Courses Descriptions for BS .c. MIS   Program

Main Major Courses (Bachelor Degree in Management Information System)

1. **Management Information Systems/ MIS211 (3 Crh.) pre. CS104+ BA108.**

    This is an introductory course that presents problems in business environment with their computer based solution. It focuses on systems, information systems concepts and technologies. Students will learn the most effective ways to use information systems. Topics include: information systems types, resources, computer and it applications, information systems key resources, gaining competitive advantage with IT, integrating collaborating environments, supply chain management, databases and data warehouses.

2. **Programming & Data Structures / MIS 213 (3 Cr.h.) pre CS104 (Computer Skills)**
   This course introduces the student to the concepts of structured programming together with Programming tools. It also introduces them to Data Structures types and the primitive operations associated with each type .Topics to be covered in this course are: Algorithms, Data C++Programming Language tools (Input Output, Selection ,Repletion, Matrixes) Data structures types (linked list, Stacks ,queues and tress), and the primitive operation associated with them and their uses.

3. **Information Systems Infrastructures /MIS240 (3 Cr.h.) pre MIS 231 (Programming & Data Structures).**

    This course introduces the students to the Information Technology infrastructure needed for using and implementing the information systems. Topics related to operating systems (structure, functionality, types, & Security), Computer Networks (Component, Protocols, and Applications), Cloud computing, and Data centers are to be covered in this course.

4. **Information Resources Management / MIS251 (3 Cr.h.) pre. MIS211. Management Information Systems.**

    The course aims to introduce to the student how the information resources are managed in a business corporate. The material covered in this course includes the impact of IT on Business, the IT strategy, the IT Governance, IT processes, I planning, the CIO and his roles in Business, and IT organization.

5. **Knowledge Based Management / MIS255 (3 Cr.h.) pre. MIS211 Management Information System.**

    This course Introduce to the students the concepts of Knowledge management and the development of knowledge-based systems (KBS). Topics covered: Knowledge management; concepts of knowledge and expert systems; developing a small scale KBS:

knowledge acquisition, Knowledge representation, knowledge reasoning, and knowledge validation; over viewing and demonstrating KBS technologies.

6. **Decision Support Systems / MIS 312 (3 Cr.h.) pre. MIS 211 Management Information Systems.**

The aim of this course is to explore the concepts of decision support systems and investigate the fundamental techniques associated with them to support decision- making process. It also develops an understanding of the methodologies, technologies, and modeling used in Decision Support Systems and Business Intelligence.

7. **Integrated Information System / MIS314 (3 Cr.h.) pre. MIS211. Management Information Systems.**

This course aims to develop knowledge and understanding of concepts of systems integration together with the information systems (Supply Chain Managements and Customer Relationship Management), Enterprise Resource Planning Systems (ERP) The students will learn about the characteristics, benefits, weaknesses and areas of application of all the mentioned systems. The course also introduces to the students the SAP/R/ R3 or BIPA ERP system as an example for ERP systems

8. **Information Systems Analysis / MIS321 (3 Cr.h.) pre. CS313 Database Systems 1**

This course introduces students to information systems analysis. The student will gain skills in Information Systems requirements analysis and logical system Specifications. The student will also learn several systematic approaches and tools for the analysis process management and techniques that will enable them to analyze systems in a team environment.

9. **Databases Systems / CS311 (3 Cr.h.) pre. MIS231 Programming and Data Structures.**

This course introduces topics that include the traditional files problems, Database systems concepts, Database systems evolution, Database types, entity, attributes, relationship, and relationship degree, Database architecture, Database modeling methods. Data definition and manipulation languages, SQL.

10. **Visual Programming / Cs332 (3 Cr.h.) pre. Structured Programming MIS 231**
This course aims to introduce to the students the concepts of Visual programming, its usage and elements. The student will learn how to program with Visual Basic programming language this includes User interface elements, such as menu, dialog boxes, text boxes, commands boxes, etc. Also the student will learn to program using loops and selections statement, and linking the of Visual Basic to access sheets and databases.

11. **Information Systems Security / MIS343 (3 Cr.h.) pre. MIS342 Network & Communication Systems.**

This course will cover a verity of topics to introduce the students to the main concepts of information system security include Security Mechanisms, Security Measures, Security services and develop skills in information and network security.

12. **Information System Auditing / MIS 356 (3 Cr.h.) pre. Management Information Systems MIS211.**

This course introduces the fundamental concepts of the information systems audit and control function. The main focus of this course is on understanding information controls, the types of controls and their impact on the organization, and how to manage and audit them. The concepts and techniques used in information technology audits will be presented. Students will learn the process of creating a control structure with goals and objectives, audit an information technology infrastructure against it, and establish a systematic remediation procedure for any inadequacies. The challenge of dealing with best practices, standards, and regulatory requirements governing information and controls is addressed.

