# MARKETING AND **MSC** SUPPLY CHAIN MANAGEMENT

# 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 and Economics and Finance and Hospitality Business and Management. Administered by Marketing and Supply Chain Management. 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.

### **Consumer and Organizational Buyer** 302 **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

### Introduction to Supply Chain 303 Management

Fall, Spring, Summer. 3(3-0) RB: Programs for which MSC 303 is a catalog-listed requirement. 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: 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, flexibilty, lead-time, and cost.

# **Supply Chain Management**

Fall, Spring, Summer. 4(4-0) P: (MSC 303) Business-Supply Chain Management cognate. R: Open only to juniors or seniors in The Eli Broad College of Business or Applied Engineering Sciences 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 strate-

### 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.

### **Quantitative Business Research Methods**

Fall, Spring, Summer. 3(3-1) Interdepartmental with Statistics and Probability. Administered by Marketing and Supply Chain Management. 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.

# **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 to juniors or seniors and open to students in the James Madison College or in the Advertising major or in the Agribusiness Management major or in the Agribusiness Management Specialization or in the Apparel and Textile Design major or in the Communication major or in the Computer Science major or in the Construction Management major or in the Economics major or in the Food Industry Management major or in the Food Industry Management Specialization or in the Interdisciplinary Studies in Social Science-Human Resources and Society major or in the Interdisciplinary Studies in Social Science major or in the Journalism major or in the Packaging major or in the Park, Recreation and Tourism Resources major or in the Retailing major or in the Security Management Specialization or in the Technology Systems Management major or in the Telecommunication, Information Studies and Media major. 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. Administered by Marketing and Supply Chain 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

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.

### 355 Entrepreneurship: Strategic Marketing **Planning and Launch**

Fall, Spring. 3 credits. P: MSC 300 R: Open to undergraduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department.

Process of planning, starting, and positioning new businesses which link directly to customer requirements. Understanding unmet market opportunity due to competitive gaps or customer needs (realized or not) for both consumer and industrial products and services.

#### Advanced Sales Communication 360

Advanced Sales Communication
Fall, Spring. 3(3-0) Interdepartmental with
Advertising and Communication. Administered by Communication. P: MSC 313 and
(MSC 300 or MSC 327) RB: COM 100 R: Open to undergraduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the College of Communication Arts and Sciences.

Need-based selling and leadership role in meeting client needs. Advanced methods of questioning, customer need analysis, negotiation, effective presentations and interpersonal communication relationships with clients. Sales role-playing presentations, business and technical writing, portfolio presentations, and case studies.

#### **Procurement and Supply Management** 371

Fall, Spring, Summer. 3(3-0) P: (MSC 303 and MSC 317 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: MGT 401, ML 401, MTA 401, MSC, 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.

# **Manufacturing Planning and Control**

Fall, Spring, Summer. 3(3-0) P: (MSC 303 and MSC 317 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: MGT 402, ML 402, MTA 402, MSC, 402

Production planning, demand management, master scheduling, materials requirements, and capacity planning. Shop floor control, computer-integrated manufacturing, and just-in-time systems.

### 373 Logistics and Transportation Management

Fall, Spring, Summer. 3(3-0) P: (MSC 303 and MSC 317 or concurrently) R: Open only to juniors or seniors in The Eli Broad College of Business. SA: ML 442, MTA 442, MSC 442

Microanalysis of logistics and transportation services. Customer service, distribution operations, purchasing, order processing, facility design and operations, carrier selection, transportation costing, and negotiation.

### 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. Administered by Marketing and Supply Chain Management. P: MSC 300 and MSC 317 and ITM 309 RB: Programs in which MSC 412 is a catalog-listed requirement. R: Open only to juniors or seniors in the Eli Broad College of Business.

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.

# 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.

# 439 Food Business Analysis and Strategic Planning (W)

Fall. 3(4-0) Interdepartmental with Food Industry Management. Administered by Food Industry Management. P: (FIM 220) and completion of Tier I writing requirement R: Open to seniors. SA: ML 439, MTA 439

Principles and techniques of business analysis and strategic planning applied to food firms. Food trend forecasts, market potential, competition and cost analyses, and business and strategic planning.

