

MEEN 5800-MEEN 5810. Topics in Mechanical and Energy Engineering. 3 hours. Selected topics of contemporary interest in mechanical engineering. Prerequisite(s): consent of instructor. May be repeated for credit as topics vary.

MEEN 5890. Directed Study in Mechanical and Energy Engineering. 1–3 hours. Study by individuals or small groups. Plan of study must be approved by supervising faculty. Written report is required. May be repeated for 6 credit hours, but a maximum of 3 credit hours can apply to major.

MEEN 5900-MEEN 5910. Special Problems in Mechanical and Energy Engineering. 1–6 hours. Special problems in mechanical and energy engineering for graduate students only. Prerequisite(s): Approval the student's supervisor and/or consent of department. May be repeated for credit.

MEEN 5920. Cooperative Education in Mechanical and Energy Engineering. 3 hours. Supervised field work in a job directly related to the student's major, professional field of study or career objectives. Summary report required. Prerequisite(s): consent of department.

MEEN 5940. Graduate Seminar in Mechanical and Energy Engineering. 1–3 hours. Provides exposure to multidisciplinary research and opinions on current and future issues from industrial, scientific, academic, governmental and engineering experts from mechanical and energy engineering areas. Prerequisite(s): consent of department.

MEEN 5950. Master's Thesis. 3 or 6 hours. A minimum of 6 hours of thesis work is required. No credit is assigned until the thesis is filed and approved by the dean of the graduate school. Continuous enrollment is required once thesis work has begun. Prerequisite(s): approval of the student's supervisor and/or consent of department.

Mechanical Engineering Technology

see *Undergraduate Catalog*

Merchandising and Hospitality Management

Merchandising and Hospitality Management, SMHM

SMHM 5000. Merchandising and Hospitality Management Study Tour. 1–3 hours. Experiential learning in industry centers for fashion, home furnishings, and/or hospitality provides a context for career development as well as an overview of the industry at work. Students collect and synthesize primary and secondary data into comprehensive analyses for career opportunities, trends, brands and other appropriate elements for the fashion, home furnishings, and hospitality industries. Prerequisite(s): consent of school. Pre-trip and post-trip classes are required. No more than three hours of field study may be used to fulfill degree requirements. (Meets with SMHM 4000.)

SMHM 5010. Merchandising Foundations. 3 hours. A functional analysis of merchandising principles and concepts and their importance in fashion markets in the retail sector. Stresses the importance of margin to the profit function of the enterprise.

SMHM 5080. Merchandising Ventures. 3 hours. Study of entrepreneurship skills and strategies resulting in application to a business plan that establishes a new venture with fashion and/or home furnishings products. Additionally, students independently identify and investigate innovative entrepreneurial ventures that culminate in a comprehensive research product. Prerequisite(s): SMHM 2090 or SMHM 2400 or SMHM 2490; SMHM 3510 or ACCT 2010; or consent of instructor. (Meets with SMHM 4080.)

SMHM 5090. Virtual Merchandising. 3 hours. (2;2) Merchandising application through experiential learning that ultimately results in the development of a product- or service-based web site with an emphasis on target market appeal, appropriate merchandising applications, and a suitable web site infrastructure based on objective research including data collection from a relevant population sample. Students apply theory and critical thinking skills to a virtual merchandising format. Prerequisite(s): SMHM 2090 or SMHM 2400 or SMHM 2490 or consent of instructor. (Meets with SMHM 4090.)

SMHM 5200. Survey of Beverages in the Hospitality Industry. 3 hours. Examination of wines, beers, and distilled spirits with a focus on vinicultural techniques, beer and distilled spirit production and classification, styles of wine and other beverages, and theory of wine and food pairing. Prerequisite(s): students must be 21 years of age or older.

SMHM 5210. Hospitality Cost Controls. 3 hours. Critical analysis of the food, beverage and labor cost control systems used in the hospitality industry. Emphasizes the identification, analysis and evaluation of control systems used for hospitality managerial planning. Develops procedures for successful control of business expenses. Prerequisite(s) undergraduate financial and managerial accounting or consent of department. (Meets with SMHM 4210.)

