

# Management Information Systems

#### WHAT IS MIS?

Management Information Systems (MIS) refers to a computer-based system that provides managers with the tools to organize, evaluate and efficiently manage departments within an organization. In order to provide past, present and predicted information, a management information system (MIS) can include software that helps in decision making, data resources such as databases, the hardware resources of a system, decision support systems, people management and project management applications, and any computerized processes that enable the department to run efficiently. The role of the MIS manager typically is to analyzes business problems and then designs and maintains computer applications to solve the organization's problems.

#### MIS ACTIVITIES:

Systems Analysis - Systems Design - problem solving using technology - programming - Website Development - Project Planning - Databases and Data Entry - Network and Technical Analysis - Requirements and Information Collection.

#### WHERE TO WORK?

MIS graduates can work in:

- -Government.
- -Companies in the Private Sector.
- -Education. (schools colleges)
- -Wholesale/Retail. (clothing supermarkets)
- -Financial Services. (banking insurance)
- -Healthcare. (hospitals -dentists)
- -Personal Services. (laundry cleaning
- beauty)
- -Research and Development Facilities.
- -Strategy and Planning Facilities.

#### MIS JOB TITLES:

- -Network Administrator.
- -Network Architect.
- -IT Consultant/Analyst.
- -Business Analyst.
- -Systems Analyst.
- -Database Administrator.
- -Web Developer.
- -Documentation & Information Analyst.
- -Associate Project Manager.
- -Web Content Publisher.
- -Systems Engineer.
- -Software Developer.
- -IT Administrator.
- -Technology Support Analyst.
- -Implementation Consultant.
- -Technical Support.



One last note: If you enjoy technology like iPhones, iPods, and Instagram, have an interest in technology and the desire to use technology to improve people's lives, then you have what it takes to major in MIS!



## Management Information System (MIS) Major Sheet

#### (English Version)

Required courses/subjects for the MIS major				
1013230	Business Problem Solving and Programming			
1013331	Information System Development Methodologies			
1013336	Data Communication and Networks			
1013350	Advanced Business Applications			
1013433	Business Database Systems			
1013472	Project In IS			

Elective Courses/Subjects for the MIS Major (A student must select only 3 courses from the available courses below)				
1013351	Introduction To Electronic Commerce			
1013352	Management Support System			
1013353	Integrated Information System			
1013354	IS Project Management			
1013450	Global Issues In Electronic Commerce			
1013451	Social Issues In IS			
1013480	Internship In Information Systems			
1013492	Special Topics In IS			

Minor Courses/Subjects for the MIS Major		
1011430 Internet Marketing		
1013316	Supply Chain Management	



## صحيفه تخرج تخصص نظم المعلومات

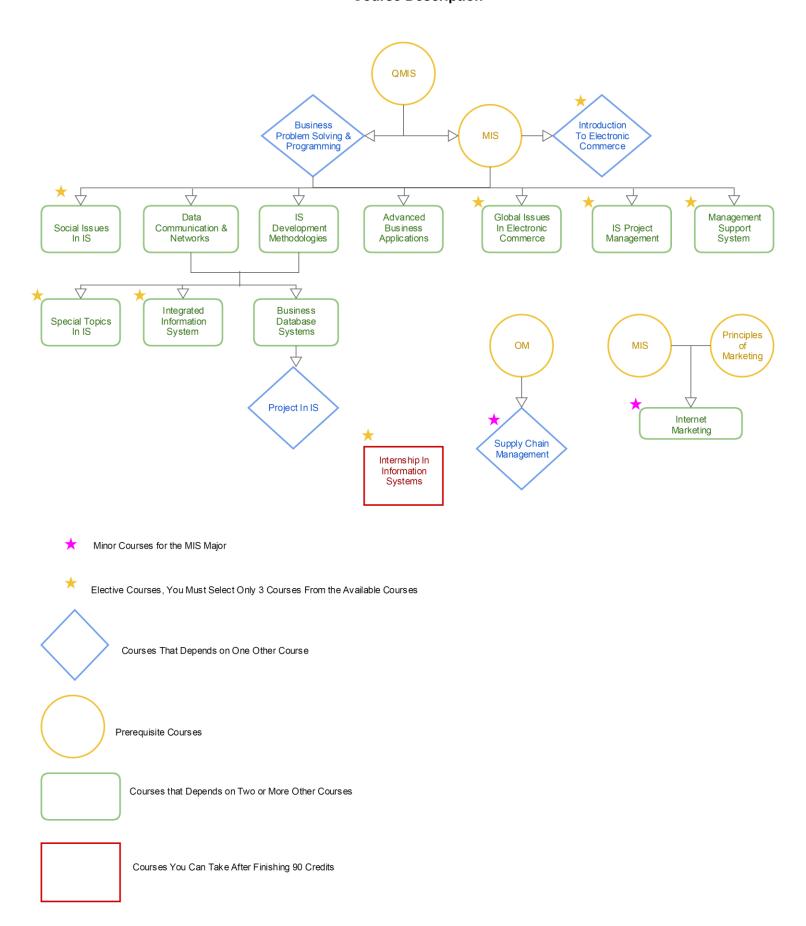
#### (Arabic Version)

