Management—MGT

824 Management and Organizational Behavior
Spring. 3(3-0) R: Open only to students in Business Management of Manufacturing, non-business masters students, or doctoral students in all majors. SA: MGT 906
Micro and macro models of organizational behavior applied to the management of people, group processes, and organization design. Motivation, diversity, leadership, group performance, organization structure and culture.

831 Managing Power, Empowerment, and Involvement
Fall. 3(3-0) RB: (MBA 824) R: Open only to students in the Graduate School of Management or with departmental permission. Assessment and evaluation of power and empowerment in organizations. High involvement management and organizational effectiveness. Ethical issues in the use of power and empowerment as managerial tools.

832 Negotiation and Conflict Management
Spring. 3(3-0) RB: (MBA 824) R: Open only to students in the Graduate School of Management or approval of department. Negotiation and bargaining to manage people and interpersonal relations. Developmental processes, stages, and types of conflict. Approaches to conflict management and resolution.

840 Leadership: A Personal Challenge
Fall, Spring. 3(3-0) R: Open only to students in the Graduate School of Management or with departmental permission. Review and evaluation of classic and popular theories of leadership. Guided self-assessment of current leadership style and strengths. Further development of leadership abilities through case analyses and class exercises.

842 Change Management and Evaluation
Spring of even years. 3(3-0) R: Open only to students in The Graduate School of Management or approval of department. Understanding, diagnosing and changing organizations. Managing the change process. Micro and macro organizational interventions.

852 Entrepreneurship: New Business Planning and Initiation
Fall. 3(3-0) R: Open only to students in the Graduate School of Management or with departmental permission. Assessment of the viability of a business idea. Development of a market analysis, project strategy, and plan to initiate the business. Identification and analysis of factors critical to new business financing and success.

870 Strategic Management
Fall, Spring. 3(3-0) R: Open only to second-year M.B.A. students. Determination of the strategic direction of the firm and management of strategic processes in the firm. Integration of environmental factors and organizational functions in the analysis and solution of management problems.

871 Business Processes and Strategies
Summer. 3(3-0) RB: Undergraduate degree in accounting. R: Open only to Master of Science students in Accounting and Business Processes. Organizational goals, design, and control of the global business enterprise. Strategies for creating value and sustaining competitive advantage across the firm’s value chain.

875 Change Management
Spring. 2(2-0) R: Open only to students in the Master of Science in Logistics and the Master of Science in Manufacturing and Innovation. Role and process of organizational change management. Types of change, identifying need for change, and change management process.

890 Independent Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in Business. Approval of department. Faculty-supervised independent study.

906 Seminar in Organizational Research Methods
Spring. 3(3-0) R: Open only to Ph.D. students. Methods for scientific research in the areas of organizational behavior, personnel and organizational theory. Theory building, hypothesis formation and testing, reliability theory, construct validity, external validity, research design.

907 Seminar in Organizational Behavior
Fall of even years. 3(3-0) R: Open only to Ph.D. students. Directed readings on the behavior of individuals within organizations. Theory and empirical research on perception, decision-making, work motivation, work attitudes, leadership and group dynamics.

908 Seminar in Organizational Theory
Fall of odd years. 3(3-0) RB: (MGT 906) R: Open only to Ph.D. students. Formal organizations viewed as rational, natural and open systems. Survey of contemporary theory and empirical research.

909 Seminar in Human Resource Management
Spring of odd years. 3(3-0) R: Open only to Ph.D. students. Classic and current empirical research. Job analysis, personnel selection, training, and incentive systems.

910 Seminar in Strategic Management
Fall of even years. 3(3-0) R: Open only to Ph.D. students. Review of recent research literature. Topics include developments in strategic types, identification of strategic groups, strategy formulation, implementation, and decision making.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to Ph.D. students in Management. Doctoral dissertation research.

