

# Master of Business Administration

## Course Descriptions

### 39 Credit Hours

#### Core Requirements

##### MGM 5500-Managerial Accounting

This graduate course studies the financial and economic principles and techniques of decision making. The role of decision criteria based on generally accepted accounting principles is explained in detail. The student acquires the basic information needed by a manager to have control of the firm and achieve his objectives in an efficient manner. (3 credits)

##### MGM 5700-Probability & Statistical Methods

The course explains various probability and statistical methods to sample, measure dispersion, skewness, and probability distributions. Testing hypothesis, analysis of variance, linear regression, correlation, multivariable analysis, and time series analysis are introduced. Case studies of quality control and engineering decisions are assigned and discussed. (3 credits)

##### MGM 6070-Managing Human Resources

Principles and methodology to manage Human Resources in scientific and technical enterprises. Techniques for hiring, benefits, incentives, promotion, retention, development, etc. are discussed, emphasizing the human dimension. Techniques for handling complaints, insubordination, and violations of regulations are introduced. (3 credits)

##### MGM 6560-Management of Information Systems

Information systems designed to support management in the areas of finance, manufacturing, marketing databases, and data communication are introduced. (3 credits)

##### MGM 6620-Managerial Finance

Financial concepts encountered in engineering situations are introduced based on the fact that they are an integral part of planning, organizing, directing, and controlling activities. The financial cycle of budgeting, accounting, controlling and auditing is discussed. Prerequisite: MGM 5500. (3 credits)

##### MGM 6690-Decision Making Techniques

This is a course where the scientific management methods for making decisions and solving administrative problems are explored. Bayesian analysis, linear programming, and analysis of alternatives are discussed. Strategic analysis, projections, forecasting, PERT, CPM, and other management techniques are introduced. Prerequisite: MGM 5700. (3 credits)

#### Track Requirements

##### MBA 5600-Managerial Economics

Fundamentals of supply and demand, analysis of consumer behavior, analysis of production cost, main structures of the market place, brief introduction to linear programming of the economic systems, and development of economic concepts and macroeconomics. (3 credits)

##### MBA 6900-Strategic Management

This course will be studied in the context of cases. Mergers, acquisitions, international boundaries and global perspectives on a broad range of issues are explored. The issues are addressed from the perspective of firms ranging in size from small companies to multinationals. Prerequisite: (Completion of MBA Core Courses). (3 credits)

##### MBA 5700-Managerial Marketing

The study of the strategic processes of creating time and place utilities. It deals with how to identify customer's needs, change those needs to wants, and sustain the desire of the particular product (service or good). How this process can be applied to profit and non-profit organizations. (3 credits)

##### MBA 6830-Operations Management

This is a graduate course in manufacturing techniques. In this course the student will become familiar with the tools, techniques, and types of manufacturing processes and with production planning, scheduling, and control. Topics such as Inventory Control, Just-In-Time, TQM, and World Class Manufacturing will be discussed. Also, introduction to manufacturing systems such as factory layout, robotics, and manufacturing cells will be included. (3 credits)

## Emphasis (Choose One)

### Accounting

#### ACC 6500-Accounting Information Systems

An introduction to accounting information systems (AIS) and the relationship of AIS to Management Information Systems. Includes analysis of hardware and software, system design and the systems development life cycle (SDLC) approach, database management systems (DBMS), internal control, flowcharting, data flow diagrams and their application to the accounting cycles (revenue, expenditure, conversion). Microsoft Access will be used to develop a basic system. Prerequisites: ACC- 3330/3340 & MGM- 6560 (3 credits)

#### ACC 6600-Advanced Auditing

A study of modern auditing techniques. Includes tools and techniques of risk assessment, the audit risk model and the audit plan. The implications and auditing of information systems and technology, GAAS and PCAOB standards, ethics and the Sarbanes-Oxley requirements. Prerequisites: ACC- 3330/3340 & ACC- 4320 (3 credits)