مقررات اجبارية				
1013230	حل مشكلات الاعمال التجارية و البرمجة			
1013331	تحليل و تصميم النظم			
1013336	الشبكات و اتصالات البيانات			
1013350	تطبيقات الحاسب الآلي المتقدمة في الاعمال التجارية			
1013433	نظم قواعد بيانات الاعمال التجارية			
1013472	مشروع في نظم المعلومات			

ية	مقررات اختيارية يختار الطالب ٣ مقررات من المقررات التالية				
1013351	مقدمة في التجارة الالكترونية				
1013352	نظم دعم الادارة				
1013353	نظم المعلومات المتكاملة				
1013354	ادارة المشاريع في نظم المعلومات				
1013450	القضايا العالمية في التجارة الالكترونية				
1013451	القضايا الاجتماعية في نظم المعلومات				
1013480	تدريب ميداني في نظم المعلومات				
1013492	مواضيع خاصة في نظم المعلومات				

مقررات مساندة للتخصص			
التسويق عبر الانترنت التسويق عبر الانترنت			
1013316	ادارة سلسلة الامدادات		

# Management Information System (MIS) Major Course Description





### **Quantitative Methods and Information Systems Course Description**

Course ID	Title	Credits	Course Description
098	Basic Algebra	3	This course provides an introductory level of algebra and pre-calculus. Topics include basic algebra, equations, inequalities, solving linear, quadratic equation, functions, graphs, exponential and logarithmic functions, with application to business.
110	Business Math	3	The course covers basic unvaried calculus with applications in business. Topics include an introduction to linear algebra, limits, differentiation with application and integration.
120	Business Statistics I	3	The course provides an introduction to statistical concepts and techniques with application in business. Topics include graphical and tabular presentation of data, introduction to MINITAB, measure of center tendency and dispersion, introduction to probability, random variables, discrete and continuous distributions and sampling distribution.
121	Business Statistics [Strictly for non- business students]	3	The course provides an introduction to statistical concepts and techniques with application in business. Topics include graphical and tabular presentation of data, introduction to MINITAB, measure of center tendency and dispersion, introduction to probability, random variables, discrete and continuous distributions and sampling distribution.

130	Computer-Based Applications in Business	3	This course provides students with an exposure to a suite of software tools useful for knowledge workers (e.g., spreadsheets, databases, presentation graphics, database retrieval, statistics, word processing, and Internet and electronic mail). It also provides students with a basic information technology background in order to understand tradeoffs in computer architecture for effective use in a business environment.
205	Introduction to Management Science	3	Introduces the student to the quantitative business analysis using several mathematical models, such as linear programming and its applications to business problems, special models such as transportation, transshipment, assignment and project scheduling using CPM/PERT techniques.
210	Operations Management	3	Provides the knowledge and skills required to design, operate and control the production systems in services and manufacturing organizations. Topics include product selection & design, process selection, capacity planning, location decisions and facility layout, demand forecasting, inventory management, and an introduction to quality & productivity management.
220	Business Statistics II	3	Provides a comprehensive coverage for inferential statistics that are needed for analyzing business data. Topics include confidence intervals, hypothesis testing, correlation, simple and multiple linear regression, introduction to time series and index numbers.

