#### 811

**Human Resource Staffing**Spring. 3(3-0) P:NM: (MBA 824) R: Open only to graduate students in the College of Business or approval of department.

Scientific, legal, and administrative issues in the selection, placement and promotion of individuals in organizations. Topics include job analysis, recruitment, testing, interviewing, performance appraisal, and affirmative action.

#### **Human Resource Training**

Spring. 3(3-0) P:NM: (MBA 824) R: Open only to graduate students in the College of Business or approval of department.

Planning, implementing and evaluating training programs. Career stages and career planning. Matching individual and organizational development

#### 820 Managing the Internetworked Firm

Spring, Summer. 2(2-0) R: Open only to MBA students.

Managing the domestic and international uses of the Internet. History, technology, ownership, and regulation of the Internet. Modes of communication via the Internet. Legal and technical suitability of the Internet. Privacy, security, and access issues.

#### 821 **Managing Internet Commerce**

Spring. 3(3-0) RB: Familiarity with a web browser. R: Open only to students in the Graduate School of Management or with departmental permission. Not open to students with credit in MGT 820.

Managing Internet access and use. Evolution, infrastructure, technology and governance of the Internet. Commercial applications of the Internet. New business opportunities. Security of transactions. Legal issues

#### **Human Resource Compensation** 822

Fall. 3(3-0) P:NM: (MBA 824) R: Open only to graduate students in the College of Business or approval of department.

Application of compensation principles to organizational objectives. Strategic use of compensation systems for attracting, motivating, and retaining employees. Managerial aspects of paying employees at all organizational levels.

#### 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 806

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

Fall. 3(3-0) P:NM: (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.

#### **Negotiation and Conflict Management** 832

Spring. 3(3-0) P:NM: (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.

### 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 devdopment of leadership abilities through case analyses

#### **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.

#### **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

### 870

**Strategic Management** Fall, Spring. 3(3-0) R: Open only to secondyear 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.

### **Business Processes and Strategies**

Summer: 3(3-0) Summer: Exec Dev Center. 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.

Role and process of organizational change management. Types of change, identifying need for change, and change management process.

### 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. stu-

dents.

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.

### 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.

#### Seminar in Organizational Theory 908

Fall of odd years. 3(3-0) P:NM: (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

### 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, implement ation, and decision making

#### **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 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

Role of business in society. Activities and functions of business organizations. Major issues and challenges facing business: globalization, social responsibility, diversity. Contemporary management prac-

#### 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 College of Business. SA: ML 300. MTA 300 Not open to students with credit in MSC 327.

Analysis of 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. SA: ML 302, MTA 302

Application of consumer behavior principles to customer satisfaction, market planning, and marketing mix decisions. Ethical, diversity, and international

#### 303 Introduction to Supply Chain Management

Fall, Spring, Summer. 3(3-0) R: Open only to juniors or seniors in the College of Business and to students in programs for which MSC 303 is a catalog-listed requirement. 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 305

Fall, Spring, Summer. 4(4-0) P:M: (MSC 303) R: Open only to juniors or seniors.

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 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 strat e-

### Personal Selling and Buying Processes Fall, Spring. 3(3-0) SA: ML 313 313

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. 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:M: (MSC 300 and MSC 317 or concurrently) R: Open only to juniors or seniors. 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.

Introduction to Marketing
Fall, Spring, Summer. 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.

#### Food Marketing Management 335

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. FSM 335

Management decision-making in food industry σganizations (processors, wholesalers, retailers). Marketing and sales in response to customer and consumer needs. Distribution and merchandising systems in domestic and international contexts.

### **Retail Management**

Fall, Spring, Summer. 3(3-0) 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 dev elopment. Managerial strategy. Locational, purchasing, organizational, personnel and promotional techniques. Retail budgeting and control. Social and ethical considerations.

# **Procurement and Supply Management**

Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors. SA: MGT 401, MGT 401, ML 401, MTA 401, MGT 401, MGT 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:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors. SA: MGT 402, MGT 402, ML 402, MTA 402, MGT 402, MGT 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) R: Open only to juniors or seniors. SA: ML 410. 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.

#### Sales Management

Fall, Spring. 3(3-0) P:M: (MSC 300 and MSC 317) R: Open only to juniors or seniors. 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 ethi-

#### 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. 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.

# **New Product Design and Development**

Spring. 3(3-0) R: Open only to seniors.

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 Department of Agricultural Economics. P:M: (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.

# **Logistics and Transportation**

Management
Fall, Spring, Summer. 3(3-0) P:M: (MSC 305 and MSC 317) R: Open only to juniors or seniors. SA: ML 442, MTA 442

Microanalyis of logistics and transportation services. Customer service, distribution operations, purchasing, order processing, facility design and operations, carrier selection, transportation costing and negotia-

### 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 College of Business. 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.