# 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 371 and MSC 372 and MSC 373) 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

### 474 Negotiations

Fall, Spring. 2(2-0) Interdepartmental with Management. Administered by Marketing and Supply Chain Management. P: MSC 371 or concurrently R: Open to undergraduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department.

Strategic negotiation, negotiation preparation, buyersupplier relationship assessment, international negotiations, and negotiation simulation.

# 475 Decision Modeling in Supply Chain

Fall, Spring. 2(2-0) P: MSC 372

Decision modeling in supply chains with emphasis on forecasting, aggregate planning, material requirement planning, inventory management, transportation, supply network design, quality management, and sourcing decisions. Use of traditional and advanced spreadsheet modeling tools.

# 476 Transportation Management

Fall, Spring. 2(2-0) P: MSC 373 R: Open to undergraduate students in the Department of Marketing and Supply Chain Management or approval of department.

Current issues and strategies in transportation management and policy. Carrier management problems and opportunities, and economic characteristics of the various modes of transportation.

### 479 Advanced Topics in Supply Chain Management

Fall, Spring. 2(2-0) P: (MSC 371 or concurrently) and ((MSC 372 or concurrently) and (MSC 373 or concurrently))

Advanced aspects of supply continuity and supply risk, advanced project management, environmentally friendly manufacturing, total quality management, supply chain metrics, electronic markets, relationship management, interfaces with research and development, innovation, and markets. Topics vary.

# 480 Entrepreneurship Capstone Experience

Fall, Spring. 3(3-0) P: MSC 355 R: Open to undergraduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to students in the School of Hospitality Business.

Entrepreneurship and business development projects. Defining marketing intangibles. Defining scope of work. Engagement management. Preparing deliverables for entrepreneurial firms. Working with entrepreneurs to solve real problems ranging from initial visioning and planning to grow to size.

### 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.

# 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: (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: (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 Creation, Growth, and Domination

Spring. 3(3-0) P: MBA 820 or MSC 805 R: Open to graduate students in the Master of Business Administration in Business Administration or approval of department.

Creative, outside-the-box, and theoretical concepts and processes for creating markets, growing markets, and establishing leadership positions in mature markets.

### 810 Innovating and Launching Products and Services

Spring. 3(3-0) P: MSC 805 or MBA 820 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Department of Marketing and Supply Chain Management or approval of department.

New product and service management for competitive-intensive firms. Creating new product and services ideas using voice of customer as well as creative-inventive paradigms. Managing cross-functional teams. Developing and implementing innovation strategies. New product development regimes, service architecture approaches and launch strategies. Decision making in the context of innovation.

### 811

**Brand Strategy**Fall. 3(3-0) P: 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.

### **Decision Support Systems in Business**

Fall. 3(3-0) Interdepartmental with Information Technology Management. Administered by Information Technology Management. P: 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.

# **Emerging Topics in Supply Management**

Spring. 1 to 12 credits. RB: MSC 870 R: Open to masters students in the Supply Chain Management major.

Perspectives on new and emerging issues of supply management. Topics vary.

# **Emerging Topics in Operations** Management

Spring. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Perspectives on new and emerging issues in operations management. Topics vary.

### **Emerging Topics in Logistics** 817 Management

Spring. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Perspectives on new and emerging issues in logistics management. Topics vary.

#### **Supply Management Tools** 825

Spring. 1(1-0) P: MBA 821 R: Open only to M.B.A. students or approval of department. C: MSC 826 concurrently or 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: MBA 821 R: Open only to M.B.A. students or approval of department. C: MSC 825 concurrently or 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

### **Competing Through Supply Chain** Logistics

Spring. 1(1-0) P: MBA 821 R: Open only to M.B.A. students or approval of department. C: MSC 825 concurrently or 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.

### **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.

**Supply Chain Management II**Spring, Summer. 3(3-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Review of customer supply chain expectations and the processes used to fulfill them.