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230	Business Problem Solving & Programming	3	This course provides students with hands-on experience in the design and development of computer-based solutions to business problems. In developing such business applications, students will have exposure to the basics of programming concepts and algorithms using an appropriate procedural language.
240	Introduction to Business Information Systems (IS)	3	This course provides students with an understanding of contemporary organizational systems and processes, and the role of information technology and systems in support of such processes. The Focus is on topics such as individual and group decision making, information needs and systems, strategic use of IS, information and knowledge management, IT trends, intraorganizational and inter-organizational systems, Ethical and global issues, and IS planning and control.
310	Operations & Service Management	3	Offers an advanced understanding of the operations management in service and manufacturing organizations. Topics include operations strategy, performance measurement and improvement, demand forecasting, capacity planning, aggregate production planning, process scheduling, and operations technology.
316	Supply-Chain Management	3	An integrated approach of supply-chain, material requirement planning, just-in-time systems, material flow systems, purchasing and suppliers strategy, warehousing management, transportation and distribution systems, inventory planning and control, and e-business in supply chain management.

318	Technology Management	3	Provides a foundation for managing technology in a competitive environment with global implications. Topics include, development of technology policy and strategy, management and implementation of new technologies, technology sourcing, technology development and life cycle, economic and financial analysis of technology, the innovation process and its impact on organization, and technology transfer mechanisms.
320	Applied Modeling & Forecasting	3	Intends to develop skills to use modeling techniques through statistical packages. In addition to teaching the basic concepts and methodology of data modeling, the course stresses its techniques as a tool in solving business problems in prediction and forecasting. Major topics include simple and multiple linear regression, inference of regression analysis, modeling of qualitative data, introduction to time series analysis, exponential smoothing, trends analysis and seasonal analysis.
331	Systems Analysis & Design	3	This course introduces students to the issues, processes and methods of systems analysis, design and implementation in an organizational context. Emphasis is on providing students with an understanding of the system development life cycle, on developing skills in business problems identification, selection and application of systems analysis, design and implementation methods and tools, and on enhancing effective communication with end users.

332	Data Communications and Networks	3	This course enables students to learn and apply knowledge pertinent to the design and implementation of computer networks as integral part of the information systems infrastructure in an organization. Emphasis is on business data communications and networking requirements, including communications hardware and software, analysis and design of networking applications, network types, topologies and protocols, and network management.
350	Advanced Business Applications	3	This course provides students with advanced hands-on experience in the development of business and Internet applications by using a state-of-the-art programming language, algorithms and concepts.
351	Introduction to Electronic Commerce	3	This course enables students to acquire a broad operational knowledge of B2C Electronic Commerce. Topics include: attracting customers to an EC web site, informing customers about products and services offered, supporting customers via the web site, personalizing the look and feel of the web site, etc.
352	Management Support Systems	3	This course enables students to acquire a broad understanding of management support systems, their components, business applications, and evaluation.
353	Integrated Information Systems	3	This course enables students to acquire a broad understanding of integrated information systems in a business environment. Topics include supply chain management, enterprise-wide systems, ERP, etc.