### 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 College of Business. SA: ML 470. MTA 470

Analysis and problem solving of supply chain management cases. Purchasing, manufacturing, logistics, and transportation as an integrated supply

#### 471 **Topics in Purchasing and Sourcing** Management

Spring. 2(2-0) P:M: (MSC 401) R: Open only to juniors or seniors in the Supply Chain Management major. SA: ML 403, MSC 403. MTA 403

Current topics in sourcing and negotiation strategy such as price and cost analysis, and purchasing research techniques.

#### **Topics in Operations Management**

Spring of odd years. 3(3-0) P:M: (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.

#### **Topics in Logistics and Transportation** 473 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.

#### Independent Study 490

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.

### **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.

### 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:M: (MSC 300 or MSC 303) R: Open only to juniors or seniors. SA: ML 491,

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

### Materials and Logistics Management Spring. 3(3-0) SA: ML 800, MTA 800 800

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.

#### Materials Management: Tactical and 801 Strategic Perspectives

Fall. 3(3-0) P:NM: (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) P:NM: (MSC 800) R:
Open only to MBA students. SA: ML 802, MTA 802

Sourcing strategies and applications. Negotiation planning and execution.

### **Operations Management Strategy**

Spring. 3(3-0) P:NM: (MSC 801) SA: ML 803, MTA 803

Operations management issues including quality, technology, group technology, computer integrated manufacturing, and just-in-time manufacturing.

### **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 & strategies and tactics. Segmentation, marketing mix, market esponse modeling, and ethics in a global context.

# Marketing Analysis in Technology Environments Fall. 3(3-0) P:M: (MBA 820) R: Approval of

department. SA: ML 806, MTA 806

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

### Marketing Information Technology -**Customer-Driven Strategies**

Fall. 4(4-0) P:M: (MBA 820) R: Approval of department. SA: ML 807, MTA 807

Customer-driven marketing strategies. Market orientation, voice of customer, organizational buying processes, sales management, customer satisfætion measurement, marketing in information technology environments, and flexible marketing channel redesign strategies. Case studies involving the use of multimedia, www, www2, and virtual communities. Development of web-based strategies for businessto-business marketers and integration of customer logistical support.

Entrepreneurial Marketing Fall. 3(3-0) P:NM: (MBA 820 or MSC 805) SA: ML 808, MTA 808

Entrepreneurial processes of creating markets. Creative approaches for designing competitororiented strategies in mature markets.

# **Technology and Product Innovation**Spring. 3(3-0) P:M: (MSC 806 and MSC

807) R: Approval of department. 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.

### Marketing Strategy in Technology Environments

Spring. 2(2-0) P:M: (MSC 806 and MSC 807) R: Approval of department. 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) P:NM: (MBA 820 or MSC 805) SA: ML 813, MTA 813

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

### **Practical Supply Chain Analysis**

Spring. 1(1-0) P:NM: (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

#### 824 Channel and Logistics Management

Spring. 3(3-0) P:NM: (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) P:NM: (MBA 820 or 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.

### Food Marketing Management

Spring. 3(3-0) Interdepartmental with Agricultural Economics. P:NM: (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.

### **New Technology and Products** Management

Fall. 2(2-0) R: Open only to students in the Advanced Management Program.

Strategic management of new product development processes. Planning, analytical, and decisionmaking concepts and tools available to market and brand managers. Global new product management best practices, product strategy and policy, introductions, product portfolio management, and organizational implications.

# **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.

### Optimization Models I

Fall of odd years. 3(3-0) SA: MGT 834 Linear optimization models and algorithms. Theory of linear programming. Simplex algorithm and variations. Duality theory and sensitivity analysis. Linear programs with special structure.

### Introduction to Computer Simulation

Fall of even years. 3(3-0) P:NM: (STT 442) SA: MGT 837

Discrete computer simulation and its use in research and planning. Simulation approaches and computer simulation languages. Design and interpretation of simulation experiments. Internal mechanics of sim ulation programs.

### Marketing and Supply Chain Management-MSC

#### 838 Design and Analysis of Statistical Experiments Spring of odd years. 3(3-0) P:NM: (STT

442) SA: MGT 838

Basic experimental design. Non-parametric and multivariate methods. Elementary sampling theory. Response surface methodology. Data analysis using statistical packages such as BMD and SPSS.

# Total Quality Management Fall. 3(3-0) P:NM: (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) P:NM: (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.

### **Procurement and Sourcing Strategies** Fall. 3(3-0) P:M: (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) P:M: (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, valuemapping, 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:M: (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) 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**

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.

### **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 v enture; 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.

#### 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**

Spring. 3(3-0) P:NM: (MBA 820 or MSC 805) SA: ML 862, MTA 862

Development of marketing strategies for international expansion. Evdution of global markets, market selection, timing, entry sequence, modes of entry, and the corporate infrastructure for global marketing expansion.

Emerging Topics in Business Spring. 3(3-0) P:NM: (MBA 820 or MSC 805) SA: ML 865, MTA 865

Perspectives on new and emerging issues of business administration. Topics vary.

