

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

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: (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: (MSC 303) R: Open only to juniors or seniors in The Eli Broad College of Business or the Business-Supply Chain Management cognate in the 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

International and cross-cultural study of business decisions, enterprises, markets, and institutions. Globalization of industries and firm competitiveness. International business transactions and entry strategies.

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: (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: (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, Summer. 3(3-0) R: Open only to juniors or seniors 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.

351 Retail Management
 Fall, Spring, Summer. 3(3-0) Interdepartmental with Food Industry Management. P: (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. Locational, 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: (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: (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. 3(3-0) P: (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.

412 Marketing Technology and E-Commerce
 Fall, Spring. 3(3-0) Interdepartmental with Information Technology Management. P: (MSC 300 and MSC 317 and ITM 309) R: Open only to juniors or seniors in the Eli Broad College of Business, and to students in programs in which MSC 412 is a catalog-listed requirement.

Enabler technologies and their role in creating marketing opportunities, efficiencies, and innovations. Tools, applications, platforms, and infrastructures. Determination of business configurations that foster value creation from enabler technologies.

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

Planning, implementing, and controlling the firm's personal selling function. Analysis of sales territories. Management of recruitment, selection, training, and motivation of sales personnel. Evaluation of sales performance. Discussion of diversity and ethical issues.

415 International Marketing Management
 Fall, Spring. 3(3-0) P: (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: (MSC 300 and MSC 317) R: Open only to seniors in The Eli Broad College of Business.

Practical training and experiences in design and testing of new products.

Marketing and Supply Chain Management—MSC

- 439 Food Business Analysis and Strategic Planning(W)**
Fall. 3(3-0) Interdepartmental with Food Industry Management. Administered by Department of Agricultural Economics. P: (FIM 220) R: Open only to juniors or seniors 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: (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: (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: (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: (MSC 402) R: Open only to juniors or 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: (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.
- 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**
Spring. 3(3-0) P:M: (MBA 820) R: Open only to M.B.A. students or approval of department. SA: ML 806, MTA 806
Analysis of data gathered for strategic and tactical marketing decisions from a variety of sources. Traditional and internet marketing research methods, statistical analysis software, sales forecasting, data mining techniques, scanner data and analysis, Web site traffic metrics and analysis.
- 807 Customer-Driven Strategies**
Fall. 3(3-0) P:M: (MBA 820) R: Open only to M.B.A. students or approval of department. SA: ML 807, MTA 807
Theories and models of consumer and business buyer behavior. Research tools that organizations use to listen to the voice of the customer. Use of information in formulating marketing strategies. Market orientation, segmentation, customer value based pricing, personal selling and sales management, branding, customer satisfaction measurement, and developing customer loyalty.
- 808 Market Development and Leadership**
Spring. 3(3-0) P:M: (MBA 820 or MSC 805) R: Open only to M.B.A. students or approval of department. SA: ML 808, MTA 808
Creative, outside-the-box, and theoretical concepts and processes for creating markets, growing markets, and establishing leadership positions in mature markets.
- 810 Technology and Product Innovation**
Spring. 3(3-0) P:M: (MSC 805 or MBA 820) SA: ML 810, MTA 810
New product and technology management for technology-intensive firms. Creating new product ideas. Managing cross-functional teams. Developing and implementing new product and technology strategies.
- 811 Brand Strategy**
Fall. 3(3-0) P:M: (MBA 820) R: Open only to M.B.A. students or approval of department. SA: ML 811, MTA 811
Competitive brand development strategy, marketing analysis, and marketing planning. Simulating marketing and product decisions in globally competitive market environments. Development and execution of marketing and branding strategy and plans for a high technology firm.
- 814 Decision Support Systems in Business**
Fall. 3(3-0) Interdepartmental with Information Technology Management. Administered by The Eli Broad College of Business. P:M: (MBA 823 or ITM 309)
Computer-based managerial decision support systems (DSS). Basic system architectures for DSS. Individual and group systems. Data-driven and intelligence (model) driven systems. Project analysis of a globally distributed system.
- 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.
- 825 Supply Management Tools**
Spring. 1(1-0) P:M: (MBA 821) R: Open only to M.B.A. students or approval of department. C: MSC 826 concurrently, MSC 827 concurrently.
Analytical tools to support procurement strategy development and supplier management. Spend analysis, supplier cost and price analysis, "should cost" models, cost analysis for make-versus-buy decisions.

