

## **College of Administrative Sciences**

### **Bachelor in Management Information Systems**

#### **Course Description**

##### **University Compulsory Courses**

###### **ARB101 - Arabic Language**

This course deals with issues related to Arabic grammar and literature. It studies some basic linguistic issues in the vocabulary, morphology, syntax, and semantics of Arabic. It also studies stylistic and literary features through analysing and discussing some selected texts from the holy Quran and other literary masterpieces.

(Prerequisite: None)

###### **ENG101 - English Language (I)**

ENG101 is a credit course that runs for one semester of 15 weeks for 3 or 6 hours per week during the summer semester. It is required for students of Law, Political Science, Business Administration, and Art and Design Bachelor Programmes delivered in Arabic. This course is for learners whose achievement in the Oxford Online Placement Test (OOPT) is 41 or higher. The course provides practice in reading, writing, and note-taking at the Intermediate level. It includes academic English, study skills and various reading texts and text types. The course is intended to improve students' English language skills to undertake a further English credit course, ENG102, and use English in their studies as needed.

(Prerequisite: None)

###### **ENG102 - English Language (II)**

per week during the summer semester. It is required for students of Law, Political Science, Business Administration, and Art and Design Bachelor Programmes delivered in Arabic. This course is for learners who have completed ENG101. The course provides practice in reading, writing, and note-taking at the upper-intermediate level. It includes academic English, study skills and various reading texts and text types. The course is intended to improve students' English language skills to undertake various credit courses and use English in their studies as needed.

(Prerequisite: ENG101)

###### **CS104 - Computer Skills**

This course covers the following topics: basic information technology concepts, using the computer to manage files, word processing, spreadsheets, presentation and database.

(Prerequisite: None)

### **BA161 - Introduction to Entrepreneurship**

This course aims to study the concept of entrepreneurship, explain its implications and significance, and provide students with the knowledge and skills necessary to transform ideas into applied entrepreneurial projects in accordance with the rules of founding entrepreneurial projects. Moreover, the course aims to provide students with the core skills of an entrepreneur, starting from establishing the project, choosing the legal formula for it, planning, organising, marketing, and financing until the whole process is fully managed while enabling students to submit proposals to establish a commercial project and discuss it at the end of the semester. Finally, the course aims to study practical cases for pioneering projects in the Kingdom of Bahrain.

(Prerequisite: None)

### **HBH105 - Bahrain Civilization & History**

This course deals with the history of Bahrain from 1500-1800. It studies the stages of the Portuguese invasion of this part of the world and the international power struggle that erupted after the invasion. It also deals with the ruling of Al-Utuub Tribe of Bahrain and the reign of Al Khalifa thereafter.

(Prerequisite: None)

### **HR106 - Human Rights**

This course discusses the basic principles of human rights. It acquaints students with the nature of human rights; their realms and sources, paying special attention to the international legal provisions concerning human rights included in the following documents: United Nations Charter, International Declaration of Human Rights, International Accord on Civil and Political Rights, International Accord on Social and Economic Rights, International agreement against torture and inhumane, disrespectful punishment, and Protection mechanisms and constitutional organisation of public rights and freedoms in the Kingdom of Bahrain. (Prerequisite: None)

## **University Elective Courses**

### **ISL101 - Islamic Culture**

The course deals with the concept of "Culture" in general and the concept of "Islamic Culture" in particular, and other related concepts. Thus, the course studies the characteristics of the Islamic culture, its sources, fields of study, and its role in creating the "Islamic character". It also deals with the so-called "cultural invasion", its types, methodologies, and other related issues.

(Prerequisite: None)

### **ISL103 - Islam & Contemporary Issues**

This course deals with the way Islam deals with contemporary issues such as the phenomenon of fanaticism, determination of the Islamic calendar, alms tax (Zakat) on money and jewellery, democracy and government system, and other scientific and cultural developments.

(Prerequisite: None)

### **ISL102 - Islamic Ethics**

This course is an Elective University Requirement. It stresses the importance of ethics in Islam and the value Islam gives to ethics in general and work ethics in particular. The course draws general comparisons of the treatment of ethics along different ages in the history of Islam. According to Islam, it offers insights into the possible tools to enhance work ethics.

(Prerequisite: None)

### **SPT101 - Special Topics**

This course is an Elective University Requirement. It deals with special contemporary topics that are important to University students, and the topics dealt with may be economic, social, historical, or political.

