Course Description
Bachelor in Management Information Systems

1605215   **Principles of Management Information Systems**   **(3 credit hours)**
Prerequisite: (None)

Introducing the essentials of Management Information Systems (MIS), providing an overview of Information Systems (ISs) and their applications in business organizations, managing the information resource in organizations, the use of Information Systems (ISs), and technical issues are blended with managerial concepts, provide enough knowledge to be able to feel at ease when hearing or using some of the technical jargon.

1605311   **IT Tools for Business Applications**   **(3 credit hours)**

Prerequisite: (None)

The essentials of business computing, a brief history about the basics of computer hardware and the situation prevailing in Jordanian industry and commerce, computer software, operating systems, programming languages and particular application packages, 'hands-on' application work will concentrate on spreadsheets, databases, electronic mail, word processing and presentation graphics application as business tools, the management of business computing including organizational aspects, system development, people and security.

1605312   **Managing the Information resource**   **(3 credit hours)**

Prerequisite: (None)

The impact of Information Technology (IT) on organizations in general, and on new organization structures and control systems that are enabled by IT, IT role in managing the organization transformation process, inter-organizational systems and Electronic Data Interchange (EDI), IT role in changing organization boundaries and market practice, management and strategic issues raised by the introduction of new Information Technologies (ITs), IT and managerial effectiveness, emerging Information Technologies (ITs) such as virtual reality and multimedia, assessing the potential strategic uses of IT, organization and leadership issues like the role of information officers, IT and global enterprises and future technologies, applications, and organizations.

1605313   **Office Automation Systems**   **(3 credit hours)**

Prerequisite: (None)

General concepts of the office and office management systems, designing and organizing the office works, a concentration on the general application of automation concepts to the modern workplace, automation and the office works modeling, the application of office automation tools and techniques in the computerized office, the communication and messaging systems, electronic meeting and managerial reporting systems, document and filling management systems, a practical use of the most available office automation applications, the important role of end user computing in commercial organizations.

1605321   **Business Software Development**   **(3 credit hours)**

Prerequisite: (1902102)

The basic concepts of algorithm development, programming concepts and the design and applications of data and file structures as well as the notion of problem solving in the context of computer programming for business, the basic concepts of Software Development, these include the S/W life cycle of analysis, design, coding, testing and maintenance, the development strategies of top-down design and Object-Oriented Programming (OOP), the coverage extends to include a practical programming languages and their features building on what has been acquired in computer skills courses.

1605322   **Database Management Systems**   **(3 credit hours)**

Prerequisite: (1605215)

The basic concepts of databases and their components, processing, analyzing, designing, using and implementing database systems, data structures, data models, modeling techniques and different models of databases, relational databases, introduction to Structured Query Language (SQL) and the application of Database Management Systems (DBMS) concepts to business problems, developing prototypes of a database system for management, the coverage extends to include usage of DBMS applications such as MS-ACCESS and ORACLE.

| 1605323 | **System Analysis and Design** | **(3 credit hours)** |

Prerequisite: (1605322)

Introduction to system analysis and design of business organizations, the analysis and conceptual design phases of the System Development Life Cycle (SDLC), system planning and project orientation, project management approach, providing an in-depth coverage of the requirement analysis including finding, process modeling, network modeling, project repositories and business process redesign, system analysis tools, the role of the system analyst, the basic foundations of conceptual design such as the feasibility analysis and architectural selection, system development and documentation, practical study of real life business cases are also covered.

| 1605331 | **Supply Chain Management and Logistics** | **(3 credit hours)** |

Prerequisite: (None)

An overview of the organization, management and control of an automated material flow processes, logistical strategies and relationships of procurement of goods between the organization and its suppliers, handling and warehousing and inventory control of goods, integrating forecasting system design, inventory management, distribution requirements planning, supply chain management, purchasing and supplier/vendor networks, logistics, transportation network and E-operations, integrated enterprise-wide computer-based systems and network optimization are studied to both production and service operations.

| 1605332 | **E-Business** | **(3 credit hours)** |

Prerequisite: (1604201)

Basic fundamental concepts of electronic business and commerce, overview of a practical use of Internet for commercial use, an emphasis on the navigation of the Internet as well as designing web work and publishing web pages on the Internet, the coverage also extends to e-retailing, e-stock trading, e-publishing and e-banking, problems surrounding the e-commerce including security, privacy, new business processes and cross border commerce.

