MBA

Business Administration

MBA 501: Management Economics
The techniques and approaches of microeconomic reasoning are applied to issues of management and policy. The theory of the market and the price system is closely examined to identify areas where neoclassical economics is helpful to the analyst and manager. Decisions regarding firm boundaries, competition, pricing, and entry are examined. Extensive use is made of case studies.
Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 502: Finance
How firms meet and manage their final objectives. Today's financial environment, the fundamental trade-off between risk and return, the time value of money, and valuing future cash flows are discussed. Financial tools and techniques, which can be used to help firms maximize value by improving decisions related to capital, are explained. Bond and stock valuations are introduced.
Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 503: Data Analysis and Decision Making
An introduction to statistical techniques useful in the analysis of management problems. We motivate each topic by managerial applications, and we analyze actual data sets using modern statistical software. Topics include probability estimation, hypothesis testing, and regression analysis.
3 credits, Letter graded (A, A-, B+, etc.)

MBA 504: Financial Accounting
Introduction and exploration of basic financial accounting terminology, principles, concepts, and their relevant business applications. This course will include the recording, summarization, and adjustment of financial transactions and the preparation and presentation of the basic financial statements. Other topics will include valuation methods for cash, accounts receivable, inventory and property, plant and equipment. This course is also offered as EMP 502.
3 credits, Letter graded (A, A-, B+, etc.)

MBA 505: Marketing
A survey course covering the foundations of the marketing discipline. The course is designed to give students conceptual frameworks and tools to help firms meet demands of the marketplace in a profitable way. A wide range of marketing strategy topics (e.g., segmentation, positioning) and marketing tactics (the Four P's of Marketing -- Product, Price, Place and Promotions) will be covered, as well as development of the discipline's foundations (definition, philosophy, and the history of marketing).
3 credits, Letter graded (A, A-, B+, etc.)

MBA 506: Leadership, Team Effectiveness and Communications
The purpose of the course is to introduce you to the multifaceted phenomenon of leadership, teams, and communications. It seeks to answer the following three questions: What do leaders really do? What makes teams effective? How do you create persuasive communications? The course addresses such topics as leadership styles, building motivated teams, and developing strategic communications. It examines these topics with a goal of not only imparting knowledge about evidence-based managerial practices but also assisting students to acquire the skills necessary to become business leaders, team builders and articulate communicators.
3 credits, Letter graded (A, A-, B+, etc.)

MBA 507: Ethics and Law
This course would link the main ethical problems facing the modern manager with the statutes and regulations that have been enacted to deal with these problems. Emphasis is placed on the moral and ethical responsibilities that relate to investors, employees, customers, and the community. Students will learn the basic vocabularies of business law and of ethics.
Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 509: Continuous Quality Improvement
This course provides students with understanding of concepts of TQM and quality improvement methods to attain world-class performance in business operations. Topics include policy deployment, process improvement methodology, daily work management, quality story methodology, six sigma, poka-yoke, ISO, Deming and Baldrige Awards criteria.
3 credits, Letter graded (A, A-, B+, etc.)

MBA 510: Employee Benefits
This course addresses an area of major social change: new developments in fringe benefit programs available to American workers. Topics include pensions, social security, savings and profit sharing plans, and other benefits in the working and retirement years. It also compares fringe benefits available to the individuals in the private, public, and not-for-profit sectors. Future fringe benefit programs and policies will also be explored. This course is offered as both CES 510 and MBA 510.
3 credits, Letter graded (A, A-, B+, etc.)

MBA 511: Technological Innovations
Innovation drives the modern firm by the interaction of technical invention and managerial entrepreneurship. This course explores the variety of sources of new products, processes, and services, such as inventors, universities, research and development departments in industry, and government labs. In addition, the course explores the variety of ways of bringing new products, processes, and services to market, including startup firms, acquisitions, mergers, and entrepreneurship within the firm. Case studies showing the interaction of invention and entrepreneurship are analyzed. A term project is required in which the student either analyzes the history of invention and entrepreneurship in a major firm or writes a business plan for high technology startup firm.
Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 512: Business Planning and Strategic Management
The principles and techniques of strategic management by which an organization sets and implements its long-range direction. This includes the processes of environment scanning, self-assessment of organizational purpose and comparative advantage, and synthesis of organizational mission, plans, and strategic initiatives. Extensive use is made of case studies and in-class exercises.
Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 514: Collective Bargaining and Arbitration in the Public Sector
This course presents an overview of the history, procedures, and problems of public sector labor relations, and comparisons with the private sector. The role of public opinion and politics in public sector bargaining will be explored. Students will role play the negotiation of a public sector contract: preparation of bargaining package, negotiation, mediation, fact-finding, arbitration. They will also prepare, present, and critique a public sector grievance case from its shop origins to its final disposition by arbitration. This course is offered as both CES 514 and MBA 514.
3 credits, Letter graded (A, A-, B+, etc.)
Because both the similarities and differences of organizations and management across national boundaries must be a part of the knowledge base of tomorrow’s manager, this course examines proprietorships, partnerships, corporations, governmental regulatory agencies, public authorities, voluntary social services, multinational corporations, and strategic alliances, as well as combinations of these organizations, across sectoral and national boundaries.

