2005/2006/2007/2008/2009/2010/2011/2012

Business Information Systems Department
King Abdullah II School for Information Technology (KASIT)
University of Jordan

Curriculum for B.Sc.
in
Business Information Systems

The Academic Degree:

B.Sc. in Business Information Systems

A. Contents:

The curriculum for the department of Business Information Systems consists of (132) credit hours as follows:

Sequence	Requirement type	Credit Hours
1	University Requirements	27
2	Faculty Requirements	36
3	Specialization Requirements	69
Total		**132**

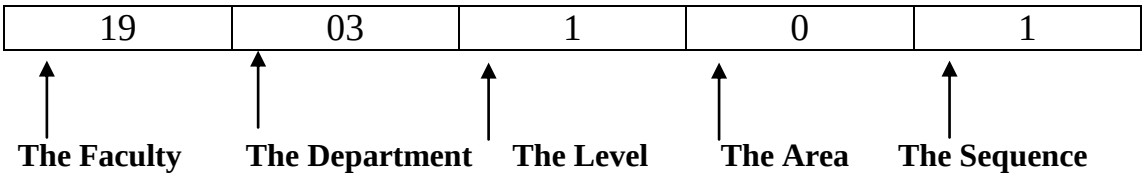
B. Department Codes:

Code	Department
1	Computer Science (CS)
2	Computer Information Systems (CIS)
3	Business Information Systems (BIS)

C. Area Codes* :

Area Code	Specialization	Area Code	Specialization
0	General	5	Applications
1	Languages	6	Distributed Systems and Communications
2	Information systems and tools	7	Systems Development
3	Based Erect	8	Specialized Topics
4	Theoretical Erect	9	Project and special Topics

* Meaning of Course Code:



Example 1903101 Fundamentals of Information Technology

The Requirements:-

First: **University Requirements: (27)** Credit Hours as follows:

A- Obligatory Courses: (21) Credit Hours as follows:

Course Code	Course Code	Credit Hours
1500100	Military Sciences	3
1501101	Communication Skills / Arabic 1	3
1501102	Communication Skills / Arabic 2	3
1502101	Communication Skills / English 1	3
1502102	Communication Skills / English 2	3
1700100	National Education	3
1902100	Computer Skills-1	3

B- Elective courses: (6) Credit Hours as follows:

Course Code	Course Name	Credit Hours
0302100	**Science and Society**	3
0305100	**Environment**	3
0401100	**Islamic Culture**	3
0402100	**Islamic System**	3
0600100	**Agriculture in Jordan**	3
0601100	**Home Agriculture**	3
0603100	**Human Nutrition**	3
0803100	**Introduction to Libraries and Information Science**	3
0905100	**Principles of General Safety**	3
1000101	**Democracy and Human rights**	3
1132100	**Sport and Health**	3
1601100	**Principles of Management**	3
1701102	**Knowledge of Theory**	3
1702101	**Islamic Civilization**	3
1704100	**Introduction to Sociology**	3
1731100	**Logic and Critic thinking**	3
1733100	**Jordan – Archaeology**	3
1736100	**Principles of Psychology**	

Second: **Faculty Requirements: (36)** Credit Hours

A- Obligatory Courses: (36) Credit Hours as follows:

Course No.	Course Name	Week Hours		Credit Hours	Pre required
		Theoretical	Practical		
0301101	Calculus – 1	3	-	3	-
0301102	Calculus –2	3	-	3	0301101
0301131	Principles of Statistics	3	-	3	-
0907231	Computer Logic	3	-	3	-
1901101	Discrete Mathematics	3	-	3	-
1901102	Computer Skills-2 (Science Colleges)	3	*	3	1902100
1901215	Advance Programming	2	2	3	1901102
1901231	Data Structures	3	*	3	1901215
1902201	Interpersomal Communication	3	-	3	-
1903101	Fundamentals of Information Technology	3	-	3	-
1903121	Web Application Development -1	3	*	3	-
1903232	Managenant Information Systems	3	*	3	1903101

*** Weekly training in Labs**

Third: Department Requirements (69) credit hours:

A- Obligatory Specialization Requirements (54) credit hours.