MARKETING AND SUPPLY CHAIN MANAGEMENT—MSC

Department of Marketing and Supply Chain Management
The Eli Broad College of Business and The Eli Broad Graduate School of Management

101 Introduction to Business
Fall. Spring. 3(3-0) R: Not open to juniors or seniors in the College of Business. SA: ML 101

293 Cooperative Education for Business Students
Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Accounting; Economics; Finance; Management; Hospitality Business. R: Approval of department. Integration of pre-professional educational employment experiences in industry and government with knowledge and processes taught in the student’s academic program. Educational employment assignment approved by the Department of Marketing and Supply Chain Management.

300 Managerial Marketing
Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in the Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 300, MTA 300 Not open to students with credit in MSC 327
Analysis and strategic integration of buyer behavior, segmentation, positioning, demand analysis, information, pricing, promotion, channels, product policies, and ethics in consumer, reseller, industrial, and service markets.

302 Consumer and Organizational Buyer Behavior
Fall, Spring. Summer. 3(3-0) P:M: (MSC 300) R: Open only to juniors or seniors in the Eli Broad College of Business or Food Industry Management major. SA: ML 302, MTA 302
Application of consumer behavior principles to customer satisfaction, market planning, and marketing mix decisions. Ethical, diversity, and international issues.

303 Introduction to Supply Chain Management
Fall, Spring. Summer. 3(3-0) R: Open only to juniors or seniors in the Eli Broad College of Business and to students in programs for which MSC 303 is a catalog-listed requirement. Not open to students in The School of Hospitality Business. SA: MGT 303, ML 303, MTA 303
Objectives, processes, and functions of supply chain management activities including procurement, manufacturing, and logistics. The role of supply chain processes in creating competitive advantage with respect to quality, flexibility, lead-time, and cost.
305 Supply Chain Management
Fall, Spring, Summer. 4(4-0) P:M: (MSC 303) R: Open only to juniors or seniors in The Eli Broad College of Business or Engineering Arts major.
Supply chain operating practices and principles. Strategies for customer service, quality, procurement, manufacturing, logistics, and integrated supply chain management.

310 International and Comparative Dimensions of Business
Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 310, MTA 310

313 Personal Selling and Buying Processes
Fall, Spring. 3(3-0) SA: ML 313
The nature of channel relationships. Buying behavior and sales processes. Applications to differing industries and kinds of channel relationships.

317 Quantitative Business Research Methods
Fall, Spring, Summer. 3(3-1) Interdepartmental with Statistics and Probability. P:M: (STT 315) R: Open only to juniors or seniors in The Eli Broad College of Business. Not open to students in The School of Hospitality Business. SA: ML 317, MTA 317
Application of statistical techniques, including forecasting, to business decision making. Includes applications of linear regression and correlation, analysis of variance, selected non-parametric tests, time series, and index numbers.

319 Marketing Research
Fall, Spring. 3(3-0) P:M: (MSC 300 and MSC 317 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 319, MTA 319
Research methods designed to obtain information for marketing decisions. Research design, data collection, and interpretation of information to provide a customer orientation.

327 Introduction to Marketing
Fall, Spring. 3(3-0) R: Open only to students in programs for which MSC 327 is a catalog-listed requirement. Not open to students with credit in MSC 300.
Survey of marketing topics - buyer behavior, segmentation, positioning, demand analysis, information, pricing, promotion, channels, product policies, and ethics in consumer, reseller, industrial, and service markets.

335 Food Marketing Management
Spring. 3(3-0) Interdepartmental with Food Industry Management. Administered by Department of Agricultural Economics. P:M: (FIM 220 or MSC 300) SA: ML 335, MTA 335, FIM 335
Management decision-making in food industry organizations (processors, wholesalers, retailers). Marketing and sales in response to customer and consumer needs. Distribution and merchandising systems in domestic and international contexts.

351 Retail Management
Fall, Spring, Summer. 3(3-0) Interdepartmental with Food Industry Management. P:M: (MSC 300 or MSC 327) R: Open only to juniors or seniors in The Eli Broad College of Business or the Food Industry Management or Merchandising Management major. SA: ML 351, MTA 351
Domestic and international retailing structure, environment, and development. Managerial strategy. Location, purchasing, organizational, personnel and promotional techniques. Retail budgeting and control. Social and ethical considerations.