(Prerequisite: None)

### **LFS102 - Thinking and Communications Skills Development**

This course is a University Requirement. It introduces the concept of thinking, its characteristics, its forms and its importance in the educational process. The course also deals with applying modern strategies and theories interpreted for different kinds of thinking. The course deals in detail with aspects of communication skills to improve students' skills in overcoming communicative barriers when communicating in various situations and for various purposes.

(Prerequisite: None)

### **SOC101 - Introduction to Sociology**

The course introduces Sociology; the scientific study of society. Thus, the course stresses social interaction processes and their impact on the members of any society. The course provides students with the knowledge of the main social phenomena and components of social structure.

(Prerequisite: None)

### **MAN101 - Man and Environment**

This course deals with issues related to the relationship between human beings and the environment they live in, with special attention to the environment of students at the University. The course draws students' attention to the environmental significance and the necessity of regulating our behaviour to avoid harming it.

(Prerequisite: None)

### **LIB101 - Introduction to Library Science**

This course introduces the library sciences. It gives a general historical review of the development of libraries through the ages and sheds light on the importance of libraries in the development of knowledge and sciences. The course reviews the services the libraries introduce to those who may want to benefit.

### **CS205 - Computer Applications**

This course includes the following topics: using a word processing programme to write reports, using a spreadsheet software programme to create an elementary accounting programme, using a database software programme to design an elementary information system.

(Prerequisite: CS104)

### **Programme Compulsory Courses**

#### **BA109 - Principles of Management (2) (E)**

The course exposes students to the basic concepts of the organisation, its characteristics and legal forms. It provides a comprehensive understanding of the organisation's functions (production, marketing, finance, human resource, knowledge and information and management). Additionally, it covers the organisation's relationship with the surrounding environment.

(Prerequisite: BA108)

#### **ACF151 - Financial Management (1)**

This course will introduce students to the concepts and tools of financial management. The focus of the course is decision-making in a financial context. Therefore, it examines the techniques used in businesses to make decisions that are consistent with the efforts to increase the wealth of the business owners in a corporate environment. The topics covered include but are not limited to financial analysis, the time value of money, capital budgeting, risk and return, valuation of future cash flows, valuation of stocks and bonds, and long-term financing.

(Prerequisite: ACF101)

#### **MIS 211 - Management Information Systems**

This course presents computer-based solutions to problems encountered in the business environment. It focuses on systems, information systems concepts and technologies. Students will learn the most effective ways to use information systems to achieve competitive advantages for the business. Topics include information systems types, computer and IT applications, gaining a competitive advantage with IT information systems key resources, integrating collaborating

environments, E-Commerce, Decision Support Systems, enterprise resource planning, customer relationship management, supply chain management, databases and data warehouses.

(Prerequisite: BA108 + CS104)

### **MIS231 - Programming and Data Structure**

This course introduces the concepts of structured programming together with programming tools. It also introduces them to Data Structures types, the primitive operations associated with each type, and C++ implementation for some of the primitive operations. Topics to be covered in this course are Algorithms, C++ Programming language tools (Input Output, Selection, Repetition, Methods and Matrices), and Data structures types (Linked list, Stacks, Queues and trees).

(Prerequisite: MIS211)

### **BA238 - Human Resources Management (E)**

This introductory Human Resource Management course (HRM) is designed to introduce students to detailed knowledge and understanding associated with the field. The course covers the main theories, principles and concepts associated with HRM. The course also exposes students to the major challenges and problems encountered in the HRM environment. It introduces them to the tools, techniques and practices used by HRM professionals to deal with problems and issues encountered in the workplace, some of which may be undefined.

(Prerequisite: BA109)

### **MIS240 - Information Systems Infrastructures**

This course engages students in an advanced study of the Information technology infrastructure required to build and implement information systems. Topics related to operating systems (structure, functionality, types, and security), Computer Networks (Components, Protocols, and Applications), the key features of Cloud computing, and Data centres are covered in this course.

(Prerequisite: MIS211)

### **MIS251 - Information Resources Management**

The course aims to extend students' detailed knowledge of the business environment by introducing students to how information resources are managed in a business environment. The material covered in this course includes the impact of IT on business, IT strategy, IT governance, IT processes, IT planning, and the role of the CIO within the organisation.

(Prerequisite: MIS240)

### **MIS312 - E- Decision Support Systems**

This course explores the core concepts of decision support systems and investigates the fundamental techniques associated with them to ensure they can effectively support the decision-making process. It also develops an

understanding of the methodologies, technologies, and modelling used in Decision Support Systems and Business Intelligence.

(Prerequisite: MIS251)

### **MIS314 - Integrated Information Systems**

The course provides a comprehensive review of enterprise systems, focusing on integrated business processes with enterprise resource planning (ERP) systems. It provides detailed coverage of enterprise systems architecture, data in enterprise systems, and ERP application platforms. This course also covers the key business processes supported by modern ERP systems.