Course No.	Course Name	Week Hours		Credit Hours	Pre required
		Theoretical	Practical		
1602101	Accounting Principles-1	3	-	3	-
1602102	Accounting Principles-2	3	-	3	1602101
1603201	Principles of financial Management	3	-	3	1602101
1631101	Principles of Business Management	3	-	3	-
1901341	Theory of Algorithm	3	*	3	1901231
1901361	Computer Network -1	3	*	3	1901231
1901473	Operating Systems	3	*	3	1901321 or 1901231
1902211	Object-Oriented Programming-1	3	-	3	1902100
1902321	Database Systems	3	*	3	1901231
1902471	Software Engineering	3	*	3	1902321
1902471	Systems Analysis	3	*	3	1902321
1903251	Manufacturing Information systems	3	-	3	1903232
1903341	Operations Research	3	*	3	1901215
1903352	Web Publishing	3	*	3	1903121
1903354	Electronic Business	3	*	3	1903352
1903442	Modeling and Simulation in Business	3	*	3	1903341
1903481	Quality Management	3	-	3	1902321 and 0301131
1903495	Project	3	*	3	

b) **Elective Specialization Requirements (15) credit hours**:

Course No.	Course Name	Week Hours		Credit Hours	Pre required
		Theoretical	Practical		
0301271	Financial Mathematics –1	3	-	3	0301102
1601407	Small Business Management	3	-	3	-
1602313	Accounting Information Systems	3	-	3	1602102
1603452	Risk Management	3	-	3	1603201
1902322	Information Security	3	-	3	1902231
1903222	Management of Information Centers	3	-	3	1631101
1903224	Management of Information Sources	3	-	3	1903101
1903332	Decision Support Systems	3	-	3	1903232 and 1902321
1903345	Computer Ethics	3	-	3	1903101
1903353	Web Application Developments –2	3	-	3	1903121
1903356	Statistical Packages	3	-	3	0301131
1903415	Database Languages and Tools	3	-	3	1902321
1903458	Certified Software Packages	3	-	3	-
1903481	Business Requirements Analysis	3	-	3	-
1903471	Business Intelligence Systems	3	-	3	1903232
1903485	Special Topics	3	-	3	-

Courses offered by BIS department

Course No.	Course Name	Week Hours		Credit Hours	Pre required
		Theoretical	Practical		
1903101	Fundamentals of Information Technology	3	-	3	-
1903121	Web Application Development-1	3		3	-
1903222	Management of Information Centers	3	-	3	1631101
1903232	Management Information Systems (MIS)	3	-	3	1903101
1903235	Information Resources Management	3	-	3	1903101
1903235	Manufacturing Information Systems	3	-	3	1903252
1903322	Electronic Business	3	-	3	1903321
1903332	Decision Support Systems	3	-	3	1903331
1903341	Operations Research	3	-	3	1901215
1903345	Computer Ethics	3	-	3	1901101 1903101
1903352	Web Publishing	3	-	3	1902212
1903353	Web Application Development-2	3		3	1903121
1903375	Statistical Packages	3	-	3	0301332
1903415	Database Languages and Tools	3	-	3	1902321
1903435	Executive Information Support Systems	3	-	3	1903332
1903442	Modeling and Simulation in Business	3	-	3	1903341
1903458	Certified Software Packages	3	-	3	
1903471	Business Intelligence Systems	3	-	3	1903232
1903481	Quality Management	3	-	3	1902321 and 0301131
1903485	Special Topics	3	-	3	
1903495	Project	3	-	3	-

Supervisory Plan

First Year

Second Semester			First Semester		
Credit Hours	**Course Name**	**Course No.**	**Credit Hours**	**Course Name**	**Course No.**
3	Principles of Accounting – 1	1602101	3	Calculus-1	0301101
3	Principles of Statictics	0301131	3	Discrete mathematics	1901101
3	Computer Skills-2 (Science Colleges)	1901102	3	Fundamentals of Information Technology	1903101
3	Web Application Development -1	1903121	3	Univ. Req. (Computers Skills 1)	
3	Management Information Systems	1903211	3	Univ. Req.	
3	Uni. Req.				
18			**15**		