# 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.

### **Applied Data Analysis**

Summer. 3(3-0) R: Open only to students in the Master of Science in Logistics.

Review of managerial and statistical data techniques used for logistics analysis. Hypothesis testing, regression and correlation analysis, forecasting, data mining, and statistical analysis.

#### 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.

#### 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

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

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.

### **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 logis-

#### 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.

### 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.

### **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.

### Capstone Project in Manufacturing

Fall, Spring, Summer. 3(1-6) Interdepartmental with Engineering. Administered by 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.

#### 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 met h-

#### 906 Quantitative Methods in Marketing

Spring. 3(3-0) P:NM: (MSC 905) or approval of department. R: Open only to Ph.D. students. SA: ML 906. MTA 906

Concepts and methods in the scientific investigation of marketing phenomena. Focus on the use of multivariate analytic tools.

#### 907 Causal Modeling in Marketing

Fall. 3(3-0) P:NM: (MSC 906) R: Open only to Ph.D. students. SA: ML 907, MTA 907 Statistical methods in marketing, emphasis on causal modeling.

Marketing Decision Models Fall. 3(3-0) P:NM: (MSC 906) R: Open only to Ph.D. students. SA: ML 908, MTA 908

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

### 910

History of Marketing Thought Fall. 3(3-0) R: Open only to Ph.D. students. SA: ML 920, MSC 920, MTA 920

Evolution of marketing institutions, techniques, theories, and critiques. Influence of changing environmental and technological factors.

### Theories of Competition in Marketing

Spring. 3(3-0) R: Open only to Ph.D. students SA: ML 921, MSC 921, MTA 921

Relationships among competition, marketing, and corporate and economic growth. Competition phenomena studied through a variety of disciplines, including marketing, economics, political science, sociology and social psychology.

# Seminar in Social Sciences in Marketing

Spring. 3(3-0) R: Open only to Ph.D. students. SA: ML 922, MSC 922, MTA 922

Social science perspectives on marketing.

#### 913 Seminar in Spatial and Temporal

Marketing Spring. 3(3-0) R: Open only to Ph.D. students. SA: ML 923, MSC 923, MTA 923

Theory concerning marketing strategies and programs in logistics, channels, and pricing. Field research needs.

### **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.

# **Procurement and Sourcing Management**

Strategy
Spring of odd years. 3(3-0) P:NM: (MSC 918) R: Open only to Ph.D. students. SA: MGT 919

Management issues affecting the contribution of procurement and sourcing strategies to the competitiveness of the firm.

#### 920 Seminar in Manufacturing Strategy

Fall of even years. 3(3-0) P:NM: (MSC 803) R: Open only to Ph.D. students. SA: ML 920, MTA 920, MGT 920

Research in manufacturing strategy. Quality, tec hnology, flexibility, innovation. Theory building.

### Seminar in Inventory Management

Fall of odd years. 3(3-0) P:NM: (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) P:NM: (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 Transportation-Distribution **Systems**

Fall of odd years. 3(3-0) P:NM: (MSC 805) R: Open only to Ph.D. students. SA: ML 930. MTA 930

Transportation-distribution research on systems integration. Elements of networks, systems, and economic theory in the design, evaluation, and control of logistics systems. Topics include strategic logistics, forecasting, and system integration mod-

### Transportation and Distribution Research Methods

Spring of odd years. 3(3-0) P:NM: (MSC 930) R: Open only to Ph.D. students. SA: ML 931, MTA 931

Techniques and methodology of system design, customer service and policy formulation.

# **Transportation and Distribution**

Development Policy
Fall of even years. 3(3-0) P:NM: (MSC 805)
R: Open only to Ph.D. students. SA: ML 932 MTA 932

The interaction of government, carrier, and user logistics and distribution strategies, particularly at the macro-corporate and national policy levels.

### 940

International Business Theory Fall of even years. 3(3-0) P:NM: (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 941 Spring of odd years. 3(3-0) P:NM: (MSC 940) R: Open only to Ph.D. students. SA:

MI 941 MTA 941

Scientific methods of research on international business. Topics include cultural bias and organizing multi-country studies.

#### 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.

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

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**

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.

# MASTER OF **BUSINESS** ADMINISTRATION

**MBA** 

## 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 shareholder value, competitive forces, configuring the value-added chain. Strategies for implementing new organizational forms. Designing and managing strategic change.

#### **Financial Accounting Strategies** 802

Fall, Spring. 2(2-0) R: Open only to MBA

Financial accounting model, valuation, and reporting concepts and uses. Valuing securities, financial statement analysis, and cash flows. Budgeting, decision analyses, cost estimation and accumulation, capital budgeting, and international financial concepts.

#### 804 Applied Data Analysis for Managers

Fall, Spring. 2(2-0) P:NM: (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 half of sem ester.