(Prerequisite: MIS251)

### **MIS321 - Information Systems Analysis**

This course provides students with advanced knowledge and understanding of the concepts and practice of information systems analysis. Students 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 analyse systems in a team environment.

(Prerequisite: MIS240)

### **MIS332 - Visual Programming**

This course introduces the concepts of Visual Basic (VB) Programming, its tools, its elements and its usage in problem-solving. The student will learn to design, write and implement a programme with the VB programming language. The topics covered in this course are the user interface with its tools (dialogue boxes, text boxes, buttons, list boxes, combo boxes, radio buttons, checkboxes, etc.), loops, selections statement, and timers. The student will also learn to use VB tools to do animation, create a web browser, and connect a basic visual programme with a database.

(Prerequisite: MIS231)

### **MIS344 - Introduction to Database Systems**

This course develops students' knowledge and understanding of database systems. It extends students understanding of approaches to maintenance and manipulation of files by introducing and explaining database systems concepts, database systems evolution, and database types. The entity, attributes, relational database, database architecture, database modelling methods, data definition, and database manipulation languages such as SQL are comprehensively explained.

(Prerequisite: MIS321)

### **MIS343 - Information Systems Security**

This course covers the key principles and practices related to information systems security. The course comprehensively covers information security concepts, attacking techniques, security policies, cryptographic tools, authentication systems, access control, and types of malicious software. In addition, the course examines legal and ethical issues related to information systems security.

(Prerequisite: MIS314)

### **BA349 - Operations Management (E)**

The course provides students with advanced knowledge and skills necessary to transform inputs (materials, labour, capital and management) into outputs (products or services) that explores a firm's value propositions and complies with its business strategy. Topics include location, product selection and design, capacity planning, process selection, facilities location and design, Scheduling, Aggregate Production Planning, Material Requirements Planning (MRP), and Modern Manufacturing Systems and Future Plant. The course contributes to students' development as autonomous and responsible professionals in the business environment.

(Prerequisite: BA109)

### **MIS 255 – Knowledge Based Management**

This course introduces the concepts of Knowledge management and forces driving knowledge management Systems. Students will learn about the issues in knowledge management, knowledge types, knowledge generation, knowledge transfer, knowledge management solutions, knowledge management technologies and the infrastructure of knowledge management systems. Also, this course will acquaint students with the applications of knowledge management systems.

(Prerequisite: MIS312)

### **MIS361 - E-Business**

This course provides students with advanced knowledge of technological concepts, economic effects, and structural constitution for electronic business systems such as B2B, B2C, C2C, G2B and any other emerging technology. Enterprise systems solutions, pricing techniques, information security issues, client relations, and social and legal issues will also be covered. The course focuses on how business is carried out electronically through various digital platforms.

(Prerequisite: MIS255)

### **MIS363 - Special Topics in Information Systems**

This course aims to provide students with detailed knowledge of selected topics in information systems that reflect emerging trends or areas of interest in information systems which are not covered in-depth in other courses in the Bachelor Degree of Management Information Systems (MIS). The course currently examines developments and research in the following topics - Social Media, Internet of Things, Cloud Computing and Big Data. The course thus gives

students knowledge of new and emerging topics using new and innovative information system technologies, management approaches, integration issues, and relevant contemporary issues which impact MIS. The course covers areas of knowledge which are of professional interest for information systems practitioners and managers. The contents of the course will be revised periodically (subject to relevant approvals from the College and the University) to incorporate other topics or research that are likely to significantly impact information systems development and use.  
(Prerequisite: MIS 465)

#### **MIS422 - Information Systems Design & Implementation**

This course provides students with advanced knowledge and understanding of Information Systems development review, converting new system specifications to design, designing effective output, designing effective input, database design, designing an effective user interface, designing accurate data entry procedures, design documentation, coding, testing, and getting user approval, user training and system implementation.

(Prerequisite: MIS321 + MIS344)

#### **MIS436 - Web Applications Development**

This course covers the concepts required to demonstrate critical knowledge of programming web application servers. The student will gain advanced knowledge of the fundamental architectural elements of programming websites that produce content dynamically. The primary development tools introduced will be HTML, JavaScript and PHP. Nevertheless the course will also cover related topics dealing with content development as necessary so that students may build significant applications.

