<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tr>
<td>293</td>
<td>Cooperative Education for Business Students</td>
<td>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 Supply Chain Management. R: Approval of department. SA: MSC 293 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 Supply Chain Management.</td>
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<tr>
<td>303</td>
<td>Introduction to Supply Chain Management</td>
<td>Fall, Spring, Summer. 3(3-0) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to undergraduate students in the School of Hospitality Business and open to students in the Agribusiness Management major or in the Applied Engineering Sciences major or in the Construction Management major or in the Food Industry Management major or in the Packaging major. 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.</td>
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<tr>
<td>371</td>
<td>Procurement and Supply Management</td>
<td>Fall, Spring, Summer. 3(3-0) P: SCM 303 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Applied Engineering Sciences major or in the Sales Communication Specialization. Strategic issues in procurement and supply management. Purchasing processes, procurement cycle, purchasing research, relationships with suppliers, negotiation, and commodity planning. Cost, price, and value analysis.</td>
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<tr>
<td>372</td>
<td>Manufacturing Planning and Control</td>
<td>Fall, Spring, Summer. 3(3-0) P: (SCM 303 and MKT 317) or (SCM 303 and STT 351) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Applied Engineering Sciences major. Production planning, demand management, master scheduling, materials requirements, and capacity planning. Shop floor control, computer-integrated manufacturing, and just-in-time systems.</td>
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<td>373</td>
<td>Logistics and Transportation Management</td>
<td>Fall, Spring, Summer. 3(3-0) P: SCM 303 and (MKT 317 or concurrently) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Applied Engineering Sciences major. Microanalysis of logistics and transportation services. Customer service, distribution operations, purchasing, order processing, facility design and operations, carrier selection, transportation costing, and negotiation.</td>
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<tr>
<td>393</td>
<td>Introduction to International Business</td>
<td>Fall, Spring, Summer. 3(3-0) Fall: Abroad. Spring: Abroad. Summer: Abroad. Interdepartmental with Accounting and Finance and General Business and Business Law and Hospitality Business and Management and Marketing. Administered by Marketing. R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the School of Hospitality Business. Introduction to the context of international business delivered on-site in foreign settings. Fundamental concepts and principles of globalization such as multinational corporations, foreign markets and economics, internal and external market transactions, international law, cultural influences, and multinational business strategies.</td>
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<tr>
<td>470</td>
<td>Supply Chain Application and Policy (W)</td>
<td>Fall, Spring, Summer. 2(2-0) P: (SCM 371 and SCM 372 and SCM 373) and completion of Tier I writing requirement R: Open to seniors in the Supply Chain Management major. SA: MSC 470 Analysis and problem solving of supply chain management cases. Purchasing, manufacturing, logistics, and transportation as an integrated supply chain.</td>
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<td>474</td>
<td>Negotiations</td>
<td>Fall, Spring, (2-0) Interdepartmental with Management. Administered by Supply Chain Management. R: Open to juniors or seniors in the Supply Chain Management Major or approval of department. SA: MSC 474 Strategic negotiation, negotiation preparation, buyer-supplier relationship assessment, international negotiations, and negotiation simulation.</td>
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<td>475</td>
<td>Supply Chain Decision Modeling</td>
<td>Fall, Spring, (2-0) P: SCM 372 R: Open to juniors or seniors in the Supply Chain Management major. SA: MSC 475 Decision modeling in supply chains with emphasis on forecasting, aggregate planning, material requirements planning, inventory management, transportation, supply network design, quality management, and sourcing decisions. Use of traditional and advanced spreadsheet modeling tools.</td>
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<td>476</td>
<td>Transportation Management</td>
<td>Fall, Spring, (2-0) P: SCM 373 R: Open to juniors or seniors in the Department of Supply Chain Management or approval of department. SA: MSC 476 Current issues and strategies in transportation management and policy. Carrier management problems and opportunities, and economic characteristics of the various modes of transportation.</td>
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<td>479</td>
<td>Advanced Topics in Supply Chain Management</td>
<td>Fall, Spring. 2(2-0) P: (SCM 371 or concurrently) and (SCM 372 or concurrently) and (SCM 373 or concurrently) R: Open to juniors or seniors in the Supply Chain Management major. SA: MSC 479 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.</td>
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<td>490</td>
<td>Independent Study</td>
<td>Fall, Spring, Summer. 1 to 3 credits. SA: MSC 490 Supervised program of independent library or field research designed to supplement classroom study.</td>
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<tr>
<td>490H</td>
<td>Honors Independent Study</td>
<td>Fall, Spring, Summer. 1 to 3 credits. SA: MSC 490H Supervised program of library or field research designed to supplement classroom study</td>
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<td>491</td>
<td>Topics in Supply Chain Management</td>
<td>Fall, Spring. 3(3-0) SA: MSC 491 Current issues in supply chain management.</td>
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<td>800</td>
<td>Supply Chain Management</td>
<td>Fall, Spring, Summer. 3(3-0) R: Open to graduate students and not open to students in the Master of Business Administration in Business Administration or in the Supply Chain Management major. SA: MSC 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.</td>
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<tr>
<td>815</td>
<td>Emerging Topics in Supply Management</td>
<td>Spring. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to MBA students and open to masters students in the Supply Chain Management Major or approval of department. SA: MSC 815 Perspectives on new and emerging issues of supply chain management. Topics vary.</td>
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<tr>
<td>816</td>
<td>Emerging Topics in Operations Management</td>
<td>Spring. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to MBA students and open to masters students in the Supply Chain Management Major or approval of department. SA: MSC 816 Perspectives on new and emerging issues in operations management. Topics vary.</td>
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<tr>
<td>817</td>
<td>Emerging Topics in Logistics Management</td>
<td>Spring. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to MBA students and open to masters students in the Supply Chain Management Major or approval of department. SA: MSC 817 Perspectives on new and emerging issues in logistics management. Topics vary.</td>
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Supply Chain Management—SCM