SMHM 5240. Global Fashion Retailing. 3 hours. A strategic perspective of fashion-oriented products in a dynamic marketplace. Included are case analyses of merchandising principles practiced by representative companies. Interpretations of global trends and issues affecting multi-channel distribution.

SMHM 5250. Restaurant Development. 3 hours. The identification, examination and application of restaurant development principles. Topics include menu planning, service styles, dining room and kitchen design, materials purchasing and receiving, food production techniques, accounting and financial management, and merchandising.

SMHM 5260. Hospitality Business Strategies. 3 hours. Critical thinking and strategic planning processes for hospitality operations. Analyze financial business plans, human resources plans and marketing plans for hospitality organizations; address leadership issues and global dimensions of management for hospitality organizations; analyze ethical issues and legal issues in managing hospitality enterprises, create solutions for hospitality operations from corporate and entrepreneurial perspectives. Utilize case study analysis and computer applications to apply principles.

SMHM 5280. Hotel and Restaurant Operations: Theory and Analysis. 3 hours. A study of hotel and restaurant management operations problems, including the areas of budgeting, human resource scheduling and payroll control, sales forecasting, costing and financial statement analysis. Students will be actively involved in writing and discussing cases on current operations issues.

SMHM 5300. Research Methods in Merchandising and Hospitality Management. 3 hours. Critical evaluation of research methods in merchandising and hospitality management fields. Develop research framework and formulate research design questions. Enhance research skills through writing a thesis proposal or research proposal.

SMHM 5350. Contemporary Issues and Trends in Merchandising and Hospitality Management. 3 hours. An analysis of current issues, trends and future projections influencing the field of either hotel and restaurant management or fashion merchandising.

SMHM 5400. Research Applications in Merchandising and Hospitality Management. 3 hours. Execute research projects with implications for marketers in textile, apparel, home furnishings or hospitality industries. Emphasis is on conceptualizing problems, analyzing and interpreting data, and writing for industry and/or scholarly dissemination. Prerequisite(s): SMHM 5300; statistics; or consent of instructor.

SMHM 5440. Consumer Theory. 3 hours. Classic and contemporary consumer theories analyzed in situational contexts. Emphasis on formulating integrated consumer behavior models for strategic decision-making in both domestic and international consumer-driven markets in merchandising and hospitality industries.

SMHM 5460. Human Capital Development in Merchandising and Hospitality Management. 3 hours. Major areas of human relations skills necessary for managing employees and customers in merchandising and hospitality management are studied. Topics include employee supervision, motivation, communication, training, management development, problem-solving, decision making and stress management.

SMHM 5480. Hospitality Industry Finance. 3 hours. Critical evaluation of financial management issues in the hospitality industry. Analysis and evaluation of asset structures, capital structures, costs of capital and capital budgeting for hospitality firms. Determination of financial aspects of hotel valuation. Evaluation and comparison of the financial value, worth and health of hospitality firms.

SMHM 5500. Merchandising Strategies. 3 hours. Merchandising theory, principles and practice applied to the strategic planning, developing and presenting of textile, apparel and home furnishings product lines. How consumer driven markets motivate product sourcing, pricing, assortment, styling and timing in the global distribution pipeline.

SMHM 5510. Advanced Buying, Planning and Allocation. 3 hours. In-depth study of planning, buying and distributing merchandise to retail stores. Focuses on maximizing profit and decision-making strategies and principles. Prerequisite(s): SMHM 3510 or SMHM 5010 with a grade of C or better, or consent of instructor. (Meets with SMHM 4510.)

SMHM 5520. Global Tourism Systems. 3 hours. In-depth analysis of the global travel and tourism industries from a systems perspective. Models of tourism system used as methodological tools to understand this complex global industry. Topics include historical, contemporary and future effects of travel and tourism as related to social, economic, cultural and environmental issues.

SMHM 5530. International Sustainable Tourism. 3 hours. Examines the philosophy, concepts and attitudes prevalent in practices of sustainable tourism in global destinations. Emphasizes the social/cultural, environmental and economic elements of sustainable tourism development. The variety of ways sustainable tourism activities are organized internationally and best practices are explored.