#### ACC 6800-Advanced Financial Accounting

A study of theory and techniques preparing consolidated financial statements, partnerships, foreign subsidiary accounting and non-profit accounting. Prerequisites: ACC- 3330/3340 (3 credits)

### Computer Information System

#### CIS 6605 - Data Base Management Systems

This course presents methodologies and principles of database design. The focus is on database architectures, logical modeling, the relational model, and database design process and techniques. Topics covered include the entity relationship model, the relational model, relational operators, integrity constraints, the SQL language, and data normalization. Also included are topics in distributed databases, objects-oriented databases, and security issues. (3 credits)

#### CIS 6615 - Software Engineering for Business

Basic concepts of software requirements generation and analysis, software design, structured design methodologies, data flow design, and programming of an engineering system and testing. (3 credits)

#### CIS 6705 - Data Communications and Computer Networks

Recent advances and new applications in the expanding field of computer networks and distributed systems are examined. The technical fundamentals, architecture, and design of computer networks and distributed systems are described. Strategies, tools, and techniques for network planning, implementation, management, maintenance, and security are delineated. Topics include ISDN, and ATM, the OSI model, transmission media, network operating systems, topologies, configuration protocols, and performance characteristics. Trends in standardization, internetworking, downsizing, and the development of local-networks (LANs), wide-area networks (WANs), metropolitan-area networks (MANs), and enterprise-wide networks are explored. (3 credits)

### General Business

This emphasis allows the students to design their own program by selecting courses from any of the other nine emphasis, to match their particular interests. A total of 9 credits must be taken.

## Healthcare Management

### HCM 6500-Healthcare Management I

This course provides an overview of the history, structure and current perspectives of the US healthcare system. The course examines topics such as: cost, financing, access to healthcare, information management systems, public health and systems for delivery of healthcare. (3 credits)

### HCM 6600-Healthcare Management II

This course offers a global perspective on how the United States and other countries address issues of health and healthcare. The course reviews organizational principles, practices and the management of health service organizations. Prerequisite: HCM 6500. (3 credits)

### HCM 6800-Healthcare Ethics

This course discusses ethical issues in the healthcare field. Cases and a variety of topics related to the healthcare field are discussed. (3 credits)

## Management of International Enterprises

### MIE 7010-International Business Operations

This course examines the global environment, and reasons for the globalization of an organization. Michael Porter's diamond theory of international competitiveness is discussed, as well as the latest work on the theory of multinational enterprises. Prerequisite: Completion of MBA Core Requisites. (3 credits)

### MIE 7020-International Business Strategies

This course examines international business strategies using an integrated approach. Functional international strategies are explained in the context of actions taken by global companies in a variety of settings. Foreign exchange and multinational strategies are covered. Prerequisite: MIE 7010. (3 credits)

### MIE 7110-International Finance

Financial concepts encountered in engineering situations are discussed. Auditing, budgeting, funding, evaluation of alternatives and control of expenses are discussed. Prerequisite: MGM 6620. (3 credits)

## Project Management

### PJM 6500- Project Management: Initiation, Implementation and Termination

This course introduces project management fundamentals and principles from the perspective of a manager, who must organize, plan, implement and control non-routine activities to achieve schedule, budget and performance objectives. Topics include project selection, organization and charters, planning, conflict and negotiation, budgeting, cost estimation, scheduling, monitoring, controlling, auditing, and termination. (3 credits)

### PJM 6600-Project Risk Management

This course addresses the important elements of risk management. The coursework also explores the risk management processes outlined in the Project Management Body of Knowledge (PMBOK) Guide. Topics include risk management planning, risk identification, risk analysis, development of appropriate responses, and risk monitoring and control. (3 credits)

### PJM 6800-Project Procurement & Solicitation

This course presents the major processes through which goods and services are acquired in the project management environment. Topics include planning, solicitation, source selection, contract administration, and contract closeout. (3 credits)