919. Procurement and Sourcing Management Strategy
Spring or odd-numbered years. 3(3-0)
P: MGT 918 R: Ph.D. students
Procurement/sourcing management concepts and underlying theory. Complex management issues affecting the contribution of the function/process to competitiveness of the firm.

920. Seminar in Manufacturing Strategy
Fall of even-numbered years. 3(3-0)
P: MGT 801 and MGT 803 R: Ph.D. students
Seminar on research in manufacturing strategy. Quality, technology, flexibility, innovation, and theory building in manufacturing strategy.

921. Seminar in Inventory Management
Fall of odd-numbered years. 3(3-0)

922. Seminar in Production Planning & Scheduling
Spring of odd-numbered years. 3(3-0)

923. Topics in Operations Management
Spring of odd-numbered years. 3(3-0)
P: MGT 801, MGT 803 R: Doctoral Business
Current research in the field of operations management. Topics will vary in order to allow the course to focus on current issues.

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. May enroll for a maximum of 99 credits. R: Ph.D. Business Management

Courses with an asterisk (*) have not been approved by the University Committee on Curriculum.
460*. Marketing Strategy  
Fall, Spring, Summer. 3(3-0)  
P: MTA 319, and one other MTA course. R: Open only to seniors in the College of Business. Identification and analysis of managerial marketing issues. Integration of marketing concepts and theories through case analysis. Ethical and international applications.  
QP: MTA 302 MTA 319 QA: MTA 460

470*. Materials and Logistics Policy  
Fall, Spring. 3(3-0)  
Interdepartmental with the Department(s) of Management.  
P: MGT 304 and MTA 345 and one MLM elective R: Juniors and Seniors Business and programs which MTA 470 is catalog requirement  
Analysis of comprehensive cases incorporating strategic and tactical decisions throughout the supply chain and logistics management process. Cases include identification/definition of MLM problems, evaluation of integrated alternatives and development of recommendations.  
QP: MGT 304 MTA 345 QA: MTA 407

490*. Independent Study  
Fall, Spring, Summer. 1 to 3 credits.  
 May reenroll for a maximum of 6 credits.  
R: Open only to majors in Marketing and Transportation Administration and in Materials and Logistics Management. Approval of department. Supervised program of independent study or field research designed to supplement classroom study.  
QA: MTA 490

491*. Topics in Marketing  
Fall, Spring. 3(3-0) May reenroll for a maximum of 6 credits.  
P: MTA 300. R: Open only to juniors and seniors in the College of Business.  
Current issues in specialized marketing, logistics knowledge of marketing, and environmental analysis. Strategy development for firms.  
QP: MTA 300 QA: MTA 399

801*. Business Communication I  
Fall, Spring. 2(2-0)  
P: Masters Business MBA  
Analysis of business communication situations; planning and execution of business communications; development of oral and written communication skills.  
QP: MTA 300

802*. Business Communication II  
Fall, Spring. 1(1-0)  
P: MTA 801 R: Masters Business MBA  
Continuation of Business Communication I; developing and applying written and oral business communication skills with other courses in the MBA Program.  
QP: MTA 300

805*. Marketing Management  
Fall, Spring. 3(3-0)  
P: Graduate Business  
R: Graduate Business  
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.  
QP: ACG 383 MGT 386 MGT 383 QA: MTA 805

806*. Marketing Decisions Support Systems  
Fall, Spring. 3(3-0)  
P: MTA 805 R: Graduate Business  
Introduction to analytical marketing decision-making using existing data bases. Expert system development and application in marketing management.  
QP: MTA 805

807*. Customer-Driven Strategies  
Fall, Spring. 3(3-0)  
P: MTA 805 R: Graduate Business  
Development of marketing strategies based on the analysis and understanding of consumer and organizational buyer behavior. Development designed to meet or exceed customers' expectations.  
QP: MTA 805

808*. Market-Driven Strategies  
Fall, Spring. 3(3-0)  
P: MTA 805 R: Graduate Business  
Development of marketing strategies based on the analysis and understanding of competitors. Alternative approaches to competitive strategies are considered.  
QP: MTA 805 QA: MTA 831

809*. Logistics and Transportation Strategy  
Fall, Spring. 3(3-0)  
Interdepartmental with the Department(s) of Management.  
P: MGT 800 R: Graduate Business  
The planning, control and measurement process for logistics and transportation systems. Customer service, transportation, inventory, order processing, warehousing and marketing management.  
QP: MGT 800 QA: MTA 809

810*. Product Innovation and Management  
Fall. 3(3-0)  
P: MTA 805 or permission of department  
R: Graduate  
Analysis, decision-making, and planning concepts and tools available to product managers. Topics include: new product policy and development, organizational issues, and product modification and deletion.  
QP: MTA 805