Spring, 3 credits, Letter graded (A, A-, B+, etc.)

**MBA 517: Information Systems for Management**

Information systems and its role in strategic planning and managerial operations in business. The systems approach to the analysis, design, and implementation of information systems. Recent developments in information technology and its impact on existing and future information systems.

Fall, 3 credits, Letter graded (A, A-, B+, etc.)

**MBA 519: Grievance Handling and Arbitration**

Grievance and arbitration procedures in a variety of private- and public-sector labor agreements are examined in terms of contract clauses, practical procedures, and problems characteristic of different employment sectors. Dispute settlement between parties themselves is explored, and the final recourse to arbitration is examined in terms of arbitrator selection, case preparation, presentations at hearings, and analysis of awards. Recommendation: strong work experience in a position that requires familiarity with labor laws, such as FLSA, FMLA, ERISA, COBRA, and HIPPA.

3 credits, Letter graded (A, A-, B+, etc.)

**MBA 520: History of Labor Relations**

The course proceeds from the beginnings of labor organization in the guilds and crafts of the early 19th century, to the accelerating pace of change today. The peaking of union strength from the beginnings of labor organization in the guilds and crafts of the early 19th century, to the accelerating pace of change today. The peaking of union strength.

3 credits, Letter graded (A, A-, B+, etc.)

**MBA 521: Industry Project**

Under faculty supervision, groups of students work for clients on management issues in a variety of areas such as health care, MIS, marketing, data analysis, business plans, and the like. The course provides students with the opportunity to apply the analytic skills they have learned in the classroom to actual management problems. Students also gain practical experience in business writing, giving formal presentations, and working in teams.

Fall, 6 credits, Letter graded (A, A-, B+, etc.)

**MBA 522: Industry Project**

Under faculty supervision, groups of students work for clients on management issues in a variety of areas such as health care, MIS, marketing, data analysis, business plans, and the like. The course provides students with the opportunity to apply the analytic skills they have learned in the classroom to actual management problems. Students also gain practical experience in business writing, giving formal presentations, and working in teams.

Fall, 6 credits, Letter graded (A, A-, B+, etc.)

**MBA 523: Human Resource Management Workshop**

This course is designed for human resources practitioners who wish to prepare themselves for higher level executive positions: planning for the personnel function relative to organizational purpose and size of workforce; developing recruiting plans, job classifications, and wage schedules; establishing benefit systems; and training supervisors, systematizing employee supervision, and evaluation methods. Finally, the class will develop such motivational incentives as career development, job enrichment, and employee assistance programs and learn how to devise model affirmative action and employee safety procedures.

3 credits, Letter graded (A, A-, B+, etc.)

**MBA 526: Job Evaluation, Compensation Systems and Benefits**

An advanced course providing students with both theory and specific knowledge of job evaluation and compensation systems. Topics include comparable worth and legal requirements: preparation of job evaluation and job design, fringe benefits, pensions, social security, theory of compensation systems as they relate to job satisfaction and employee morale; development of wage and salary surveys, internal and external equity pay scales, performance-based pay systems, and salary administration procedures. An analysis of incentives-bonuses, stock options, salary deferrals and special benefits-will complete the course.

Prerequisite: HRM 532 (formerly CES 526).

3 credits, Letter graded (A, A-, B+, etc.)

**MBA 527: Women in the Workplace**

This course addresses the economic and social struggle of women to achieve workplace equality. It includes an examination of their labor force participation; the remuneration of women; segregated employment patterns; special problems of women in professional, managerial, and scientific disciplines; analysis of the corporate environment and the role of affirmative action in removing formal and informal barriers to progress. It investigates the campaign for comparable worth; alternative definitions of success; women's contribution to the world of work; the glass ceiling and the mommy track; work-family issues; child care; sexual harassment; and women as managers. The course will feature case analysis and guest speakers from different organizations.