401 Procurement and Supply Management
Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: MGT 401, ML 401, MTA 401
Strategic issues in procurement and supply management. Purchasing process, procurement cycle, purchasing research, relationships with suppliers, negotiation, and commodity planning. Cost, price, and value analysis.

402 Manufacturing Planning and Control
Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: MGT 402, ML 402, MTA 402
Production planning, demand management, master scheduling, materials requirements, and capacity planning. Shop floor control, computer-integrated manufacturing, and just-in-time systems.

410 Product Innovation and Management
Fall, Spring, Summer. 3(3-0) P:M: (MSC 300 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 410
Analytic, decision-making, and planning concepts and tools available to product managers. New product policy and development, organizational issues, and product modification and deletion.

413 Sales Management
Fall, Spring. 3(3-0) P:M: (MSC 300 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 413, MTA 413

415 International Marketing Management
Fall, Spring. 3(3-0) P:M: (MSC 300) and (MSC 310 or EC 340) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 415, MTA 415
Marketing decisions, strategies, and operations of the firm involved in international business. Researching global market opportunities and formulating market entry strategies. Developing and implementing the international marketing program.

420 New Product Design and Development
Spring. 3(3-0) P:M: (MSC 300 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 420, MTA 420
Practical training and experiences in design and testing of new products.

439 Food Business Analysis and Strategic Planning (W)
Fall. 3(3-0) Interdepartmental with Food Industry Management. Administered by Department of Agricultural Economics. P:M: (FIM 220) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 439, MTA 439, MSC 439
Principles and techniques of business analysis and strategic planning applied to food firms. Food trend forecasts, market potential, competition and cost analyses, business and strategic planning.

442 Logistics and Transportation Management
Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 442, MTA 442
Microanalysis of logistics and transportation services. Customer service, distribution operations, purchasing, order processing, facility design and operations, carrier selection, transportation costing and negotiation.

460 Marketing Strategy (W)
Fall, Spring, Summer. 3(3-0) P:M: (MSC 302 and MSC 317 and MSC 319) and completion of Tier I writing requirement. R: Open only to seniors in the Marketing major. SA: ML 460, MTA 460
Identification and analysis of managerial marketing issues. Integration of marketing concepts and theories through case analysis. Ethical and international applications.

470 Supply Chain Application and Policy (W)
Fall, Spring. 2(2-0) P:M: (MSC 401 or concurrently and MSC 402 or concurrently and MSC 442 or concurrently) and completion of Tier I writing requirement. R: Open only to seniors in the Supply Chain Management major. SA: ML 470, MTA 470
Analysis and problem solving of supply chain management cases. Purchasing, manufacturing, logistics, and transportation as an integrated supply chain.

472 Topics in Operations Management
Spring of odd years. 3(3-0) P:M: (MSC 402) R: Open only to seniors in the Supply Chain Management major. SA: ML 404, MSC 404, MTA 404, MGT 404
Managerial aspects of current issues such as total quality, computer integrated manufacturing and simultaneous engineering.

473 Topics in Logistics and Transportation Management
Spring. 3(3-0) P:M: (MSC 442) R: Open only to juniors or seniors in the Supply Chain Management major.
Current topics in logistics and transportation planning, information technology, response based strategies, third party logistics and relationship management.

490 Independent Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to juniors or seniors. Approval of department. SA: ML 490, MTA 490
Supervised program of independent library or field research designed to supplement classroom study.
Marketing and Supply Chain Management—MSC

490H Honors Independent Study
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to juniors or seniors in the Honors College. Approval of department. SA: ML 490H, MTA 490H

Supervised program of independent library or field research designed to supplement classroom study.

491 Topics in Marketing and Supply Chain Management
Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: (MSC 300 or MSC 303) and (MSC 317) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 491, MTA 491

Current issues in specialized marketing, logistics knowledge of marketing, and environmental analysis. Strategy development for control.