(Prerequisite: MIS231)

#### **MIS445 - Mobile Computing**

This course comprehensively covers all aspects of mobile computing and its platforms, wireless networks, architectures, security and management, and mobile computing applications such as mobile messaging, mobile agents, and sensor applications. It deals with the fundamentals of mobile technology. It progressively builds on these to consider more complex topics, including network and wireless communication, mobile computing applications, platforms and middleware, wireless LANs and PANs, wireless security, wireless positioning, and wireless management and support.

(Prerequisite: MIS436)

#### **MIS454 - MIS Ethics**

This course aims to provide students with a solid grounding in the principles and concepts which underpin a study of ethics and give them in-depth knowledge of how ethical concepts and actions impact the Information Systems



Management field. The course focuses on the fundamental concepts of ethics, ethical standards of information systems, professionals and users of information systems, and ethical issues related to privacy and digital crimes.

(Prerequisite: MIS343)

#### **MIS456 - Information Systems Project Management**

This course discusses the processes, methods, techniques and tools organisations 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 organisation is a complex team-based activity, where various types of technologies, including project management software and software to support group collaboration, are an inherent part of the project management process. This course also acknowledges that project management involves using resources within the organisation and others acquired from outside the organisation.

(Prerequisite: BA314)

#### **MIS462 - Internship**

The internship is a pre-arranged, credit-bearing work experience which allows a student to achieve personal goals aligned with the goals of a supervising professional organisation or agency. Internships provide opportunities to explore career options, test career choices, and encourage the development of skills within a chosen field. An internship allows students to relate theory with practical job experience and develop new skills that will be transferable to future employers.

(Prerequisite: 90 Credit Hours)

#### **MIS464 - Applied Research in MIS**

In this course, students critically apply appropriate research methodologies to develop either a software application with an accompanying research report or a comprehensive research report based on another valid research project selected by the student and validated by the tutor. Typically, the research project will be oriented to real-life business problems or situations. This allows an individual student to take the responsibility of executing applied research with guidance from a supervisor. The student will use knowledge and skills gained in earlier studied courses and implement them in the research. Students will be required to plan their work and meet deadlines. They also need to demonstrate the outcome of the investigation and write a comprehensive report.

(Prerequisite: BA307 + MIS462)

#### **MIS465 - Business Intelligence**

This course introduces the concepts of Business Intelligence (BI) and its capabilities, including organisational memory capabilities, integration capabilities, presentation capabilities and Business Intelligence tools and techniques. The

material in this course covers the various aspects of BI, including the business impacts, technologies, management and development of BI.

(Prerequisite: MIS312)

**Programme Elective Courses: (6 Credit hours/2 courses to be chosen from this group)**

**MIS356 - Information Systems Auditing**

This course introduces the fundamental concepts of the information systems audit and control function. The main focus of this course is to understand audit controls, the types of controls and their impact on the organisation's performance. The concepts and techniques used in information technology and systems audits will be presented. Students will learn audit management; dealing with best practices, standards, regulatory requirements, governing information and controls is addressed.

(Prerequisite: MIS251)

**MIS 210 - Financial Information Systems**

Financial Information Systems is concerned with how computerised information systems impact financial data capturing, processing, and communication. This course introduces the components of financial information systems, i.e. people, technology, procedures, and controls necessary to conduct internal and external e-business, emphasising the internal controls over such systems. This course presents problems in the financial environment with their computer-based solution. It focuses on the concepts of information systems and technology applied in a business context and also examines the importance of financial information systems in detecting and preventing fraud. Students will learn the most effective ways to use information systems in the financial environment. Students will understand the importance of implementing effective financial information systems in a business context.

(Prerequisite: ACF151 + MIS211)

**BA241 - Quantitative Methods in Management (E)**

This course provides an introduction to the concept, theories and principles associated with and application of quantitative methods in Management. It develops the mathematical and statistical competence necessary to facilitate progression in areas such as Operation Management necessary for decision making. The course builds on concepts and analytical techniques taught in STA 101 Principles of Statistics, developing more advanced quantitative methods, such as Linear Programming and Sensitivity and Duality Theory. Quantitative methods are used throughout the economy's business, government and non-profit sectors. At a minimum, effective participation in decision-making must be able to understand and interpret statistical reports.

(Prerequisite: STA101)

**BA332 - Business Communication**

The course introduces the concepts of written and oral business communications. This course focuses on the importance of the communication process, its objectives and types. It enables students to achieve competencies in business writing, including good and bad news business letters, memoranda, electronic mail, persuasive messages, formal letters, and formal reports. The course promotes students' capacity to use electronic communication and technology appropriate to contemporary business functions. Additionally, it paves the way for students' personal development as professionals in the business world.

(Prerequisite: BA109 + ENG 111)