SMHM 5531. Sustainable Natural Resource Management. 3 hours. Examines the fundamental changes affecting the world that impact institutions and attitudes toward more sustainable natural resource management. Problems with the depletion of the ozone layer, global warming, deforestation, species decimation, coastal erosion, wetlands protection, acid rain, water pollution, solid and hazardous waste disposal, toxic air emissions, and other environmental problems of similar magnitude require changes in industry. Case study analysis and problem solving. Taught at CATIE in Costa Rica.

SMHM 5532. Context and Challenges of Applied Sustainable Tourism Development. 3 hours. Explores the environment's dilutive capacity and its important to sustainable tourism. Examines factors critical to the sustainable tourism industry such as concentration of visitors, rising affluence, technological change, and increased expectations. Social responsibility, cultural assessment, and community participation principles for applied sustainable tourism development are considered in case studies and field excursions. Intervention strategies for sustainable tourism development are presented as a compelling case for an effective private-public partnership for development of sustainable tourism. Taught at CATIE in Costa Rica.

SMHM 5533. Environmental Policies in a Changing World. 3 hours. Comprehensive overview of the theory and application of environmental policy. Policy instruments for environmental and natural resource management are explored in an industry-based context. Explores Costa Rica's national strategy for sustainable development and its policy implications for the sustainable tourism industry. Focuses on the selection and design of policy instruments for preserving the environment and/or reducing impact from tourism projects and programs. Taught at CATIE in Costa Rica.

SMHM 5534. Seminars in Sustainable Tourism: Experiences of Successful Practitioners in Costa Rica. 3 hours. Examines the complexity of evaluating sustainability and the need for evaluation from various perspectives. Outlines the dilemmas that may be present in sustainable tourism projects, represented as competing values from the practitioner's point of view. Experiences of successful and not-so-successful practitioners of sustainable tourism are analyzed for the best practices in operational management, customer satisfaction, business planning, and promotion-marketing. Recognizes the importance of scale when evaluating sustainability. Covers both small- and large-scale tourism projects. Taught at CATIE in Costa Rica.

SMHM 5535. Quantitative and Qualitative Analyses in Sustainable Tourism. 3 hours. Provides the tools and methods required for collecting, interpreting, analyzing and reporting quantitative and qualitative data. Uses quantitative and qualitative tools with a wide range of applications in the fields of sustainable tourism and environmental science. Focuses on research in rural communities. Taught at CATIE in Costa Rica.

SMHM 5536. Field/Practical/Professional Experience with Research Applications. 3 hours. Combines field, practical or professional experience with applied research. Supervised work experience in hospitality/tourism businesses, agencies or institutions as related to field and research interests is required. Requires a minimum of 150 hours of work experience/field research in the last semester of the master's degree as a capstone. The types of field work and research projects required by the course are supported by area hospitality/tourism businesses, non-governmental organizations, and/or governmental organizations in Costa Rica through partnerships with CATIE. Taught at CATIE in Costa Rica.

SMHM 5540. Tourism Services Management and Marketing. 3 hours. Concepts, tools and strategies necessary to effectively manage and market tourism services at the operational and destination level. The distinct character of tourism services and implications for management and marketing are explored. Topics include foundations of tourism management and marketing, managing tourism relationships, market-oriented management, marketing the operational and destination image (branding), tourism servicescapes, and managing a tourism service culture.

SMHM 5550. Promotional Strategies. 3 hours. Analyze internal, external and situational factors that influence promotion strategies including advertising, public relations, promotions and salesmanship. Formulate and judge promotion strategies that generate added economic value to textile, apparel, home furnishings, or hospitality products or companies.

SMHM 5600. Managing Customer Experiences. 3 hours. Explore creating and managing customer experiences of tangible and intangible products and services that link merchandising and hospitality segments. Apply merchandising strategies of planning, developing and presenting products to consumers with the experiential components of the hospitality industry to provide a total concept-based experience.

SMHM 5630. Event Management. 3 hours. Focus on meeting, exhibition, event, and convention industry. Topics include planning, designing, managing and evaluating small to large events; applying industry professional standards; and the impacts of event management on operations. Addresses the major trends and successful practices in event management.