- 826 Manufacturing Design and Analysis**
 Spring. 1(1-0) P:M: (MBA 821) R: Open only to M.B.A. students or approval of department. C: MSC 825 concurrently, MSC 827 concurrently.
 Designing and analyzing operations processes. Capacity planning and management, process flow and mapping, value-mapping, quality tools and techniques, dependent demand inventory techniques. Recent developments and data.
- 827 Competing Through Supply Chain Logistics**
 Spring. 1(1-0) P:M: (MBA 821) R: Open only to M.B.A. students or approval of department. C: MSC 825 concurrently, MSC 826 concurrently.
 Logistics as a value-adding process that synchronizes demand and supply. Supply chain logistics strategy, information technology, segmental positioning, forecasting and collaborative planning, and customer accommodation.
- 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) RB: (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) RB: (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 Strategy**
 Fall. 2(2-0) P:M: (MBA 821) RB: (MSC 825 and MSC 826 and MSC 827) R: Open only to M.B.A. students or approval of department.
 Developing and implementing procurement strategy. Commodity strategy, insourcing and outsourcing strategy. Supplier evaluation and selection, supplier relationship management and supplier development. Strategic cost management, global sourcing, negotiation, contract management, and purchasing ethics.
- 853 Operations Strategy**
 Fall. 2(2-0) P:M: (MBA 821) RB: (MSC 825 and MSC 826 and MSC 827) R: Open only to M.B.A. students or approval of department.
 Developing and implementing operations strategy. Matching of competitive priorities with operational investments and decisions. Manufacturing process choice, capability development, technology management, process simulation, linking supply chain with product type and inventory management decisions. Recent developments such as synchronized flow management, E-commerce, and advanced performance measurement and evaluation.
- 854 Integrated Logistics Systems**
 Fall. 2(2-0) P:M: (MBA 821) RB: (MSC 825 and MSC 826 and MSC 827) R: Open only to M.B.A. students or approval of department.
 Logistics systems and operations that achieve synchronized demand and supply. Transportation, inventory analysis, warehousing, materials handling, and logistics network design. Integrated performance measurement and organizational structure.
- 855 Supply Chain Management Technology and Applications**
 Spring. 3(3-0) P:M: (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 multinational environment. Assessment of international modes of operations, markets, financial strategies, services, and resources. Competitive strategy.
- 862 Developing Global Markets**
 Fall. 3(3-0) P:M: (MBA 820 or MSC 805) R: Open only to M.B.A. students or approval of department. SA: ML 862, MTA 862
 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 Logistics and 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.