Second Year

Second Semester			First Semester		
Credit Hours	**Course Name**	**Course No.**	**Credit Hours**	**Course Name**	**Course No.**
3	Principles of Accounting-2	1602102	3	Computer logic	0907231
3	Data Structures	1901231	3	Principles of Business Administration	1631101
3	Documnentaton & Interpersonal Communication	1902201	3	Advance Programming	1901115
3	Object Oriented Programming -1	1902211	3	Optional	
3	Calculus-2	0301102	3	Uni. Req.	
3	Uni. Req.				
18			**15**		

Third Year

Second Semester			First Semester		
Credit Hours	**Course Name**	**Course No.**	**Credit Hours**	**Course Name**	**Course No.**
3	Computer Networks-1	1901361	3	Principles of Financial Management	1603201
3	Manufacturing Information systems	1903251	3	Database Systems	1902321
3	E-Business	1903354	3	Web Publishing	1903352
3	Systems Analysis	1902475	3	Operations Research	1903341
3	Uni. Req.		3	Uni. Req.	
3	Optional		3	Optional	
18			**18**		

Fourth Year

Second Semester			First Semester		
Credit Hours	**Course Name**	**Course No.**	**Credit Hours**	**Course Name**	**Course No.**
3	Modeling and Simulation in Business	1903442	3	Theory of Algorithms	1901341
3	Quality Management	1903481	3	Operating Systems	1901471
3	Uni. Req.		3	Software Engineering	1902471
3	Project	1903495	3	Uni. Req.	

3	Optional		3	Optional	
15			**15**		

Business Information System

Courses Description

1903101 Fundamentals of Information Technology: (Prerequisite none)

Information Technology components, computer hardware: memory, CPU, machine cycle. numbering system: decimal, binary, octal, hexadecimal, operations, data representation, coding. communications and networks multimedia, E-business, system software and applications, information system: analysis and development, problem solving : algorithm, flowchart, pseudo code. Weekly practice in the lab.

1903121 Web Application Development –1 (Prerequisite none)

The course introduces students to the tools and techniques used for building Web-based applications. Students will gain an understanding of the fundamental workings of the Web. Students will be taught how to develop web applications using client-side tools such as HTML and Java Script and server-side tools such as ASP.

1903222 Management of Information Centers: (Prerequisite1631101)

End-user computing: training and education, application development, network requirement, Technical Assistant: directing security and control issues, Selection of hardware and software, evaluation of application, file backups and recovery; General support services

1903232 Management Information Systems (MIS): (Prerequisite 1903101)

Fundamentals of Information Systems; Types and levels of MIS; IT in Business; Business Application of Information Technology; Managing Information Technology: global management, planning and information change; Security and protection issues. Weekly practice in the lab.

1903235 Information Resources Management: (Prerequisite 1903101)

Roles of information systems in the overall strategy and management of organizations; Organization management; Information resources: Personnel, planning and control, technological trends, management implications, managing MIS department; Outflow of information; Documents generation and distribution; Team management; New issues in MIS. Weekly practice in the lab.

1903251 Manufacturing Information Systems (Prerequisite 1903232)

The field of stud deals systems that meet specific needs. Components include computer aided manufacturing (CAM), computer aided design (CAD), material requirements planning (MRP), master production schedule (MPS), capacity requirements planning (MRP), master production schedule (MPS), capacity requirements planning (CRP), production activity control (PAC), computer integrated manufacturing (CIM), and flexible manufacturing systems (FMS will be covered.

1903322 Electronic Business (Prerequisite 1903352)

Introduction to electronic commerce; Hardware and Software requirements; Internet and Intranet Connectivity; Browsers; Electronic-mail; Electronic Data Interchange; Electronic Advertising; Electronic Fund Transfer; Security Protocols; Telecommuting; Teller machines; Electronic Commerce Applications; Business-to-Customer Commerce; Business-to-Business Commerce; Electronic Payments and security; E-commerce programming with XML and ASP. Weekly practice in the lab.