800 Supply Chain Management
Spring. 3(3-0) SA: ML 800, MTA 800 Fundamentals of materials and logistics management. Strategic impact of the transformation process in a global economy. Quality, inventory management, logistics strategy, customer service, international procurement, management of technology.

801 Materials Management: Tactical and Strategic Perspectives
Fall. 3(3-0) RB: (MSC 800) SA: ML 801, MTA 801 Integration of procurement and operations management for competitive advantage. Strategic and tactical approaches to customer requirements. Management of supply-chains procurement, process assessment, quality, manufacturing planning and control, and technology.

802 Procurement and Sourcing Strategies
Fall, Spring. 3(3-0) RB: (MSC 800) R: Open only to MBA students. SA: ML 802, MTA 802 Sourcing strategies and applications. Negotiation planning and execution.

803 Operations Management Strategy
Spring. 3(3-0) RB: (MSC 801) SA: ML 803, MTA 803 Operations management issues including quality, technology, group technology, computer integrated manufacturing, and just-in-time manufacturing.

805 Marketing Management
Spring. 2 to 3 credits. SA: ML 805, MTA 805

Strategic and decision-making aspects of marketing functions. Analysis, coordination, execution of marketing programs. Development of strategies and tactics. Segmentation, marketing mix, market response modeling, and ethics in a global context.

806 Marketing Analysis in Technology Environments
Fall. 3(3-0) P: (MSC 820) R: Open only to MBA students in the Marketing Technology Concentration. SA: ML 806, MTA 806

Analysis of data gathered for strategic and tactical marketing decisions. Marketing engineering in strategic and decision support environments. Market and decision modeling techniques using spreadsheet templates. Integrated single source market and scanner data. Significant case work.

807 Marketing Information Technology -- Customer-Driven Strategies
Fall. 4(4-0) P: (MBA 820) R: Approval of department. SA: ML 807, MTA 807


808 Entrepreneurial Marketing
Fall. 3(3-0) RB: (MBA 820 or MSC 805) SA: ML 808, MTA 808 Entrepreneurial processes of creating markets. Creative approaches for designing competitor-oriented strategies in mature markets.

810 Technology and Product Innovation
Spring. 3(3-0) P: (MSC 805 or MBA 820) SA: ML 810, MTA 810

New product management for technology firms. Creating new product ideas, designing high technology products, managing cross-functional teams, developing and implementing marketing plans, interpreting marketing data, forecasting sales, assessing competitive dynamics and rivalry, and coping with uncertain environmental forces.

811 Marketing Strategy in Technology Environments
Spring. 2(2-0) P: (MSC 806 and MSC 807) R: Open only to MBA students in the Marketing Technology Concentration. SA: ML 811, MTA 811 Competitive technology development strategy, marketing analysis, and marketing planning. Simulating marketing and product decisions in a globally competitive environment. Development and execution of marketing strategy and plans for a high technology firm.

813 Marketing Research Methods
Spring. 3(3-0) RB: (MBA 820 or MSC 805) SA: ML 813, MTA 813

Collection, analysis, and interpretation of primary data from problem definition to report writing.

821 Practical Supply Chain Analysis
Spring. 1(1-0) RB: (MBA 820 or concurrently) R: Open only to MBA students in the Supply Chain Management major. Practical considerations and issues required to perform supply chain management analysis and operations. Supply chain management terminology and concepts.

824 Channel and Logistics Management
Spring. 3(3-0) RB: (MBA 820 or MSC 805) SA: ML 824, MTA 824

Interfirm relationships in domestic and international settings. Interorganizational behavior, channel management, channel leadership and negotiations, relationship management, and strategic alliances.

828 Marketing Programming
Spring. 3(3-0) RB: (MSC 805) Use of computer-based cases, simulations, and exercises to solve marketing problems and to develop marketing strategies and tactics. High-tech approaches to marketing programs.