Marketing Supply Chain Management—MSC

- 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) Fall: e-learning. 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.
- 887 Technology and Innovation Implementation**
Summer. 3(3-0) R: Open only to students in the Master of Science in Manufacturing and Innovation.
Marketing assessment and technological feasibility in the development of innovative products and processes by an individual developer. Functional interfaces. Value engineering in the design and procurement process. Focus on commercialization of an actual technological innovation.
- 888 Capstone Project in Manufacturing**
Fall, Spring, Summer. 3(1-6) Interdepartmental with Engineering. R: Open only to seniors in the Manufacturing Engineering major or to students in the Business Management of Manufacturing major.
Problem solving in manufacturing. Design of products and processes for manufacturing using a systems approach. Teaming and communication skills are emphasized.
- 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: Approval of department. SA: ML 890, MTA 890
Faculty-supervised independent study.
- 892 Environmentally Conscious Manufacturing**
Summer. 2(2-0) R: Open only to students in the Master of Science in Manufacturing and Innovation.
Environmental issues in the manufacturing environment. Economic and strategic motivations for environmental consciousness. Tools, procedures, and recent developments.
- 893 Manufacturing Strategy**
Summer. 3(3-0) R: Open only to students in the Master of Science in Manufacturing and Innovation.
Manufacturing strategy as a competitive weapon. Link between manufacturing strategy and corporate strategy. Alignment of manufacturing strategy with corporate strategy, and structural and infrastructural decisions. Development and deployment of global manufacturing strategy. Adaptation of strategy to position the competitive capabilities of the firm appropriately.
- 905 Theory Development and Research Design in Marketing**
Fall. 3(3-0) R: Open only to Ph.D. students
SA: ML 905, MTA 905
Research concepts and scientific methods for the study of marketing. Formulation of hypotheses, concepts of measurement, and quantitative methods.
- 907 Causal Modeling in Marketing**
Fall. 3(3-0) RB: (MSC 906) R: Open only to Ph.D. students. SA: ML 907, MTA 907
Statistical methods in marketing, emphasis on causal modeling.
- 908 Marketing Decision Models**
Fall. 3(3-0) R: Open only to Ph.D. students. SA: ML 908
Applications of marketing decision models in new product development, pricing, distribution, advertising, and sales promotion.
- 910 Seminar in Marketing Theory**
Fall of even years. 3(3-0) R: Open only to Ph.D. students.
Development, critical analysis, and integration of marketing theory. Theory grounding and professional standards of scholarship. Methods of meta analysis, historical analysis, and game theoretic analysis.
- 911 Proseminar in Marketing Literature and Research Criticism**
Fall of odd years. 3(3-0) R: Open only to Ph.D. students.
Classic and contemporary contributions in marketing. Fundamental trends shaping the evolution of markets, competition, and marketing institutions. Major theoretical explanations of marketing strategy and behavior such as the resource-based theory and knowledge-based view of the firm.
- 912 Seminar in Buyer Behavior**
Spring of even years. 3(3-0) R: Open only to Ph.D. students.
Organizational and consumer behavior and their relationship to marketing strategy. Attitudes, information processing, decision making, and attribution theory. Methodological tools appropriate for analyzing buyer behavior such as conjoint analysis.
- 913 Seminar in Marketing Channels and Marketing Relationships**
Spring of odd years. 3(3-0) R: Open only to Ph.D. students.
Interorganizational issues in marketing. Theoretical perspectives on marketing channels, supplier relations, strategic alliances, firm boundaries, firm capabilities, and logistics. Integration of existing theories. Research methods in marketing channels and marketing relationships.
- 918 Procurement and Sourcing Theory**
Fall of even years. 3(3-0) R: Open only to Ph.D. students. SA: MGT 918
Theoretical models explaining procurement and sourcing strategy. Frameworks to guide research.
- 920 Seminar in Manufacturing Strategy**
Fall of even years. 3(3-0) RB: (MSC 803) R: Open only to Ph.D. students. SA: ML 920, MTA 920, MGT 920
Research in manufacturing strategy. Quality, technology, flexibility, innovation. Theory building.

921 Seminar in Inventory Management
Fall of odd years. 3(3-0) RB: (MSC 803) R:
Open only to Ph.D. students SA: ML 921,
MTA 921, MGT 921
Classical, just-in-time, and multi-echelon inventory
control models. Forecasting.

923 Topics in Operations Management
Spring of odd years. 3(3-0) RB: (MSC 803)
R: Open only to Ph.D. students SA: ML 923,
MTA 923, MGT 923
Current research in the field. Topics vary.

930 Theory of Logistics Systems
Fall of odd years. 3(3-0) R: Open only to
Ph.D. students.
Development and management of firm logistics
systems within the context of an integrated supply
chain strategy. Elements of network, economic,
behavioral, and systems theory in the design, man-
agement, and control of logistics systems.

**931 Simulation Methods for Marketing and
Logistics**
Spring of odd years. 3(3-0) R: Open only to
Ph.D. students.
Techniques and methodology for marketing and
supply chain system design, customer service, and
policy formulation. Methodological focus on simula-
tion and analytical techniques to develop empirical
results documenting current and anticipated system
performance.

932 Logistics and Public Policy
Fall of even years. 3(3-0) RB: (MSC 930) R:
Open only to Ph.D. students.
History and rationale of government in the develop-
ment, maintenance, and control of transportation
and supply chain infrastructure. Interaction of users,
carriers, government, and public to create, interpret,
and refine national economic and environmental
policies.

940 International Business Theory
Fall of even years. 3(3-0) RB: (MSC 860 or
MSC 862) R: Open only to Ph.D. students.
SA: ML 940, MTA 940
Theories explaining international business phenom-
ena. Varying perspectives on international business
activities, concepts, and frameworks.

941 International Business Research Issues
Spring of odd years. 3(3-0) RB: (MSC 940)
R: Open only to Ph.D. students. SA: ML
941, MTA 941
Scientific methods of research on international
business. Topics include cultural bias and organiz-
ing multi-country studies.

990 Independent Study
Fall, Spring. 1 to 3 credits. A student may
earn a maximum of 6 credits in all enroll-
ments for this course. R: Open only to Ph.D.
students. SA: ML 924, MTA 924
Intensive reading and research on a marketing topic
of mutual interest to a faculty member and a Ph.D.
student.