SMHM 5650. Global Merchandising. 3 hours. Critical analysis of merchandising principles and practices in a global context with emphasis on economic, political, environmental, cultural and social issues; geographic distribution; trade theory; trade data; and technological developments. Contrast the global dominance of textile, apparel and home furnishings industries on world trade and on consumer-driven markets by country and geo-political regions.

SMHM 5660. Advanced Merchandising Applications. 3 hours. Using the case study method, students apply merchandising theory, principles, and practices to industry scenarios. Emphasis on problem solving, creative thinking, fact-finding, data analysis, and data interpretation involved in business operations. Focus on the development of leadership skills while functioning in small and large groups. Prerequisite(s): SMHM 3510 or ACCT 2010. (Meets with SMHM 4660.)

SMHM 5700. Service Excellence. 3 hours. Explores the dynamics of service excellence in the merchandising and hospitality industries. How consumer-driven trends motivate service approaches, management and training procedures, and their impact in the marketplace.

SMHM 5730. Hotel and Restaurant Management Systems. 3 hours. In-depth analysis of revenue management in hotel and restaurant operations. Integration of the principles of marketing, finance and managerial economics to maximize revenues within the constraints and parameters of hospitality management operational issues and guest behavior. Utilization of computer simulations to model cost and revenue flows in a realistic manner to achieve operational and financial goals of the hospitality enterprise. Emphasis on analysis, report writing and formal business presentations.

SMHM 5750. Electronic Merchandising. 3 hours. Analysis and application of electronic information exchange technology related to textile, apparel, home furnishings and other fashion-oriented products. Emphasis on product development, manufacturing/production, distribution, merchandising, e-commerce and sales.

SMHM 5790. Field Experiences in Various Areas of Concentration. 3 hours. Arranged.

SMHM 5800. Seminar in Various Areas of Concentration. 3 hours. May be repeated for credit as topics vary.

SMHM 5810. Teaching Practicum in Merchandising and Hospitality Management. 3 hours. Provides introductory teacher education preparing graduate students to enter into a first teaching assignment with knowledge of how to prepare, likely challenges, and facilitation of student learning. Prerequisite(s): merchandising or hospitality management master's status.

SMHM 5820. Facilities Planning, Equipment Layout and Design. 3 hours. (2;2) Principles of hospitality property management and design with analysis of efficient work spaces for hospitality operations emphasizing space utilization and work flow, ADA adherence, environmental concerns and regulations, and the creation of a safe and secure work environment.

SMHM 5830. Legal and Regulatory Aspects of Merchandising and Hospitality Management. 3 hours. Introduction to the laws and regulations which influence business and management decisions in merchandising and the hospitality industry. Provides a practical knowledge of the law and operation of the legal system. Focuses on the management techniques for minimizing risks associated with legal liability.

SMHM 5850. Brand Development. 3 hours. Students understand the role of brand, the concept of brand equity, and importance of creating strong brands. Application of brand knowledge to brand portfolio development. Students integrate theoretical frameworks through case study analyses. Prerequisite(s): SMHM 2400 or SMHM 2490 or consent of instructor. (Meets with SMHM 4850.)

SMHM 5860. Strategic Management in the Hospitality Industry. 3 hours. Application and exploration of critical issues associated with the hospitality strategic management process. Topics include the hospitality industry internal and external contexts of strategic planning and execution; growth and competitive advantage strategies for hospitality organizations; organizational resource and capability analysis; prevention and management of crisis situations in the hospitality industry including food-borne diseases and the impact of natural disasters on the tourism industry; entrepreneurial strategies for electronic tourism; and global strategic management for hospitality corporations. Cases of hospitality-specific companies, readings, and lectures/discussions are utilized.

SMHM 5900-SMHM 5910. Special Problems in Various Areas of Concentration. 3 hours each. Arranged. Prerequisite(s): consent of instructor.

SMHM 5920. Problem in Lieu of Thesis. 3 hours. No credit given until problem in lieu of thesis is completed.

