

Manufacturing Engineering Technology

see Engineering Technology

Marketing and Logistics

Logistics and Supply Chain Management, LSCM

3960. Logistics and Supply Chain Management. 3 hours. Analysis and design of domestic and international logistics systems. Topics include transportation, warehousing, inventory control, materials handling and packaging, and plant and warehouse locations within and between firms. Emphasis on concepts and practices that provide firms with a competitive advantage. Prerequisite(s): junior standing.

4360. Global Alliances and International Supply Chain Management. 3 hours. Supply chain and alliance strategy in the multi-national firms. Materials management, international sourcing and distribution, and importing/exporting procedures. International carrier management and operations are examined. Prerequisite(s): LSCM 3960.

4530. E-Logistics in Supply Chain Management. 3 hours. Comprehensive inquiry into the role of e-commerce in collaborative distribution and logistics relationships. Special attention is afforded to resource and technology interdependencies, exchange governance mechanisms and relationship management bench-marking. Emphasis is given to the tools for creating value in the supply chain. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650) or consent of department.

4560. Business Transportation Management. 3 hours. Principles of transportation covering the role of transportation systems; environmental and economic impacts; modal components; managerial and economic aspects of the various modes, with applications to both domestic and international operations. Prerequisite(s): MKTG 3650.

4800. Logistics Internship. 3 hours. Supervised work in a job related to the student's career objectives. Prerequisite(s): LSCM 3960 and 4560. Must be within two long terms/semesters of graduation at the time of the internship and have consent of department chair or internship director. Pass/no pass.

4860. Advanced Logistics Management. 3 hours. Application of logistics decision-making tools and skills as they apply to inventory, transportation, and warehouse management. Course stresses hands-on application of analytical tools useful in logistics; analysis of the characteristics of logistics system elements and their interrelationships within a company; developing skills to analyze technical logistics problems; and developing executive-level communications skills leading to the concise statement of problems and proposed solutions. Prerequisite(s): LSCM 3960.

Marketing, MKTG

2650. Global Marketing Concepts. 3 hours. Introduction to the multicultural and multiracial world from a marketing perspective. Course is intended to provide useful tools for assessing and addressing diversity in the business and marketing environment. Cannot be used to meet business foundation, business professional field, or business supporting field requirements. *Satisfies the Cross-cultural, Diversity and Global Studies requirement of the University Core Curriculum.*

3010. Professional Selling. 3 hours. Professional selling principles and practices for business applications. Principles of communication, listening, selling yourself and a business sales model. Students develop and present two sales presentations. Satisfies the COBA business foundation communication requirement. Open to all majors. *Satisfies the Communication requirement of the University Core Curriculum.*

3500. Personal Marketing. 3 hours. Application of key marketing concepts to a personal marketing context. Provides useful tools for image management, including the development of differentiation strategies, development strategies, positioning strategies, marketplace segmentation, target marketing and personal promotion tools. Students prepare a comprehensive personal marketing plan.

3650. Foundations of Marketing Practice. 3 hours. Survey of marketing concepts and practices and overview of the range of activities performed by marketing managers. Topics include the identification of market opportunities, strategic marketing planning, product/service development and management, price setting and management, establishing and managing distribution channels, and structuring promotional programs. Prerequisite(s): junior standing.

3660. Advertising Management. 3 hours. Advertising for business executives; creation of primary demand, stimuli, promotional programs, media selection, appropriation and evaluation. Prerequisite(s): MKTG 3650 (non-business majors may complete MKTG 2650).

3700. Marketing and Money. 3 hours. Students are taught to understand and appreciate the money implications and impact of marketing decisions. The teaching method is "intensively hands-on" and makes use of mini-cases, problems and exercises in the context of market opportunity analysis, market segmentation, and planning and implementing a marketing mix. Prerequisite(s): MKTG 3650 (may be taken concurrently, but completion is recommended) (non-business majors may complete MKTG 2650).

3710. Marketing Research and Information Technology. 3 hours. Examination of marketing information technologies and marketing research. Students learn why and when to do marketing research, the types and sources of primary and secondary data available, methods for collecting data, the construction of data gathering instruments (e.g. questionnaires), the use of measurement scales, basic sampling, and data analysis techniques. Class emphasizes the use of secondary data sources, especially online, electronic sources of marketing information. Prerequisite(s): DSCI 3700 and MKTG 3700 (may be taken concurrently).

3720. Internet Marketing Concepts and Strategy. 3 hours. Students are expected to garner an appreciation for the role of e-commerce for creating competitive advantage in the global marketplace. Course reviews models and strategies pertinent to Internet marketing, including market segmentation, marketing mix strategies and customer relationship management. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650), or consent of department.

3875. Marketing Rights and Responsibilities. 3 hours. Critical assessment of the ethical and social impact of marketing strategy and tactics. Specific attention is directed to the rights and responsibilities of marketers, consumers and society. Topics include the application of ethical theories to advertising and promotions, distribution, pricing and product development practices. Students are introduced to ethical concerns related to consumer profiling, target marketing and market segmentation. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650) or consent of department.