831 Food Marketing Management
Spring. 3(3-0) Interdepartmental with Agricultural Economics. RB: (MBA 820 or MSC 805) SA: ML 831, MTA 831 Marketing management decisions in food firms. Consumer orientation, computer technologies, food system cost reduction, global opportunities, environmental and social issues.

833 Decision Support Models
Fall. 3(3-0) SA: MGT 833 Analytical models to support decision making. Topics include multiple regression, linear optimization, decisions under uncertainty, and forecasting.

842 Total Quality Management
Fall. 3(3-0) SA: (MSC 800)

Total quality management principles and practices, tools and techniques, implementation of continuous quality improvement programs, links to manufacturing and competitive strategies.

843 Environmentally Conscious Manufacturing
Spring. 3(3-0) R: (MSC 801 and MSC 833) Elements of the environmentally responsible enterprise, with an emphasis on legal and regulatory trends, assessment measures and audits, tools and procedures, supply chain management, and frameworks. Corporate environmental responsibility as linked to product and process design.

852 Procurement and Sourcing Strategies
Fall. 3(3-0) P: (MBA 821) R: Open only to students in the MBA program.

Developing and implementing procurement strategy. Procurement and commodity strategy, insourcing and outsourcing, supplier evaluation and selection, supplier management and development, global sourcing, cost and price analysis, negotiation, contract management, and procurement in product and process design.

853 Manufacturing Strategy
Spring. 3(3-0) R: (MBA 821) R: Open only to students in the MBA program.

Developing and implementing operations strategy. Capacity planning and management, manufacturing process choice, process flow and mapping, value-mapping, and just-in-time tools and techniques. Recent developments such as synchronized flow management, Kaizen events, and advanced performance measurement and evaluation.

854 Integrated Logistics
Fall. 3(3-0) P: (MBA 821) R: Open only to students in the MBA program.

Logistics as a value-adding process that synchronizes demand and supply. Supply chain strategy, segmental positioning, and facility network design. Development and maintenance of service provider relationships. Forecasting and collaborative planning, order management, transportation, inventory analysis, warehousing, and materials handling. Integrated performance measurement.

855 Supply Chain Management Technology and Applications
Spring. 3(3-0) R: (MBA 821) R: Open only to students in the Supply Chain Management concentration in the MBA program.

Integration of logistics, procurement and operations strategy in the supply chain. Problem solving approaches, decision support tools and analytical methods. Applications through case studies and computer simulations of supply chain situations in consumer and industrial settings.
856 Consulting Practicum For Emerging Firms
Fall, Spring. 3(1-6)
Classroom and field experience on business consulting, defining marketing intangibles, defining scope of work, engagement management, and preparing deliverables for entrepreneurial firms. Topics include small business market research tools, marketing planning, financial management and growth management.

858 Advanced Entrepreneurship
Fall, Spring. 3(1-6) R: Approval of department.
Field case experience on advanced entrepreneurial problems. Topics of cases will include navigating future growth curves of small firms; new product launches within small firms; financing for a start-up venture; refinancing for long-term stability; marketing plans for small firms; organizational and strategic planning for growing firms; and turn-around management for troubled small businesses.

859 Management of Technology and Innovation
Spring. 3(3-0) RB: Business or Engineering Integration of marketing assessment with technological feasibility studies in the development of innovative products and processes. Interfaces marketing students, engineering students, and faculty researchers on managing the research, design, and development processes leading to the commercialization of new technologies.

860 International Business
Fall, Spring. 3(3-0) SA: ML 860, MTA 860 Management of the firm in the multination al environment. Assessment of international modes of operations, markets, financial strategies, services, and resources. Competitive strategy.

862 Developing Global Markets
Spring. 3(3-0) RB: (MBA 820 or MSC 805) SA: ML 862, MTA 862 Development of marketing strategies for international expansion. Evolution of global markets, market selection, timing, entry sequence, modes of entry, and the corporate infrastructure for global marketing expansion.

865 Emerging Topics in Business
Spring. 3(3-0) RB: (MBA 820 or MSC 805) SA: ML 865, MTA 865 Perspectives on new and emerging issues of business administration. Topics vary.