SMHM 5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

Middle School Education

see *Undergraduate Catalog*

Military Science

see *Undergraduate Catalog*

Music

- MUAG — Music Applied General Courses
- MUAM — Music Applied Private Lessons (Major)
- MUAC — Music Applied Private Lessons (Concentration)
- MUAS — Music Applied Private Lessons (Secondary)
- MUCM — Chamber Music
- MUCP — Music Composition
- MUED — Music Education
- MUEN — Music Ensembles
- MUET — Music Ethnomusicology
- MUGC — Music General Courses
- MUMH — Music History and Literature, and Musicology
- MUJS — Music Jazz Studies
- MULB — Music Laboratories
- MUSM — Sacred Music
- MUTH — Music Theory

Courses that may be repeated for credit are MUAG 5000, MUAG 5210, MUAG 5390, MUAG 5640, MUAG 5650, MUAG 5660, MUAG 5800, MUAG 5810, MUAG 5850, MUAG 5860, MUAG 5890 and MUAG 6850; all courses in MUAM, MUAC and MUAS; all courses in MUCM; MUCP 5180, MUCP 5190, MUCP 6190, MUCP 6200 and

MUCP 6400; MUED 5300, MUED 5821, MUED 5822, MUED 5823, MUED 5831, MUED 5832, MUED 5840, MUED 5880 and MUED 6480; all courses in MUEN; MUET 5210; MUJS 5470 and MUJS 5760; all courses in MULB; MUMH 5711, MUMH 6160, MUMH 6520, MUMH 6530 and MUMH 6540; MUTH 5001, MUTH 5002, MUTH 5003, MUTH 5090 and MUTH 6680; and MUGC 5890, MUGC 5900-MUGC 5910, MUGC 5930, MUGC 5950, MUGC 6900-MUGC 6910 and MUGC 6950.

Applied General Courses, Music, MUAG

MUAG 5000. Choral Techniques. 3 hours. Choral organizations, singing, conducting, performing, repertoire and history. Actual experience in a model a cappella choir.

MUAG 5210. Studies in Vocal Literature. 2 hours. An intensive study of a style period or genre of solo vocal literature. May be repeated for credit as topics vary.

MUAG 5220. Advanced Singing-Acting Techniques. 1 hour. Working with the techniques of H. Wesley Balk, the course develops singing/acting skills that integrate the full system of each student. An experiential learning course in which the student applies the techniques to his or her individual operatic repertoire or assigned scenes from opera. Prerequisite(s): acceptance into the graduate program or artist's certificate. Must have at least three operatic arias in personal repertoire. Highly recommended to be taken before MUAG 5640.

MUAG 5260. Piano Collaboration (Vocal). 3 hours. Skills and techniques of vocal collaboration through study and performance with soloists of art song and vocal repertoire with orchestral reduction; study of relevant reference works; sight-reading, transposition, coaching and teaching collaborative skills. Prerequisite(s): consent of instructor.

MUAG 5261. Vocal Repertoire Master Class. 3 hours. Intensive study and performance of art song with piano and other vocal repertoire with orchestral reduction. Prerequisite(s): MUAG 5260, MUAM 5503, or consent of instructor. May be repeated for credit.

MUAG 5270. Piano Collaboration (Instrumental). 3 hours. Fundamentals of instrumental collaboration; rehearsal techniques; score reading (transposition and clefs); orchestral reductions and thorough bass realization; instrumental repertoire; work with soloists. Prerequisite(s): consent of instructor.

MUAG 5271. Instrumental Repertoire Master Class. 3 hours. Intensive study and performance of sonata and other instrumental literature. Prerequisite(s): MUAG 5270 or consent of instructor. May be repeated for credit.

MUAG 5280. Service Playing Skills I. 2 hours. Intense study of basic hymn playing, keyboard harmony, transposition, figured bass, open score reading, sight-reading and beginning improvisation. Prerequisite(s): satisfactory score on Graduate Placement Exam or MUTH 5001, MUTH 5002 and MUTH 5003.

MUAG 5290. History of Organ Style and Design. 2 hours. A survey of national styles of organ building in Germany, France, Italy, Spain and England, 1550–1900. Emphasis on construction of action, windchests and pipes. Contemporary development of the organ in North America. Prerequisite(s): MUAG 4390, undergraduate organ literature.