This course is offered as both CES 517 and MBA 527.

3 credits, Letter graded (A, A-, B+, etc.)

**MBA 530: Employee Dispute Resolution and Conflict Management**

The methods and procedures for reaching negotiated agreements. Topics include reducing conflict and confrontation between contending parties, analysis of the techniques of win-lose and win-win negotiation, and mediation. Students are expected to participate in a series of workshop activities and simulated cases to reveal how negotiation and mediation are applied to resolving difficulties in business
management, labor relations, international and domestic affairs, patient/doctor/hospital relations, and other areas where negotiation and mediation play a significant role in modern life.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 531: New Developments in Human Resource Administration
This is an advanced course, designed to examine new developments and professional concerns in human resource administration. The course focuses on such topics as productivity in the American workplace; developing union/management cooperation for productivity; methods of training in the workplace; impact of the computer revolution on the personnel field; and specialized personnel needs of the new workforce in a high-tech and service economy.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 531: New Developments in Human Resource Management
This is an advanced course, designed to examine new developments and professional concerns in human resource management. The course focuses on such topics as productivity in the American workplace; developing union/management cooperation for productivity; methods of training in the workplace; impact of the computer revolution on the personnel field; and specialized personnel needs of the new workforce in a high-tech and service economy.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 532: Foundations of Human Resources
This required course explores the basic elements of personnel administration that includes an overview of human resource functions; recruitment, selection, staffing, and placement; job classification and wage and benefit systems; employee supervision, performance management, workplace health, safety and security, counseling, discipline, and grievance. The legal framework of human resource administration, workplace diversity, and approaches specific to union and nonunion environments is also covered. This course should be taken in your first semester (formerly CES 515).

3 credits, Letter graded (A, A-, B+, etc.)

MBA 533: Employee Relations and Labor Management
The focal point of this foundation course is the historical development of labor unions in the United States, the evolution of the legal framework governing labor relations today, and the major elements of collective bargaining and dispute resolution techniques used in the private and public sectors. A discussion of the future of organized labor concludes the course. This course is offered as both HRM 533 and MBA 533 (formerly CES 516).

3 credits, Letter graded (A, A-, B+, etc.)

MBA 534: Contemporary Issues in Employee Relations
This course covers collective bargaining in America: areas of union growth, stability, and decline. Examination of current labor-management agreements in the key areas of wages, productivity, retirement and health plans, employee security, and career advancement will be explored. The chief problems emerging in current negotiations in both the private and public sectors will be examined. This course is offered as both CES 518 and MBA 553.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 537: Employee Learning and Professional/Career Development
This course provides an overview of employee learning methods, and includes training design, development, and evaluation procedures in organizations. Emphasis is placed on how to perform a needs analysis, how to select the latest training technologies, and how to apply methodologies to maximize adult learning as well as improve upon organizational development. In addition, employee development strategies are reviewed, i.e., training generalist managers and specialists, how to foster an atmosphere conducive to continuous learning, and how to reward supervisors for encouraging and supporting employee development (formerly Training and Development).

3 credits, Letter graded (A, A-, B+, etc.)

MBA 538: Organizational Development and Change Management
This course will acquaint students with types of organizational change and the roles of human resources managers as change agents and internal consultants. Cases, group exercises, and class discussions are used to examine change methods, employees' reactions to change, facilitation techniques, and evaluation methods. Roles of leaders, managers, employees, and human resource professionals are considered. Targets of change include job designs, interpersonal relationships, downsizing/rightsizing and organizational structures. Quality improvement, employee involvement, and professional development are studied as examples of change strategies. Students learn how to help their co-workers cope, as well as how to become trusted business advisors within the organization. This course is offered as both HRM 538 and MBA 538 (formerly CES 538). Prerequisite: MBA 532/HRM 532.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 543: Quantitative Methods in Management
This course is a rapid introduction to the application of modern mathematical concepts and techniques in management science. Algebraic operations, mathematical functions and their graphical representation, and model formulation are reviewed. Topics covered include the following: mathematics of interest, annuity, and mortgage; algebraic and graphic methods of linear programming; PERT, CPM, and other network models; and inventory theory. Simple management-oriented examples are used to introduce mathematical formulations and extensions to more general problems. The computer laboratory is used to give students experience with PC software packages that solve problems in all course topics. Interpretation of computer outputs is also stressed.