870 Introduction to Logistics and Supply Chain Management
Summer. 3(3-0) R: Open only to students in the Master of Science in Logistics. Integrated view of procurement, operations, and logistics management. Management of the flow of products from raw material sourcing and acquisition through delivery to the final user.

871 Applied Data Analysis
Summer. 2 to 3 credits. R: Open only to students in the Master of Science in Logistics and the Master of Science in Manufacturing and Innovation. Quantitative and statistical methods for decision making. Hypothesis testing, regression and correlation analysis, forecasting, linear programming, decision analysis and project management.

872 Distribution Fulfillment
Summer. 3(3-0) P:M: (MSC 870) RB: Introductory coursework in finance, accounting, management, and economics. R: Open only to students in the Master of Science in Logistics. Management of the firm's value creation process from product development through order receipt and delivery to consumer. Alternative approaches to developing customer value and the role of the demand and supply chain in providing it.

873 Procurement and Manufacturing Management
Summer. 3(3-0) P:M: (MSC 870) R: Open only to students in the Master of Science in Logistics. Strategic issues in procurement and supply management. Purchasing role in fulfilling the firm's operations and competitive strategies. Theory and practice for planning and controlling manufacturing operations.

874 Total Quality Management
Summer. 2(2-0) R: Open only to students in the Master of Science in Manufacturing and Innovation. Total quality management principles, practices, and techniques. Implementation of quality improvement programs. Relationship to manufacturing and competitive strategies.

875 Manufacturing Planning and Control
Summer. 2(2-0) R: Open only to students in the Master of Science in Manufacturing and Innovation. Planning and control functions required to match supply and demand in a manufacturing firm. Tools and methods for planning production and the resources/capacity needed to support production. The role of information and information systems in planning and control. Coordination of plans across organizations in the supply chain.

876 Logistics Operations Methods and Systems
Summer. 3(3-0) P:M: (MSC 872) R: Open only to students in the Master of Science in Logistics. Micro-analysis of logistics and transportation services including customer service and order fulfillment, distribution operations, purchasing or operation of transportation services, third-party logistics providers, and network design.

877 Logistics Information Technology
Summer. 3(3-0) P:M: (MSC 872) R: Open only to students in the Master of Science in Logistics. Role of information technology in logistics and supply chain management, planning and operations. Requirements, capabilities, and considerations for using information technology applications in logistics.

878 Logistics Systems Analysis
Summer. 3(3-0) P:M: (MSC 876 and MSC 877) R: Open only to students in the Master of Science in Logistics. Process of solving logistics problems. Applications of analysis tools and techniques to identify benefits and costs of logistics change.

879 Supply Chain Logistics: Strategy and Applications
Summer. 3(3-0) P:M: (MSC 876 and MSC 877 and MSC 878 or concurrently) R: Open only to students in the Master of Science in Logistics. Analysis and solution of supply chain management cases and simulations. Teamwork, communication, and job skills. Situations involving purchasing, manufacturing, logistics and transportation as an integrated supply chain.

881 Global Logistics
Fall. 3(3-0) P:M: (MSC 872 and MSC 876) R: Open only to students in the Master of Science in Logistics. Requirements for global operations and strategy development. Similarities and differences of international and domestic operations.

882 Logistics Field Study
Fall. 6 credits. P:M: (MSC 879) RB: Completion of 24 credits of Master of Science in Logistics program. R: Open only to students in the Master of Science in Logistics. Practical application of course material to a problem or situation in the student's organization.

883 Technology and Product Innovation Management
Fall. 2(2-0) R: Open only to students in the Master of Science in Manufacturing and Innovation. Management of technology and product development for high technology firms. Creating new product ideas, designing high technology products, managing cross-functional teams, developing and implementing marketing plans, interpreting marketing data, sales forecasting for new products, testing new products, assessing competitive dynamics, and coping with uncertain environmental forces.