995 Directed Research Paper
Fall, Spring, Summer. 1(1-0) R: Open only
to Ph.D. students in the Department of Mar-
keting and Supply Chain Management. SA:
ML 995, MTA 995
Production of research paper under the direction of
a senior faculty member.

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 the Department of
Marketing and Supply Chain Management.
Approval of department. SA: ML 999, MTA
999
Doctoral dissertation research.

MASTER OF BUSINESS ADMINISTRATION MBA

The Eli Broad College of Business The Eli Broad College of Business and The Eli Broad Graduate School of Management

**800 The Global Organization and the Firm's
Strategic Position**
Fall, Spring. 2(2-0) R: Open only to MBA
students.
Organizational goals, design, and control of the
global business enterprise. Maximization of share-
holder value, competitive forces, configuring the
value-added chain. Strategies for implementing new
organizational forms. Designing and managing
strategic change.

802 Financial Accounting
Fall. 2(2-0) R: Open only to MBA students.
Financial accounting model underlying financial
statements of firms. Information in financial state-
ments and role of these statements in capital mar-
kets. Information intermediaries, regulators, and role
of independent auditor. Standard setting and the
impact of changing standards. Globalization of
standards. Offered first half of semester.

804 Applied Data Analysis for Managers
Fall. 2(2-0) RB: (STT 315) R: Open only to
MBA students. Not open to students with
credit in MSC 833.
Analysis of business and economic data to support
managerial decision-making. Building, interpreting,
and applying regression models. Time series and
forecasting. Offered second half of semester.

**806 Business Ethics and the Legal
Environment**
Spring. 2(2-0) R: Open only to MBA stu-
dents.
Framework for identifying, analyzing, and resolving
ethical dilemmas in business. Key legal topics in
business using critical thinking analysis.

808 Leadership and Teamwork
Fall. 1(1-0) R: Open only to MBA students.
Understanding team management and leadership
through experiential and skill-based learning. Effec-
tive communication, including the use of electronic
communication technologies for team development
and maintenance. Active practice of teamwork,
communication, and leadership skills. Offered first
half of semester.

812 Managerial Accounting
Spring. 2(2-0) R: Open only to MBA stu-
dents.
Performance measurement and incentive system
design. Organization structure, budgeting, and
transfer pricing. Target costing. Relevant costs and
management decision models. Activity-based cost-
ing. Aligning management accounting and firm
strategy. Accounting for quality. International per-
spective on management accounting issues. Offered
second half of semester.

814 Applied Economics
Spring. 2(2-0) R: Open only to MBA stu-
dents.
Economic view of the firm. Modeling market me-
chanics in supply and demand, marginal concepts,
elasticity, market characteristics, pricing with market
power, and strategic behavior. Applications to busi-
ness problems and situations. Principal-agent re-
lationships and wealth maximization. Offered first half
of semester.

816 Business Presentations
Fall. 1(1-1) R: Open only to MBA students.
Development of effective interpersonal communica-
tions skills. Oral communications in business set-
tings.

820 Marketing Management
Fall. 3(3-0) R: Open only to MBA students.
Leadership principles. Decision-making. Fundamen-
tal marketing concepts such as segmentation, target
marketing, positioning, growth strategies, revenue
management, product management, and communi-
cation strategies. Problem-solving and marketing
planning.

821 Supply Chain Management
Fall. 3(3-0) R: Open only to MBA students.
Integrative approach to product design, develop-
ment, and delivery. Flow of products from concept
development through delivery to the final user,
including product and process development, manag-
ing information and product flows, total quality man-
agement, and resource and capacity management.

822 Financial Management
Fall. 3(3-0) R: Open only to MBA students.
Investment decisions by firms. Value creation, risk
and return, pricing models, and financial markets.
Financing alternatives, market efficiency, capital
budgeting, and leverage and risk relationships.
Optimizing firm value. Agency problems and effects
on investment and financing decisions.

823 Information Technology Management
Spring. 2(2-0) R: Open only to MBA stu-
dents.
Role of information technology in operations, deci-
sion making, and learning in organizations. Competi-
tive and economic benefits from managing informa-
tion technology resources. Competitive advantage,
efficient operations, and improved decision quality.
Offered second half of semester.

824 Managing the Workforce
Spring. 2(2-0) R: Open only to MBA stu-
dents.
Role of workforce management in fulfilling the goals
and mission of the organization. Theories and appli-
cations of management principles to acquiring,
motivating, and rewarding employees and structur-
ing their work. Domestic and international issues in
the workplace. Offered first half of semester.