13. **E-Business/ Mis 361 (3 Cr.h.) pre. MIS211 Management Information Systems.**

The student will be introduced to terms, electronics concepts, and the economic effects, structural constitution for electronic business systems, G2B, B2B, B2C, C2C, and any other emerging constitutions; databases solutions, paying techniques, information security issues, clients' relations, social and legal sequences clients' relationship and provision. Also students will be introduced to developing their own web pages using HTML to learn how to build electronic business sites on the internet network.

14. **Special Topics in Information Systems/ MIS363 (3 Cr.h.) pre. MIS211. Management Information Systems.**

This course focuses on a new development or application of technology related to information systems. The intention is to provide a rapid response to current trends, with topics and content changing with each offering. Examples of topics which might be offered include: soft systems, intellectual property, e-government, or some special aspect of one of these technology trends, and their implications for information system development and use.

15. **Information Systems Design and Implementation / MIS 422 (3 Cr.h.) pre. MIS 321 (Information Systems Infrastructures)**

This course introduces the students to how to design and implement information systems. The course includes the following topics: Information systems development review, converting new system specification to design, designing effective output, designing effective input, Database design, designing effective user interface (GUI, I/O FORM DESIGN,etc.), designing accurate data entry procedures, design documentation, coding, testing, getting user approval, user training and system implementation.

16. **Mobile Computing / MIS 445 (3 Cr.h.) pre. MIs 240 Information Systems Infrastructures**

This course introduces students to mobile computing; mobile computing platforms; wireless networks; architectures; security and management; mobile computing applications such as mobile messaging, mobile agents, and sensor applications

17. **Information Systems Ethics/ MIS (3 Cr.h.) pre. MIS 240 Information Systems Infrastructures.**

This course aims to introduce to students concepts of ethics related to information systems and their management, including fundamental concepts of ethics, ethical standards of information systems (IS) professionals and users, and ethical issues related to privacy, and computer and Internet crimes.

18. **IS Project Management / MIS 456 (3 Cr.h.) pre. Ba241 Quantitative Methods in Management E&MIS211 Management Information Systems.**

This course discusses the processes, methods, techniques and tools that organizations use to manage their information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course assumes that project management in the modern organization is a complex team based activity, where various types of technologies (including project management software as well as software to support group collaboration) are an inherent part of the project management process. This course also acknowledges that project management involves both the use of resources from within the firm, as well as contracted from outside the organization.

19. **Internship/ MIS462 (3 Cr.h.) pre. After finish (90 Credit Hours)**

The course is designed to provide management information systems students with the opportunity to gain experience in workplace settings and to translate classroom learning into practice. It focuses on reinforcing students' practical and transferable skills where further industry knowledge and skills necessary for professional advancement are acquired and developed. This course enables them to function well in a culturally diverse working environment. Additionally, it helps students reflect on the skills they are learning and the benefits gained from the internship experience.

20. **Applied Research in MIS / MIS464 (3 Cr.h.) pre. MIS462 Internship**

In this course, student applies different computer algorithms and methodologies to one of the research - oriented real life problems. This gives the opportunity for individual student, to take the responsibility of executing an investigative research, with guidance from a tutor. He will use knowledge and skills gained in earlier studied modules in working with his research. Students

will be required to plan work and meet deadlines. He also needs to demonstrate the outcome of the investigation and write a comprehensive report. Students should enjoy the freedom of this experience.

Main Elective Courses (Bachelor Degree in Management information System)

21. **Financial Information Systems / MIS 210 (3 Cr.h.) pre. MIS 211 Financial Information Systems & ACF 101 principles of Accounting**
This course introduces the students to the role of information technology in Accounting. Its focus on managing contemporary IT, as embodied by the current generation of Enterprise Resource Planning (ERP) financials software, Topics covered in this course includes: ERP Financials, FIS for Transaction processing, Building and Implementing FIS, and Organizational Impact.

22. **Web Application Development / MIS436 (3 Cr.h.) pre. MIS211 Management Information systems.**
This course will introduce concepts in programming web application servers. We will study the Fundamental architectural elements of programming web sites that produce content dynamically. The primary technology introduced will be Java Servers and Java Server Pages (JSPs), but will also cover the related topics as necessary so that students may build significant applications

23. **Business Intelligence/ MIS465 (3Cr.h.) pre MIS255 Knowledge Management+BA108**
Principles of Management (1). This course introduces the concepts of Business Intelligence together with its capabilities which include organizational memory capabilities, integration capabilities, presentation capabilities and Business Intelligence tools and venders.