Prerequisite: MAT 123 or equivalent Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 548: Fundamentals of the Bioscience Industry
A 4-module course set up to provide students with a comprehensive introduction to the complexities of the bioscience business environment.

Prerequisite: Must be either a BME or MBA graduate student (West Campus). All other students must obtain permission from the instructor.

Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 553: Simulation and Modeling
A comprehensive course in formulation, implementation, and application of simulation models. Topics include data structures, simulation languages, statistical analysis, pseudo-random number generation, and design of simulation experiments. Students apply simulation modeling methods to problems of their own design. This course is offered as CSE 529, AMS 553 and MBA 553.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 557: Introduction to Professional Consulting
The Introduction to Professional Consulting course covers the complete process of business consulting, from developing business proposals and mobilizing consulting teams,
MBA 560: Design and Analysis of Management Information Systems

An overview of information systems and the system development life cycle. Emphasis is on tools and techniques that the programmer or analyst can use to document information systems. Classical and structured tools for describing data flow, data structure, process flow, file design, input and output design, and program specifications will be presented. Object-oriented techniques will be introduced. The course will survey other important skills for the systems analyst such as fact-finding, communications, project management, and cost-benefit analysis.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 561: Expert Systems for Management

An introductory course that provides a basic understanding of the concepts and techniques needed to analyze, design, and manage the knowledge of human experts in organizations. In addition, students will learn the role of the knowledge architect in different industries and the management issues related to the growing integration of computers in the support of decision-making.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 563: Business Ethics through Film: Thinking, Acting, Managing

Using real world business cases, and fictional scenarios from films exemplifying behavior in challenging social and business situations, students will engage in critical thinking, evaluation of moral standards, and display of various ethical positions pertaining to contemporary society and management of business operations. A simulated situation as presented in a film and supported by research from the humanities, will add to experiential learning, emphasized in contemporary business education.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 566: Business Law

This course provides an understanding of the nature of law and its role in business and surveys some of the regulatory issues faced by businesses. The law of business contracts will be examined in depth. Other topics include property rights, bailments, and agency concepts, business organizations, securities law and regulation, and laws and regulations impacting technology development. This course requires case analysis, problem solving, development of critical thinking skills, and oral and written communication.

Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 568: Technology Commercialization in The Life Sciences

Commercializing life science technologies requires a significant amount of strategic planning to address the multitude of issues. Our goal is to identify and understand the issues faced by early stage life science companies from technology assessment and financing through successful commercialization. Emphasis will be placed on commercialization strategies implemented by early life companies to mitigate the risks associated with these issues. Topics covered will include competitive analysis, intellectual property, legal structure, technology valuation, equity financing and exit strategies for life science companies.

Fall, 3 credits, Letter graded (A, A-, B+, etc.) May be repeated for credit.

MBA 570: Entrepreneurship

This course helps the student develop a business plan for his or her own business idea or a plan for an entrepreneur. With the support of visiting practitioners, students take a business idea through all the planning steps. A business plan suitable for presentation to potential investors will be written and presented orally at the end of the class.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 571: Social Entrepreneurship

Students explore the concept of social entrepreneurship including motivation and skills for advocacy, entrepreneurship, and leadership. Topics include forms of social entrepreneurship (private, public, and not-for-profit), venture capital and fund raising, market analysis, marketing, communications, human resources and human relations, including negotiation and conflict resolution methods. Students will explore models of corporate social responsibility, university service to the community, and grass-roots ventures spawned by perceived need and the will to make a difference. Students work in teams to develop a strategic business plan for their own venture and present their proposals to the class.

Offered

Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 572: Business Plan Project I

Students will team with a group from engineering to develop a business plan for the engineers’ senior design project. Business students will create and monitor a project plan and perform market research for the engineering project, provide input to the design phase to maximize market satisfaction and develop a marketing plan. Students will interface with resources outside the University involved in market research.

Prerequisites: G2 standing with GPA of 3.0 or higher, and permission of the instructor

Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 573: Business Plan Project II

Building on the marketing plan developed in MBA 572, students will prepare a detailed operations and finance plan. The project plan developed in the Fall will be used to monitor progress of the team, including both Engineering and Business students’ activities. Final project will consist of a full written and oral presentation of the business plan. Students will coordinate efforts with resources outside the University including interface with outside sources of production material.