#### 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.

### **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.

### Analysis of Supply Markets and Suppliers

Spring. 2(2-0) P: MSC 870 R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Department of Marketing and Supply Chain Management or in the Supply Chain Management major. Approval of department.

Methods for supply market analysis to support sourcing strategy development, contract negotiations and cost management initiatives. Analysis of supply market conditions and structure. Buyer and supplier power. Supply risk. Benchmarking. Value analysis and value engineering.

# **Procurement and Sourcing Strategy**

Fall. 2(2-0) P: 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: 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 measu

### 854

Integrated Logistics Systems
Fall. 2(2-0) P: 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: MSC 852 and MSC 853 and MSC 854 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 entreprenuerial firms. Topics include small business market research tools, marketing planning, financial management and growth management.

#### 858 Corporate Entrepreneurship

Fall, Spring. 3(3-0) R: Open to MBA students in the Department of Marketing and Supply Chain Management or approval of department.

New venture strategies within corporate business environment. Market and analysis and planning. Product development, sales force deployment, and advertising and promotion strategy. Funding, and asset utilization and deployment. Exit and spin-off strategies. Employs team-based, non-traditional, and experiential learning methods.

### 859 Venture Management Practicum

Spring. 3(1-4)

Application of the principles and tools of market assessment, venture development, and management in venture startup or venture growth situations.

# 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.

### 861 Marketing Distribution Strategy and Analysis

Spring. 3(3-0) P: MSC 805 and MSC 800 Design, management, and integration of market distribution channel structure. Interrelationships between marketing channel structure and logistics distribution structure. Design, implementation, and analysis to achieve effective and efficient marketing channels and logistics operations.

#### 862 **Developing Global Markets**

Fall. 3(3-0) P: 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.

#### 863 Negotiations

Summer. 1 to 2 credits. Interdepartmental with Management. Administered by Management. R: Open to masters students in the Supply Chain Management major.

Strategic negotiations, negotiation preparation, buyer-supplier relationship assessment, international negotiations, and negotiation simulation.

#### 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.

### Introduction to Supply Chain 870 Management I

Spring, Summer. 3(3-0) R: Open to masters students in the Supply Chain Management

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 customer.

#### 871 **Applied Data Analysis**

Summer. 3(3-0) R: Open to masters students in the Supply Chain Management ma-

Quantitative and statistical methods for decision making. Hypothesis testing, regression and correlation analysis, forecasting, linear programming, decision analysis, and project management.

#### **Distribution Fulfillment** 872

Summer. 2(2-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

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.

### **Total Quality Management and Lean Enterprise**

Summer. 3(3-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Total quality management and lean enterprise principles, practices, and techniques. Implementation of quality and lean enterprise improvement programs. Relationship to manufacturing and competitive strategies.

#### 875 **Manufacturing Planning and Control**

Summer. 2(2-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Planning and control functions required to match supply and demand in a manufacturing firm. Tools and methods for planning production and the resources and capacity needed to support production. Role of information and information systems in planning and control. Coordination of plans across organizations supply chain.

### 876 **Logistics Operations Methods and** Systems

Summer. 2(2-0) P: MSC 872 or MSC 835 R: Open to masters students in the Supply Chain Management major.

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.

### **Supply Chain Management Information** Technology

Summer. 2(2-0) P: MSC 872 and MSC 875 and MSC 886 R: Open to masters students in the Supply Chain Management major.

Role of information technology in supply chain management, planning, and operations. Requirements, capabilities, and considerations for using information technology applications in supply chain manage-

#### 878 **Logistics Systems Analysis**

Summer. 2(2-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Process of solving logistics problems. Applications of analysis tools and techniques to identify benefits and costs of logistics change

### Supply Chain Management-Strategy and **Applications**

Summer. 3(3-0) P: MSC 870 RB: 15 credits in MS Supply Chain Management R: Open to masters students in the Supply Chain Management major.

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.

### **Global Supply Chain Management** 881

Fall. 3(3-0) P: MSC 870 R: Open to masters students in the Supply Chain Management maior.