354	IS Project Management	3	Addresses the concepts, principles, and techniques of large-scale IS project management including project organization; project leadership; project budgeting; project cost, time, and quality management; etc.
410	Quality & Productivity Management	3	Provides the tools and skills to enhance the competitive advantages of business organizations in quality and productivity. Topics include product and service quality measurement, total quality management (TQM), statistical process control, control chats for attributes and variables, process-capability analysis, acceptance sampling, quality function deployment, Tagushi method, quality certification (ISO 9000 standards), productivity management cycle, and productivity measurement, analysis and improvement.
412	Applied Topics in Service Operations Management	3	Provides application of operations management concepts and techniques in service organizations. Topics include the principles of design, operating and control of service delivery systems such as distribution organizations, restaurants, hospitals and government agencies.  Lectures, cases, assignments focus on such topics as delivery system design, client interface, demand forecasting, performance measurement and improvements, capacity management, and quality control.
415	Project Management & Scheduling	3	Addresses the concepts, principles and techniques of project management. Topics include project organization, project planning, project scheduling (Gantt charts, CPM, PERT), project crashing, project budgeting, project material requirements planning, and project evaluation (cost, time and quality).

420	Business Data Analysis	3	Provides applied skills and tools to analyze business data through the use of statistical packages and business case studies. Topics may include nonparametric techniques, further topics in time series, multivariate analysis of variance, canonical correlations, principles components and factor
425	Simulation and analysis of Business Systems	3	analysis, with applications in business.  Simulation and analysis of Business Systems.
428	Process Management and Continuous Improvement	3	This course is designed to introduce senior students to the effective process design and improvement in service, government, and manufacturing organization. Topics include, the systematic approach for designing processes, process analysis and documentation in both service and manufacturing organizations, theory and practice of continues improvement, tools and techniques.
433	Business DataBase Systems	3	This course covers information systems design and implementation within a database management system environment. Students will demonstrate their mastery of analysis and design processes acquired in earlier courses by designing and constructing databases to meet the information needs of users. Topics covered include data models and modeling techniques, information engineering, data quality and security, and client/server environment.

450	Global Issues in Electronic Commerce	3	This course enables students to acquire a broad understanding of global issues in E-Commerce management and technology. Topics include the internet infrastructure, strategic aspects of E-Commerce, strategy formulation and implementation, public policy issues and capital infrastructure from a managerial perspective, etc.
451	Social Issues in Information Systems	3	This course enables students to acquire a broad understanding of social issues in the information age. Topics include security, privacy, legal, and ethical issues.
472	Project in Information Systems	3	This is a capstone course that helps teams of students integrate and apply their business and information systems related knowledge and skills acquired in earlier courses to cover the entire life cycle of activities involved in designing, building and implementing an information system to solve real business problems for external clients (profit or nonprofit organizations in the community). Topics covered include project management issues and techniques, design of user interface, system implementation issues, system documentation and user manuals, and user training.

473	Project in Management Science	3	This is a capstone course that helps teams of students integrate and apply their business and management science related knowledge and skills acquired in earlier course to cover the entire life cycle of activation in implementing the state-of-the-art management science technique to solve real world business problems for external clients (profit or nonprofit organizations in the community). Topics covered include design of field studies and sampling techniques, questionnaire design, sampling errors, statistical analysis through the use of statistical packages (e.g., SPSS, Splus), management science models building, calibration and analysis through the use of management science packages (e.g., LINDO, CPLEX, GAMS).
480	Internship in Information Systems	3	This course is designed to provide students with practical experience through temporary employment in appropriate organizations operating in Kuwait. The temporary employment plan will be jointly set by the student(s) academic advisor and the host organization(s). The progress of the students will be supervised by the faculty member on a weekly basis. At the end of the training period, each student is asked to submit a final report describing his/her learning experience and the skills gained. The temporary employment should be at least 10 weeks long with 10 hours per week.

481	Internship in Management Science	3	This course is designed to provide students with practical experience through temporary employment in appropriate organizations operating in Kuwait. The temporary employment plan will be jointly set by the student(s) academic advisor and the host organization(s). The progress of the students will be supervised by the faculty member on a weekly basis. At the end of the training period, each student is asked to submit a final report describing his/her learning experience and the skills gained. The temporary employment should be at least 10 weeks long with 10 hours per week.
492	Special Topics in Information Systems	3	This course covers current issues and topics not usually covered by the other courses.
493	Special Topics in Management Science	3	This course covers current issues and topics in management science not usually covered by other courses.