3881. Personal Professional Development. 1 hour. Emphasis is on career development including preparation of professional resumes, developing interviewing skills and utilizing UNT placement office facilities and services. Guest speakers from various industrial settings familiarize students with professional opportunities in marketing. Should be completed prior to enrollment in MKTG 4890.

4120. Buyer Behavior. 3 hours. A survey of individual and organizational decision making in the acquisition, consumption and disposition of goods and services, with selected applications in market segmentation, marketing communications and marketing management. Topics include consumer and organizational behavior models and decision processes; internal influencing forces of motivation, perception, learning, personality, lifestyle and attitudes; external influencing forces of culture, subculture, demographic, social class, reference group and household. Prerequisite(s): MKTG 3650 (non-business majors may complete MKTG 2650).

4280. Global Marketing Issues and Practice. 3 hours. Students examine marketing decision making in an international context. Course emphasizes issues and concepts relevant to firms competing in the global marketplace, including problems and opportunities arising from the economic, legal/political, sociocultural, geographic and technological environments. Specific topics include multinational distribution, international product adaptation and cross-cultural consumer behavior. Requires a project emphasizing using and refining secondary data collection skills. Students may be required to work in a group context. Prerequisite(s): MKTG 3650. Credit not awarded for both MKTG 2650 and MKTG 3650.

4320. New Product Development. 3 hours. Understanding customer needs and translating them into new products and services whose design and presentation address those needs. Applying a disciplined approach to the new product development process from idea generation to product launch. Prerequisite(s): MKTG 3700 and 3710.

4330. Product Planning and Brand Management. 3 hours. Course concentrates on issues related to product/brand management— an important aspect of marketing function – its integration within the organization, management of portfolio of brands/products, environmental scanning, identification and creation of value (not just product) to offer to consumers, budgeting, planning, and control issues. Specific areas discussed include research, data management, analyses for planning and decision making, decisions in the areas of product/service offering, pricing, promotions management (advertising, sales promotion, personal selling and publicity), distributions (all aspects of it), ethics and global implications, among others.

4520. Marketing Channels and Strategic Partnerships. 3 hours. An examination of strategic issues involved in managing marketing channels. Topics include channel design, supply chain management and the external channels environment. Marketing channel strategy is extended to the use of strategic alliances and other collaborative distribution relationships for global competitive advantage. Special attention is directed to resource and technology interdependencies, exchange governance and relationship benchmarking. Prerequisite(s): MKTG 3650 (non-business majors may complete MKTG 2650).

4600. Retailing. 3 hours. Principles and methods; store location and layout; sales promotion; buying and pricing; personnel management; credit; stock control. Prerequisite(s): MKTG 3650 (non-business majors may complete MKTG 2650).

4620. E-Commerce Marketing Tools and Applications. 3 hours. Explores the evolution of the Internet and the Internet's ensuing role in marketing. Introduction to web design, web authoring and web-based marketing applications. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650) or consent of department.

4630. Electronic Retailing and Promotion Strategies. 3 hours. Addresses advanced aspects of retailing concepts in an electronic, online setting. Topics include promotional issues, privacy and security concerns, target market assessment, building a customer base, site design, order tracking and shipping. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650) or consent of department.

4640. Database Marketing Fundamentals. 3 hours. Examines theories, issues, processes and applications involved in the strategic use of marketing databases in corporate and non-corporate settings. Emphasizes the importance of acquiring, maintaining and processing market-related information. Introduces the extension of database marketing to the concept of one-to-one marketing. Discusses uses of computer hardware and software, the Internet and telecom technology in database marketing. Examines issues involved in the creation and maintenance of marketing databases as well as their varied uses. Students complete a project, learning and using many skills related to applied database marketing. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650) and MKTG 4620, or consent of department.

4650. Sales Management. 3 hours. Basics of first-level management in a sales setting. Topics include planning, organizing, staffing, directing and controlling the sales operation. Prerequisite(s): MKTG 3650 (non-business majors may complete MKTG 2650).

4710. Advanced Marketing Research. 3 hours. Limited to students with superior academic standing and requires the recommendation of marketing faculty. The course involves conducting a complete term/semester-long market research project with a business client. Student teams identify the client's information needs and the appropriate sources of data, design the data collection instrument, select an appropriate sample, implement the data collection process, analyze the data, write and present a "consultant's report." Makes extensive use of statistical and graphics software and packages. Prerequisite(s): MKTG 3710 and consent of department.

4750. Marketing of Services. 3 hours. An examination of the selection, application and monitoring of marketing services. Focuses on challenges in adjusting marketing techniques to meet the service needs of organizations. Prerequisite(s): MKTG 3650 (non-business majors may complete MKTG 2650).

4800. Internship in Marketing or Logistics. 3 hours. Supervised work in a job related to student's career objective or equivalent.