811*. Marketing Communication  
Spring. 3(3-0)  
P: MTA 805 R: Graduate Business  
Analysis, development, and execution of marketing communication programs for consumer, industrial, and service firms. Communication mix objectives, positioning, budgeting, media, price, promotion, brand name strategies, and regulation/ethical issues.  
QP: MTA 805

812*. Logistics Research and Analysis (LMR)  
Fall. 3(3-0)  
Interdepartmental with the Department(s) of Management.  
P: MTA 808 R: Masters Business  
Research methodology in the design and analysis of transportation and distribution systems. Emphasis on methodologies for system design, customer service, and policy studies.  
QP: MTA 809

813*. Marketing Research Methods  
Spring. 3(3-0)  
P: MTA 806 R: Graduate Business  
All aspects of marketing research from problem definition to report writing. The collection, analysis, and interpretation of primary data.  
QP: MTA 809 QA: MTA 802

814*. Transportation Policy and Plans (MLM)  
Spring. 3(3-0)  
Interdepartmental with the Department(s) of Management.  
P: MTA 806 R: Masters Business  
Policy models and managerial perspective on national and corporate policies used to shape the future of the transportation system; intersection of government, carrier management, and user logistics and distribution strategies.  
QA: MTA 818

815*. Strategic Planning (AMP)  
Fall. 3(3-0)  
R: Masters Business Administration  
Advanced Management Program students only  
 strategic and decision-making aspects of marketing analysis, coordination, and execution of marketing programs. Includes segmentation, marketing response models, and ethics.  
QP: NONE QA: MTA 805

824*. Marketing Channel Management  
Spring. 3(3-0)  
P: MTA 805 R: Graduate Business  
Development of marketing channel strategies, analysis of marketing institutions, and management of marketing channel relationships. Design, selection, and performance measurement of channel structures in domestic and international settings.  
QP: MTA 805 QA: MTA 824

831*. Food Marketing Management  
Fall. 3(3-0)  
Interdepartmental with the Department(s) of Management.  
P: MTA 805 and MGT 801 R: Masters Business  
Comprehensive case analysis of materials and logistics management strategy, policy, and planning. Case applications of marketing, quality, organization, information use, and strategic alliance issues.  
QP: MTA 805 MGT 803 QA: MTA 841

840*. International Business  
Fall, Spring. 3(3-0)  
P: Masters Business  
Management of the firm in the changing multinational environment. Assessment of opportunity afforded by international modes of operations, markets, financial strategies, services, and resources. Evaluation of competitive strategy.  
QA: MTA 880

865*. Frontiers of Business  
Spring. 3(3-0)  
P: Masters Business MBA Second-year status in the MBA Program  
Analysis of emerging issues in business administration. Perspectives on new and evolving areas of business that are of importance to business managers.  
QP: MTA 805

880*. Seminar in Marketing & Logistics  
Fall, Spring. 3(3-0) May reenroll for a maximum of 5 credits.  
P: MTA 805 R: Graduate Business  
Frontier topics in marketing and logistics. Meet specialized needs caused by an environment of rapid change.  
QP: MTA 805

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Courses are subject to revision and final approval.

MARKETING AND TRANSPORTATION ADMINISTRATION

891*. Professional Development Seminar
Fall. 1(1-0) R: Masters Business Approval of Department
Development of strategic direction to students' professional careers. Professional managerial skills enhancement via participating in a dialogue and learning activities with expert consultants in the field and with industry executives.

890*. Special Problems
Fall, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits.
R: MTA 805 R: Graduate Business Approval of Department
An individually designed course to meet the needs of graduate students in marketing and transportation.
QF: MTA 805 R: MTA 890

905*. Theory Development & Research
Design in Marketing
Fall. 3(0-0) R: Doctoral
Research concepts and scientific methods for the study of marketing. Design & research, formulation of hypotheses, concepts of measurement, and use of quantitative methods.
QF: MTA 905

906*. Quantitative Methods in Marketing
Spring. 3(0-0) P: MTA 905 or approval of Department
R: Doctoral
Advanced concepts and quantitative methods in the scientific investigation of marketing phenomena. Focuses on the use of multivariate analytic tools.
QF: MTA 906

907*. Causal Modeling in Marketing
Fall. 3(3-0) P: MTA 906 R: Doctoral
Lecture and discussion of advanced quantitative statistical methods in marketing. Substantial emphasis on causal modeling.
QF: MTA 907

908*. Marketing Decision Models
Fall. 3(3-0) R: Doctoral
Marketing models for decision-making purposes. Focuses on applications in new product development, pricing, distribution, advertising, and sales promotion.
QF: MTA 908

909*. History of Marketing Thought
Fall. 3(3-0) P: MTA 805 or equivalent R: Ph.D. Business
Traces the evolution of marketing institutions, techniques, theories and criticisms. The influence of changing environmental and technological factors in marketing practice and thought.
QF: MTA 805 R: MTA 909