1605333   **Human Resources Information Systems**   **(3 credit hours)**

Prerequisite: (None)

Introduction to the major themes that are relevant to modern Human Resources Information Systems (HRIS) applications, these themes include technical aspects, the use of actual HRIS software applications, systems configuration, developments and implementation, as well as to the roles played by human resources professionals and the integration of HRIS into the Human Resource Management function (HRM) and the other organization functions as a whole.

1605334   **Strategic Information Systems**   **(3 credit hours)**

Prerequisite: (None)

Introducing the necessity of Strategic Information Systems in providing organizations with a competitive advantage, the use of core strengths to best advantages, examine the traditional ways of improving corporate performance and directs the attention to the need for deploying Information Technology, tools of creating value that provides a competitive edge for the organization over its rivalries, IT utilization in business strategy planning, assessing the strategic and economic value of IT, the marginal analysis of strategic investments in Information Technology, strategic management of Information Technology investments, linking Information Systems application portfolios and the organizational strategy and performance.

1605435   **Production and Operations Information Systems**   **(3 credit hours)**

Prerequisite: (1601412)

Introducing the principles of Production and Operations Information Systems, the technology used and the integration concept, the role of Information Systems in the management of operations of all types in organizations, the automation of capacity planning, scheduling, materials management, inventory control, quality control and distribution, the coverage extends to actual hands-on experience with the use of computerized quantitative methods and the examination of their organizational implications.

1605436   **Marketing Information Systems**   **(3 credit hours)**

Prerequisite: (1604201)

Introducing the Marketing Information Systems concepts, showing how it is related to other Management Information Systems, elements and components of Marketing Information Systems, marketing research system, marketing intelligence system, types and resources of marketing information, the role of Marketing Information System in planning and controlling of marketing activities, its role in the marketing decision-making, the marketing Decision Support System concepts, role, components and its development phases, special emphasis on how marketing strategy concepts and theories can be applied to E-marketing operations.

1605437   **Financial Information Systems**   **(3 credit hours)**

Prerequisite: (1603201)

Explaining the need for financial information and their organizational applications as well as the nature of the required information as related to the prospective user, the focus is therefore on managerial and financial accounting as those FISs lie at the heart of virtually all financial administrations and used by commercial and non-profit organizations, the student is meant to understand the features and structure of those systems and the relevance of information technology especially the enterprise resource planning (ERP) software systems to the work of modern organizations, students will be asked to use relevant computer software applications.

1605441   **Business Data Communications and Networking**   **(3 credit hours)**

Prerequisite: (None)

Introducing the principles of Data Communications and Networking, the telecommunication systems and the different protocols and computer networks required to know by the business organizations, the foundations extend to coverage of communication concepts, transmission media, signal representation and modulation, packet switching and routing, network topology and architecture, network management and Internet protocols TCP/IP.

1605442   **Knowledge-Based Systems**   **(3 credit hours)**

Prerequisite: (None)

Introduces a broad coverage to the latest concepts of knowledge-based systems (KBS), demonstrates and overviews the technology needed for using such systems, an introduction into the application of Artificial Intelligence (AI) techniques in business, discusses different types of systems such as Decision Support Systems (DSS) and their variations as well as Expert Systems (ES) and explains their value-added contributions to the work of organizations, the coverage will extend to include major characteristics of KBSs, the knowledge acquisition and representation, inference techniques, Expert Systems development tools and Case-Based reasoning.

1605443   **Business Modeling and Simulation**   **(3 credit hours)**

Prerequisite: (1605323)

The conceptualization of business problems, the use of a diagrammatic model, the design and structuring of formal spreadsheet models as well as the validation, verification and documentation of models, solving real life business problems, using computer modeling and the exploration of different scenarios, using the what-if analysis and testing the sensitivity of model outputs.

1605451   **MIS Project**   **(3 credit hours)**

Prerequisite: (Departmental approval)

This is a supervised project by a department member. It is meant to be a field project involving advanced concepts and application to solving practical problems and providing insights for understanding the application of Management Information Systems in business. The student is expected to make a professional project presentation demonstrating the completion of the successful endeavor.

1605452   **Research Seminar in Management Information Systems**   **(3 credit hours)**

Prerequisite: (1605215)

The student learns the application of general system theory concepts and research methods in Management Information Systems. The coverage extends to discussing different methods and techniques for evaluating the role and impact of Information Systems in business and public enterprises. In addition, the course includes case discussions of Information Systems failures and success in real life. The student will be required to produce a research report about the use of IS/IT in an establishment.