Requirements for global operations and strategy development. Similarities and differences of international and domestic supply chain operations.

#### 882 Supply Chain Management Field Study

Fall. 6 credits. P: MSC 879 RB: Completion of 24 credits of Master of Science in Supply Chain Management program. R: Open to masters students in the Supply Chain Management major.

Practical application of course material to a problem or situation in the student's organization.

### 883 **Technology and Product Innovation** Management

Summer. 2(2-0) P: MSC 874 R: Open to masters students in the Supply Chain Management major.

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 to masters students in the Supply Chain Management ma-

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

# Strategic Sourcing

Summer. 2(2-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

Fundamentals of strategic sourcing and supply chain management. Integration and coordination of product innovation, sourcing, manufacturing, distribution, and logistics for global competitiveness.

### Capstone Project in Manufacturing 888

Fall, Spring, Summer. 3(1-6) Interdepartmental with Engineering. Administered by Marketing and Supply Chain Management. R: Open only to seniors in the Manufacturing Engineering major or to students in the Manufacturing and Engineering Management major.

Problem solving in manufacturing. Design of products and processes for manufacturing using a systems approach. Teaming and communication skills are emphasized.

### Independent Study 890

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.

### Operations Strategy 893

Summer. 2(2-0) P: MSC 870 R: Open to masters students in the Supply Chain Management major.

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.

#### 894 **Supply Chain Inventory Management**

Spring. 3(3-0) P: MSC 835 R: Open to masters students in the Supply Chain Management major.

Inventory management concepts and technologies. Development of forecasting, demand planning, inventory policy, and inventory modeling skills.

### 895 **Supply Chain Transportation** Management

Spring. 3(3-0) P: MSC 870 and MSC 835 R: Open to masters students in the Supply Chain Management major.

Current issues in transportation management and policy. Carrier management problems and opportunities, and economic characteristics of various modes of transportation.

### 896 Logistics of Manufacturing and Service Operations

Spring. 3(3-0) P: MSC 876 R: Open to masters students in the Supply Chain Management major.

Logistics operations in support of manufacturing after-market support, and customer fulfillment opera-

#### 897 **Supply Chain Integration**

Spring. 3(3-0) P: MSC 895 and MSC 896 and MSC 894 R: Open to masters students in the Supply Chain Management major.

Assessment and development of integrated supply chain strategies. Application of analytical tools to evaluate supply chain alternatives.

#### 898 Supply Chain Consulting and Auditing

Spring. 3(3-0) P: MSC 835 R: Open to masters students in the Supply Chain Management major. C: MSC 897 concurrently.

Development of supply chain consulting skills.

Consultative processes. Role of consulting and Consultative processes. consultative selling.

### 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) SA: ML 908, MTA 908

Applications of marketing decision models in new product development, pricing, distribution, advertising, and sales promotion.

#### 910 **Marketing Theory and Critical Analysis**

Fall. 3(3-0) R: Open to doctoral students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Marketing thought in the evolution of marketing. Special emphasis on philosophy of science. Critical examination of historical concepts and theories in marketing.

### 911 **Marketing Strategy**

Fall. 3(3-0) R: Open to doctoral students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Strategic marketing and planning. How marketing concepts, tools, and processes can be used to help an organization develop a sustainable competitive advantage through the creation of superior customer

#### 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.

### **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.

### Seminar in Inventory Management 921

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.

# **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, behavorial, and systems theory in the design, management, and control of logistics systems.

### 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 simulation and analytical techniques to develop empirical results documenting current and anticipated system

### 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 development, 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 phenomena. Varying perspectives on international business activities, concepts, and frameworks.

# 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 organizing multi-country studies.

#### 990 Independent Study

Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments 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.

#### **Directed Research Paper** 995

Fall, Spring, Summer. 1(1-0) R: Open only to Ph.D. students in the Department of Marketing and Supply Chain Management. SA: ML 995, MTA 995

Production of research paper under the direction of a senior faculty member.

### **Doctoral Dissertation Research** 999

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

Doctoral dissertation research.