911*. Theories of Competition in Marketing
Spring. 3(3-0) P: MTA 920 R: Doctoral Business
Examines the relationships among competition, marketing, and corporate and economic growth. Competitive phenomena are explored through a variety of disciplines, including marketing, economics, political science, and sociology and social psychology.
QF: MTA 920 R: MTA 911

922*. Seminar in Social Sciences in Marketing
Spring. 3(3-0) P: MTA 906 or concurrent R: Ph.D. Business
Application of social science topics in marketing.
QF: MTA 906 R: MTA 922

924*. Seminar in Spatial/Temporal Marketing
Spring. 3(3-0) P: MTA 920 R: Ph.D. Business
Examines the current state of theory concerning the planning and implementation of marketing strategies and programs in logistics, channels, and pricing to identify future research requirements.
QF: MTA 920 R: MTA 924

925*. Special Topics Seminar
Fall, Spring. 3 to 6 credits. May reenroll for a maximum of 6 credits.
R: Ph.D. Business
To allow doctoral students to pursue directed reading and research on a topic of interest in Marketing.
QF: MTA 921 R: MTA 924

930*. Theory of Transportation-Distribution Systems
Fall. Odd-numbered years. 3(3-0) P: MTA 805 or equivalent R: Ph.D. Business
The micro-level course in transportation-distribution research which examines system integration. Develops the relevant elements of networks, systems and economic theory with empirical design. Application to the design, evaluation, and control of complex systems.
QF: MTA 930

931*. Transportation/Distribution Research Methods
Spring. Odd-numbered years. 3(3-0) P: MTA 930 R: Ph.D. Business
Research methodology in the designing and administration of transportation and distribution systems. Emphasis on methodologies and methodology for conducting system design, customer service and policy studies.
QF: MTA 930 R: MTA 931

932*. Transportation & Distribution Development Policy
Fall. Even-numbered years. 3(3-0) P: MTA 805 or equivalent R: Ph.D. Business
The macro-level research and theory course in Transportation-Distribution. The interaction of government, carrier, and user logistics and distribution strategies, particularly at the macro-corporate and national policy levels.
QF: MTA 932

940*. International Business Theory
Fall. Odd-numbered years. 3(3-0) P: MTA 860 or MTA 862 R: Ph.D. candidates
QF: MTA 960 OR MTA 962

941*. International Business Research Issues
Spring. Odd-numbered years. 3(3-0) P: MTA 940 R: Ph.D. Business
Perspectives on application of scientific method of international business research. Research design, measurement, data analysis and interpretation. Evolution of research in International Business.
QF: MTA 962 R: MTA 963

955*. Directed Research Paper
Fall, Spring, Summer. 1(1-0) P: MTA 921 R: Doctoral Business
MTA
In this course a MTA Doctoral Student will write a publishable research paper under the direction of a faculty member.
QF: MTA 921

999*. Doctoral Dissertation Research
1 to 24 credits. May reenroll for a maximum of 9 credits.
R: Ph.D. Approval of Department
QA: MTA 999

MATHS

MTH 0823. Intermediate Algebra
Fall, Spring, Summer. 0(4-0)
R: Designated score on mathematics placement test.
QA: MTH 0823 / 1043

110. College Algebra and Finite Mathematics
Fall, Spring, Summer. 3(3-0) P: MTH 0823 or designated score on mathematics placement test. R: Not open to students with credit in MTH 116 or MTH 120.
QF: MTH 108 QA: MTH 110

116. College Algebra and Trigonometry
Fall, Spring, Summer. 3(3-0) P: MTH 0823 or designated score on mathematics placement test. R: Not open to students with credit in MTH 110 or MTH 120.
QF: MTH 108 QA: MTH 111 / MTH 109 MTH 108

190. Algebra and a Survey of Calculus
Fall, Spring, Summer. 5(5-0) P: MTH 0823 or designated score on mathematics placement test. R: Not open to students with credit in MTH 110 or MTH 116 or MTH 120.

124. Survey of Calculus with Applications
Fall, Spring, Summer. 3(3-0) P: Designated score on mathematics placement test. R: Not open to students with credit in MTH 120 or MTH 124.
Study of limits, continuous functions, derivatives, integrals and their applications.
QF: MTH 108 OR MTH 111

126. Survey of Calculus with Applications II
Fall, Spring, Summer. 3(3-0) P: MTH 120 or MTH 124. R: Not open to students with credit in MTH 122 or MTH 124 or MTH 151.
Application of partial derivatives, integrals, optimization of functions of several variables and infinite series.

132. Calculus I
Fall, Spring, Summer. 3(3-0) P: MTH 116 or designated score on mathematics placement test. R: Not open to students with credit in MTH 122 or MTH 124 or MTH 151.
Limits, continuous functions, derivatives and their applications. Integrals and the fundamental theorem of calculus.
QF: MTH 109 OR MTH 111 QA: MTH 112 MTH 122

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