

**Description:** Students gain major-related work experience and reinforcement of their academic program. Work assignments facilitated and approved by the co-op office. Mandatory participation in seminars and completion of a report.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Completion of at least 30 credits at NJIT, approval of the school and permission of the Office of Cooperative Education and Internships

**Technology:** None

---

## MANAGEMENT INFORMATION SYSTEMS CONCENTRATION

### CS 113 - Introduction to Computer Science

**Description:** Intensive introduction to computer science. Problem solving decomposition. Writing, debugging, and analyzing computer programs. Introduction to arrays and lists. Iteration and recursion. The Java language is introduced and used to highlight these concepts.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** CS 100

**Technology:** None

---

### FIN 310 - Data-Driven Financial Modeling

**Description:** This course equips students with new analytic and modeling tools to tackle rapidly changing and dynamic financial markets. In particular, this course delivers modelling frameworks such as regression analysis, forecasting, Monte-Carlo simulation, optimization, and binomial trees; and it illustrates how to apply these frameworks in financial contexts such as portfolio management, term-structure estimation, capital budgeting, risk measurement, risk analysis in discounted cash flow models, and pricing of European, American, exotic, and real options.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MGMT 216, MGMT 316, FIN 218, FIN 315

**Technology:** R, SAS, Python, MATLAB

---

### IS 390 - Requirements Analysis and Systems Design

**Description:** A study of the information systems development life-cycle, from the initial stages of information requirements analysis and determination to the ultimate activities involving systems design. Theory, methodologies and strategies for information requirements analysis, including the assessment of transactions and decisions, fact-finding methodologies, structured analysis development tools, strategies of prototype development, and an overview of computer-aided software engineering (CASE) tools. Theory, methodologies and strategies for systems design, including design of user-interfaces, particularly menu-driven and keyword dialogue strategies, and issues in the proper design of computer output.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** CS 103, CS 113, CS 115, IS 218 or IT 202

**Technology:** None



## IS 455 - IS Management and Business Processes

**Description:** This course will emphasize how information systems enable core and supportive business processes, as well as those that interface with suppliers, partners and customers. It will discuss basic administrative, management and policy issues associated with the impact of information systems on the user and organization. The second part of the course looks at business processes in organizations: what the business process view is and why it is important, how information systems can improve processes, and how Enterprise Resource Planning systems help with that improvement. Hands-on use of a major ERP system (SAP) is included.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** IS 265 or MIS 245, IS 390

**Technology:** None

---

## MGMT 350 - Knowledge Management

**Description:** The purpose of this course is to introduce students to Knowledge Management. This term is used to refer to the ways in which organizations create, gather, manage and use the knowledge. Emphasis is placed on the information systems needed to capture and distribute knowledge and how knowledge can be used to gain competitive advantage.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MIS 245

**Technology:** None

---

## MRKT 360 - Digital Marketing

**Description:** Provides an overview of fundamental principles of digital marketing for the contemporary business environment. Topics include digital marketing fundamentals and digital user behavior, online market research, digital marketing strategies, digital marketing plan, and development of digital marketing programs.

**Credits:** 3 credit

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330

**Technology:** Simulator Mimic Pro

## MRKT 378 - Marketing Analytics

**Description:** The goal of this course is to immerse students in the technical challenges associated with contemporary marketing analytics as applied to business processes and data-driven decision making. To achieve this mission, the course will introduce modules covering the state-of-the-art in R programming applied to data analysis for marketing problems.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** MRKT 330, MGMT 216, MGMT 316

**Technology:** R, SPSS, Excel

## MGMT 310 - Co-op Work Experience I

**Description:** Students gain major-related work experience and reinforcement of their academic program. Work assignments facilitated and approved by the co-op office. Mandatory participation in seminars and completion of a report.

**Credits:** 3 credits

**Contact Hours:** 3 contact hours

**Prerequisites:** Completion of at least 30 credits at NJIT, approval of the school and permission of the Office of Cooperative Education and Internships

**Technology:** None