884 Marketing Management
Summer. 2(2-0) R: Open only to students in the Master of Science in Manufacturing and Innovation. Strategic and decision-making aspects of marketing functions. Analysis, coordination, execution of marketing programs. Development of strategies and tactics. Segmentation, marketing mix, market response modeling and ethics in a global context.

885 Manufacturing/Innovation Field Study/Research Project
Spring. 5(0-10) R: Open only to students in the Master of Science in Manufacturing and Innovation. Directed field study or research project in manufacturing and/or innovation related subjects. Practical application of knowledge gained in prior manufacturing/innovation coursework.

886 Strategic Sourcing and Supply Chain Management
Summer. 2(2-0) R: Open only to students in the Master of Science in Manufacturing and Innovation. Fundamentals of strategic sourcing and supply chain management. Integration and coordination of product innovation, sourcing, manufacturing, distribution, and logistics for global competitiveness.
### Marketing and Supply Chain Management—MSC

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>887</td>
<td>Technology and Innovation Implementation</td>
<td>3(3-0)</td>
<td>R: Open only to seniors in the Department of Manufacturing and Innovation.</td>
<td>Focus on developing innovative products and processes.</td>
</tr>
<tr>
<td>890</td>
<td>Independent Study</td>
<td>1 to 3 credits</td>
<td></td>
<td>Faculty-supervised independent study.</td>
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<tr>
<td>892</td>
<td>Environmentally Conscious Manufacturing</td>
<td>2(2-0)</td>
<td>R: Open only to students in the Master of Science in Manufacturing and Innovation.</td>
<td>Environmental issues in manufacturing.</td>
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<tr>
<td>893</td>
<td>Manufacturing Strategy</td>
<td>3(3-0)</td>
<td>R: Open only to students in the Master of Science in Manufacturing and Innovation.</td>
<td>Manufacturing strategy as a competitive weapon.</td>
</tr>
<tr>
<td>905</td>
<td>Theory Development and Research Design in Marketing</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students in the Department of Marketing and Supply Chain Management.</td>
<td>Research and development of marketing strategies.</td>
</tr>
<tr>
<td>907</td>
<td>Causal Modeling in Marketing</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Causal relationships in marketing.</td>
</tr>
<tr>
<td>908</td>
<td>Marketing Decision Models</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Applications of marketing decision models.</td>
</tr>
<tr>
<td>910</td>
<td>Seminar in Marketing Theory</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Theoretical and applied marketing concepts.</td>
</tr>
<tr>
<td>911</td>
<td>Proseminar in Marketing Literature and Research Criticism</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Literature review and research critique.</td>
</tr>
<tr>
<td>912</td>
<td>Seminar in Buyer Behavior</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Buyer behavior and decision-making.</td>
</tr>
<tr>
<td>913</td>
<td>Seminar in Marketing Channels and Marketing Relationships</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Interorganizational issues in marketing.</td>
</tr>
<tr>
<td>918</td>
<td>Procurement and Sourcing Theory</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students in the Department of Marketing and Supply Chain Management.</td>
<td>Theoretical models in procurement and sourcing.</td>
</tr>
<tr>
<td>920</td>
<td>Seminar in Manufacturing Strategy</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Strategic decision-making in manufacturing.</td>
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<tr>
<td>921</td>
<td>Seminar in Inventory Management</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Inventory control and management.</td>
</tr>
<tr>
<td>923</td>
<td>Topics in Operations Management</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Current research in the field.</td>
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<tr>
<td>930</td>
<td>Theory of Logistics Systems</td>
<td>3(3-0)</td>
<td>R: Open only to Ph.D. students.</td>
<td>Development and management of logistics systems.</td>
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<tr>
<td>931</td>
<td>Simulation Methods for Marketing and Logistics</td>
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<td>R: Open only to Ph.D. students.</td>
<td>Simulation techniques in logistics management.</td>
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<td>Public policy implications in logistics.</td>
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<td>International Business Theory</td>
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<td>Theories of international business.</td>
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<td>International Business Research Issues</td>
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<td>Independent Study</td>
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<td>943, 941</td>
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