825 Strategic Sourcing
Spring. 1.5(1.5-0) P: MBA 831 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 825 C: SCM 826 concurrently or SCM 827 concurrently.

Strategic sourcing process. Opportunity assessment, spend and requirements analysis, supply market analysis, category sourcing strategy development and implementation. Supplier evaluation and selection.

826 Manufacturing Design and Analysis
Spring. 1.5(1.5-0) P: MBA 831 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 826 C: SCM 825 concurrently or SCM 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. 1.5(1.5-0) P: MBA 831 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 827 C: SCM 825 concurrently or SCM 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.

833 Decision Support Models
Spring. 1 to 3 credits. P: SCM 800 or MBA 831 SA: MGT 833, MSC 833

Analytical models to support decision making with specific supply chain focus. Topics include multiple regression, linear optimization, decisions under uncertainty, and forecasting.

834 Supply Chain Simulation
Spring. 1 to 3 credits. P: SCM 800 or MBA 831

Simulation models to support decision making with specific supply chain focus. Simulation concepts, programming, design methods, and results interpretation.

842 Total Quality Management
Fall. 1 to 3 credits. P: MBA 831 or SCM 800

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

843 Sustainable Supply Chain Management
Spring. 1 to 3 credits. RB: SCM 800 or MBA 831 SA: MSC 843

Sustainability within business and supply chain contexts. Balancing ecology/waste, economy, and equity. Supply chain sustainability from design and resource management through transformation processes, to delivery to the final customer.

848 Analysis of Supply Markets and Suppliers
Summer. 2(2-0) P: SCM 870 R: Open to graduate students in the Supply Chain Management major. Approval of department. SA: MSC 848


852 Supply Management
Fall. 1.5(1.5-0) P: SCM 825 RB: SCM 826 and SCM 827 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 852


853 Operations Strategy
Fall. 1.5(1.5-0) P: SCM 826 RB: SCM 825 and SCM 827 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 853

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.

854 Integrated Logistics Systems
Fall. 1.5(1.5-0) P: SCM 827 RB: SCM 825 and SCM 826 and SCM 827 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 854

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 I
Spring. 1.5(1.5-0) P: SCM 852 and SCM 853 and SCM 854 or approval of department R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department. SA: MSC 855

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 Supply Chain Management Technology and Applications II
Spring. 1.5(1.5-0) P: SCM 855 R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of department.

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.

863 Negotiations
Fall, Spring, Summer. 1 to 2 credits. Interdepartmental with Management. Administered by Management. R: Open to masters students in the Department of Management or in the Department of Supply Chain Management.

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

864 Supply Chain Innovation Project Management
Fall. 1 to 3 credits. P: MBA 831 or SCM 800
Role of product and process innovation in firm competitiveness. Innovation projects in various parts of supply chain, including radical, incremental and continuous process improvement projects. Project management techniques addressing the definition, planning, and execution of innovation related projects.

866 Railway Business Management
Summer. 3(3-0) P: SCM 872 R: Open to masters students in the Supply Chain Management major.


867 Railway Operations Management
Summer. 3(3-0) P: SCM 872 R: Open to masters students in the Supply Chain Management major.

869 Service Supply Chains
Spring. 1 to 3 credits. P: MBA 831 or SCM 800

870 Introduction to Supply Chain Management I
Spring, Summer. 3(3-0) R: Open to masters students in the Supply Chain Management Major. SA: MSC 870
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.
Supply Chain Management—SCM

995 Directed Research Paper
Fall, Spring, Summer. 1(1-0) R: Open to doctoral students in the Department of Supply Chain Management. Production of research paper under the direction of a senior faculty member.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students in the Department of Supply Chain Management or approval of department. SA: MSC 999

Doctoral dissertation research.