

4460. Topics in Organizational Behavior. 3 hours.

Study of individual and group behavior in organizations. Representative topics include employee motivation, leadership, organizational power and politics, decision making and performance, organizational culture, perception and attribution, and individual differences. Students study one or more of these topics in depth. Prerequisite(s): MGMT 3720 or consent of instructor. May be repeated for credit as topics vary.

4470. Leadership. 3 hours. An in-depth course on leadership. Students are provided practical tools and methods of leadership that will apply to a variety of organizational structures. Students gain insights about their own personalities, skills, ethics, values and beliefs as they relate to leading others, and have the opportunity to discuss and debate a number of leadership topics.

4660. International Management Perspectives. 3 hours. A comprehensive framework is used to study the management of multinational operations in cross-cultural environments with a focus on the decisions that managers must make. Topics include strategic planning, organization, human resources, operations management, entrepreneurship and ethics.

4790. Human Resources Capstone Course. 3 hours. Capstone course to prepare students to enter the human resources field as qualified professionals. Intensive review of the functional disciplines in the HR field are integral to the course. Students study and evaluate theories of human resources management; engage in practical applications of theory through participation with employers engaged in solving HR problems within their workplace or identifying HR needs; explore the pragmatic implications of the professional human resource certification process and what it means for HR professionals in the global economy during the 21st century; and demonstrate integrative knowledge of HR functions relative to each other and to other functional areas within an organization. Prerequisite(s): to be taken within the final 9 hours of course work.

4800. Internship. 3 hours. Supervised work in a job related to student's career objective. Prerequisite(s): student must meet the employer's requirements and have consent of advisor.

4810. Purchasing and Materials Management. 3 hours. From original planning through delivery of finished products; purchasing, inventory control, receiving, stores, production control, traffic and materials handling.

4820. Manufacturing Planning and Control. 3 hours. In-depth coverage of the function of production planning and control, including such topics as materials requirements planning, capacity planning, master production scheduling, forecasting, production activity planning, and control and project management. Prerequisite(s): MGMT 3830.

4830. Productivity and Quality Management. 3 hours. Coverage of the topics related to quality science and quality improvement. Topics include acceptance sampling, TQM, process control and their impact on productivity. Prerequisite(s): MGMT 3830.

4840. Compensation and Benefits Administration. 3 hours. Wage and salary administration in public and private organizations; determinants of general wage and salary levels and structures; total compensation systems; interrelationship among employee performance, intrinsic and extrinsic rewards, perceived equitable payments, and employee satisfaction. Open to non-business majors.

4860. Organizational Design and Change. 3 hours. Organizational design is a primary management tool for organizing business processes and developing organizational

capabilities. The course focuses on developing an understanding of the basics of organizational design, how to utilize organizational design principles to manage change, and how to keep the design aligned with the needs of the firm and the demands to which it must respond. The design and development effort includes study of organizational structures, the basic work patterns of the organization, organizational cultures, managerial roles, and the use of teams.

4880. Management of Projects and Systems. 3 hours. Investigation and study of the role of projects in contemporary organizations. Includes a presentation of the technical aspects pertaining to the management of complex projects and systems starting with conceptual design and advanced development, and continuing through detailed design, production and termination. Emphasis is placed on integrative concepts rather than isolated methodologies. Prerequisite(s): MGMT 3830.

4890. Legal Aspects of Employment Practices. 3 hours. Current legislation and its impact on human resources policy and practices.

4900-4910. Special Problems. 3 hours each. Supervised study on a selected management topic. Typically requires a research paper and significant independent study. Prerequisite(s): consent of department.

4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

Management Science

see *Graduate Catalog*

Manufacturing Engineering Technology

see Engineering Technology

Marketing and Logistics

Logistics and Supply Chain Management, LSCM

2960. Global Logistics and Supply Chain Management. 3 hours. Introduction to the multicultural and multiracial world from a logistics and supply chain management perspective. Provides useful tools for assessing and addressing diversity in the business and global supply chain management environment. Topics include customer service, transportation, warehousing, inventory control, materials handling and packaging, information systems within and between firms throughout the global supply chain to help improve performance. Emphasis on concepts and practices that provide firms with global competitive advantage. Cannot be used to meet business foundation, business professional field, or business supporting field requirements.

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.

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.

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.

4830. Industry Practicum. 3 hours. Students work in small groups to identify and resolve hands-on industry problems under the guidance of a faculty member, work closely with industry representatives and develop solutions for a final paper/presentation to industry executives. Prerequisite(s): LSCM 3960 and at least one other LSCM course.

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. Capstone course to be taken during the last term/semester of course work. Prerequisite(s): LSCM 3960.

4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

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 a portion of the Understanding the Human Community 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 a portion of the Understanding the Human Community 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 2710 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 bench-marking. 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): graduating senior status.

4900. Special Problems. 1–3 hours each.

4951. Honors College Capstone Thesis. 3 hours. Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis. Prerequisite(s): completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College. May be substituted for HNRS 4000.

Master's Engineering Technology

see *Graduate Catalog*

Materials Science and Engineering

Materials Science and Engineering, MTSE

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

3010. Bonding and Structure. 3 hours. Amorphous and crystalline structures in metals, ceramics and polymers, point defects in crystals, structure determination by X-ray diffraction. Prerequisite(s): MFET 3450.

3020. Microstructure and Characterization of Materials. 3 hours. Introduction to dislocations, grain boundaries, surfaces and multiphase microstructures. Optical and electron microscopic characterization of microstructures. Prerequisite(s): MFET 3450.

3030. Thermodynamics and Phase Diagrams. 3 hours. First three laws of thermodynamics; phase equilibria, reaction equilibria and solution theory. Principles and applications of phase diagrams. Prerequisite(s): MFET 3450.

3040. Transport Phenomena in Materials. 3 hours. Principles of transport phenomena (momentum, heat and mass transport) in materials processes including heat, mass and momentum transport. Emphasis on applications of appropriate differential equations and boundary conditions to solve real materials processing problems. Prerequisite(s): MATH 3310 and MFET 3450.

3050. Mechanical Properties of Materials. 3 hours. Macroscopic mechanical response of ceramics, metals, polymers and composite materials, with an introduction to the underlying microstructural processes during deformation and fracture. Prerequisite(s): MFET 3450.

3060. Phase Transformations in Materials. 3 hours. Principles of structural transformations in materials. Thermodynamics and kinetics of nucleation, growth, precipitation and martensitic reactions. Prerequisite(s): MTSE 3030 and 3040.

3070. Electrical, Optical and Magnetic Properties of Materials. 3 hours. Bonding and the electronic structure and properties of metallic, ceramic, semiconducting and polymeric materials. Prerequisite(s): MFET 3450.

3080. Materials Processing. 3 hours. Basic principles and strategies for processing metals, ceramics, polymers, composites and electronic materials. Prerequisite(s): MTSE 3040.

3090. Materials Science and Engineering Laboratory I. 1 hour. (0;1) Laboratory designed to introduce students to some of the most common materials testing and characterization methods. Topics include optical metallography, tensile testing, hardness testing, impact testing, heat treating, melting and casting. Prerequisite(s): MFET 3450.

3100. Materials Science and Engineering Laboratory II. 1 hour. (0;1) Sequel laboratory designed to continue to introduce students to some of the most common materials testing and characterization methods. Topics include differential scanning calorimetry, rheology, powder processing and sintering, density, scanning electron microscopy, and x-ray diffraction. Prerequisite(s): MTSE 3090.