4810. Special Topics in Marketing or Logistics. 3 hours. Investigation, analysis and discussion of a variety of topics that are important in marketing and logistics. Topics may include supply chain management, transportation, logistics, distribution and channel management, product development and management, sales management, consultative and team selling, promotion, market segmentation and opportunity analysis, and strategic pricing. Prerequisite(s): completion of 9 hours of upper-division marketing courses.

4875. Customer Relationship Management. 3 hours. Exploration of the principles, practices, tools and technologies that underlie customer relationship management (CRM). Includes modules on building and sustaining long-term customer relationships, and using data mining and warehousing techniques to service these relationships. Also focuses on establishing CRM metrics and employing data analysis of CRM outcomes. Students are required to develop a CRM strategic plan for a market offering. Prerequisite(s): MKTG 3650 (non-business majors may take MKTG 2650) or consent of department.

4880. Advanced Marketing Management. 3 hours. Application of concepts, tools and procedures employed by practicing marketing managers. Specific attention is given to product development and management, promotion development and management, channel selection and management, physical distribution management and price setting and management. Students acquire skills in the essentials of case analysis and written as well as oral presentation of their analysis. Oral presentations may be made using electronic media. Groups may be required for case work. Prerequisite(s): MKTG 3700 and MKTG 3710.

4890. Applied Marketing Problems. 3 hours. Capstone marketing course. Students work in team settings to develop a comprehensive marketing plan. The marketing plan requires students to integrate a wide range of marketing principles and practices. The integrated marketing plan requires students to identify market opportunities and challenges, formulate actionable plans to address organizational strengths and weaknesses, and execute a marketing mix strategy. Requires both oral and written presentation of the marketing plan. Prerequisite(s): MKTG 4880 and graduating senior status.

4900. Special Problems. 1-3 hours each.

Master's Engineering Technology

see *Graduate Catalog*

Materials Science and Engineering

Materials Science, MTSC

2900-2910. Introduction to Materials Science Research. 1-3 hours. Individualized laboratory instruction. Students may begin training on laboratory research techniques.

4500. Internship in Materials Science. 3 hours. A supervised industrial internship requiring a minimum of 150 hours of work experience. Prerequisite(s): consent of department.

4900-4910. Materials Science Research. 1-3 hours. Introduction to research; may consist of an experimental, theoretical or review topic.

4920. Cooperative Education in Materials Science. 3 hours. Supervised work in a job directly related to the student's major, professional field of study or career objectives. Prerequisite(s): 12 hours of credit in materials science; student must meet employer's requirements and have consent of department. May be repeated for credit.

Mathematics

Mathematics, MATH

Students taking mathematics courses at the 2000 level or above are expected to be competent in computer programming using such languages as BASIC, C, FORTRAN or PASCAL. This competency can be obtained through completion of CSCE 1020.

For all mathematics courses, a grade of C or better is strongly recommended before progressing to the next course.

1010. Fundamentals of Algebra. 3 hours. Basic algebraic operations, linear equations and inequalities, polynomials, rational expressions, factoring, exponents and radicals, and quadratic equations. Prerequisite(s): consent of department. Students may not enroll in this course if they have credit for any other UNT mathematics course. Credit in this course does not fulfill any degree requirement. Pass/no pass only.

1100 (MATH 1314 or 1414). College Algebra. 3 hours. Quadratic equations; systems involving quadratics; variation, ratio and proportion; progressions; the binomial theorem; inequalities; complex numbers; theory of equations; determinants; partial fractions; exponentials and logarithms. Prerequisite(s): two years of high school algebra and one year of geometry, and consent of department. A grade C or better in MATH 1100 is required when MATH 1100 is a prerequisite for other mathematics courses. *Satisfies the Mathematics requirement of the University Core Curriculum.*

1190 (MATH 1325 or 1425). Business Calculus. 3 hours. Differential and integral calculus with emphasis on applications to business. Prerequisite(s): MATH 1100 with grade of C or better. *Satisfies the Mathematics requirement of the University Core Curriculum.*

1350. Mathematics for Elementary Education Majors I. 3 hours. Concepts of sets, functions, numeration systems, different number bases, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. Only for students requiring course for teacher certification. Prerequisite(s): MATH 1100 with a grade of C or better. *Satisfies the Mathematics requirement of the University Core Curriculum.*

1351. Mathematics for Elementary Education Majors II. 3 hours. Concepts of geometry, probability and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. Only for students requiring course for teacher certification. Prerequisite(s): MATH 1350. *Satisfies the Mathematics requirement of the University Core Curriculum.*

1400. College Math with Calculus. 3 hours. An applied mathematics course designed for non-science majors. All topics are motivated by real world applications. Equations, graphs, functions; exponentials and logarithms; mathematics of finance; systems of linear equations and inequalities, linear programming; probability; basic differential calculus with applications. Prerequisite(s): two years of high school algebra and consent of department; or MATH 1100 with grade of C or better. *Satisfies the Mathematics requirement of the University Core Curriculum.*