Prerequisites: G2 standing with GPA of 3.0 or higher, and permission of the instructor

Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 574: Project Management

This course will explore the theory and practice of managing a project. We will examine the various tools that are available to monitor and measure managerial tasks and to define common business processes. Every aspect of business entails the execution of a series of defined tasks and the associated allocation of corporate resources. From developing new products to implementing customer loyalty programs, managers must understand business processes including their associated tasks, inter-relationships and transformations. Project management involves three primary activities: defining manageable tasks, mapping their logical flow, and creating an implementation process. In the course, we will explore ways to manage these functions successfully to increase the probability of achieving desired results. We will use the latest software tools including: MS Project, MS Visio, @Risk
MBA 582: Capital Markets and Portfolio Theory
Development of capital markets and portfolio theory in both continuous time and multi-period settings. Utility theory and its application to the determination of optimal consumption and investment policies. Asymptotic growth under conditions of uncertainty. Applications to problems in strategic asset allocation over finite horizons and to problems in public finance. Whenever practical, examples will use real market data. Numerical exercises and projects in a high-level programming environment will also be assigned.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 583: Bayesian Methods in Finance
The course explores in depth the fundamentals of the Bayesian

3 credits, Letter graded (A, A-, B+, etc.)

MBA 585: Legal Environment of Business
Explores competing interests of buyers and sellers, creditors and debtors, suppliers and consumers. Studies Uniform Commercial Code from initiation of a sales contract through financing of transactions, examines the rights of debtors and creditors in bankruptcy, and introduces basic concepts of law, ethics, corporate social responsibility and regulation in the areas of securities, environmental protection, employment, and antitrust.

Prerequisites: MBA 562, MBA 590
Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 586: Virtual Communications and Meetings
Analyzes the growth of and interaction among wireless markets. These markets include devices and services for wide area broadband networks and 802.11b wireless local area networks. Growth factors include business strategies executed by major firms and startups, and roles played by government regulations and community groups in development and delivery of network technology. Student projects for clients or one's own startup investigate wireless

strategies in consumer, home, commercial, educational or health care markets.

Prerequisites: MBA 517, MGT 571, MGT 580.
Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 587: Decision Support Systems
An advanced course focusing on the interrelationships among management information systems, statistics and management science. Both model-driven and date-driven decision support systems will be considered. Students will identify an appropriate business application, select suitable management science and statistical methodologies, build the required information system, and demonstrate how their decision support system addresses the stated management problem.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 588: Database Management
Database processing is the foundation upon which all current applications rely and represent the repositories of business intelligence that play a crucial role in the strategic success or failure of a corporation. Even though they vary in size, complexity and organizational scope, there is an underlying common database engine that can be used to manipulate and analyze the stored information. The purpose of this course is to introduce the business professional to the fundamental concepts of database creation, design, application integration, maintenance, management and subsequent analysis.

3 credits, Letter graded (A, A-, B+, etc.)

MBA 589: Operations Management
A managerial approach to the concepts, issues and techniques used to convert an organization’s resources into products and services. Topics include strategic decisions for planning products, processes, and technologies, operating decisions for planning production to meet demand, and controlling decisions for planning and controlling operations through teamwork and Total Quality Management (TQM). Operational problems in producing goods and services are reviewed. This course is offered as both MBA 589 and EMP 506.

Spring, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 592: Organizational Behavior
An approach to understanding the behavior of individuals in organizations is developed, with emphasis on implications for effective management. This approach is used to analyze decision problems encountered in managing

human resources. Topics include individual and group decision-making skills, recruitment and selection, employee ability, motivation and incentive systems, job satisfaction, performance assessment and management, retention, training, and employee development.

Fall, 3 credits, Letter graded (A, A-, B+, etc.)

MBA 593: Special Topics in Human Resource Management
An experimental elective course offered on a one-time basis. Courses offered under this course focus on specialized topics in human resource management. Consult department for current topic(s).

3 credits, Letter graded (A, A-, B+, etc.)
May be repeated 5 times FOR credit.

MBA 595: Individual Directed Research in Business
Designed to accommodate independent research projects on an individual basis with faculty guidance.

Fall and Spring, 1-6 credits, Letter graded (A, A-, B+, etc.)
May be repeated for credit.

MBA 599: Internship Practicum
Designed to accommodate College of Business MBA graduate students working on their internship project requirement while under supervision of an advisor.

Fall, Spring and Summer, 0-1 credits, S/U grading
May be repeated for credit.

MBA 800: Summer Research
May be repeated for credit.