1903332 Decision Support Systems (DSS): (Prerequisite 1902321)

Definition; DSS Framework; Modeling and model management; Modeling process; Characteristics and capabilities of DSS; Component of DSS; DSS Hardware and Software; Constructing a DSS; DSS development tools; Group DSS; Executive DSS; Hybrid DSS; Distributed DSS; case study. Weekly practice in the lab.

1903341 Operations Research: (Prerequisite 1901215)

Operations research: origin and scope; General linear Programming problem: mathematical modeling , General solution methods: Graphical, Simplex, Sensitivity analysis: status of resources, change in coefficients, Duality Theory: properties, dual simplex; Special problems: transportation and assignment, Other applications: CPM-PERT Project management and game theory. Weekly practice in the lab.

1903345 Computer Ethics: (Prerequisite 1903101)

Identifying ethical problems; Reaching decisions; Legal constraints; professional organization and codes of conduct; Systems management and hacking; Ethical, social, political, legal and economic aspects of the application of computers; Customer rights; Copy rights; Ownership; Protocols and agreements; Security and ethical issues; Viruses detection; Protection and ethical issues; Internet and ethical implications; Computer crimes. Weekly practice in the lab.

1903352 Web Publishing: (Prerequisite 1903121)

Introduction to concepts and techniques for WWW information services; WWW design support; Production and evaluation of WWW information services; Developing strategies for locating resources; HTML (Hyper Text Markup Language); Publishing information; Web Page Design (Microsoft Front Page); Publishing HTML pages using HTML Tags and HTML Tools; Java Script; Java Applets and XML. Weekly practice in the lab.

1903353 Web Application Development-2 (Prerequisite 1903121)

Application of server-side scripting programming, Implementation of Web servers, SQL & MySQL, Database Interfaces (DBIs), Advanced ActiveX Data Objects (ADO.NET), Active Server Pages.NET (ASP.NET), Implementing Active Server Pages.NET using XML (Extensible Markup language), programming using Perl, Common Gateway Interface (CGI), PHP, Python, Java Servelets and JSP. Weekly practice in lab.

1903375 Statistical Software Packages: (Prerequisite 0301131)

Hardware and software requirements; Computer packages cover the following: basic probability and descriptive statistics; Sampling techniques; Estimation and hypothesis testing; Simple and Multiple Regression; Correlation Analysis; Distribution; Applied Statistical Forecasting; Basic techniques in time-series analysis of trend, and other optional topics; Statistical Packages in decision making. Weekly practice in the lab.

1903415 Database Languages and Tools : (Prerequisite 1902321)

A Selected DB Language such as Oracle or Access; Additional support tools for business applications: DDL and DML commands; Forms design; Reports design; Triggers; Case study.
*Weekly practice in the lab, maximum 50 students

1903435 Executive Information Support Systems (EISS): (Prerequisite 1903332)

Concepts and definitions; Distributed group support systems; Characteristics of EISS; Multidimensional analysis and presentation; Data access in EISS; Enterprise EISS; Comparing and Integrating EISS and DSS; EISS development; EISS installation and operation; Case study.
*Weekly practice in the lab, maximum 50 students

1903442 Modeling and Simulation in Business : (Prerequisite 1903341)

Introduction to computer simulation; Major characteristics; Modeling process; Trial and error; Optimization; Heuristics; The methodology of simulation; Problem definition; Construction of the simulation model; Testing and validating the model; Design of the experiments, evaluating applications; Types of simulation: conventional simulation, probabilistic simulation, time dependent vs time independent simulation, interactive visual simulation, prediction simulation, simulation of buying and selling; Stocks; Case study.Weekly practice in the lab.

1903458 Certified Software Packages : (Prerequisite: none)

In order to develop students skills which will enable them to get processional certificate This course will introduce students to some certified software packages like SAP/3, Merlin MRP, and Micro Soft Management Packages.

1903471 Business Intelligent Systems (Prerequisite: 1903232)

Budiness Intelligent Systems (BIS) focus on collecting, analyzing and converting rawbusiness data into actionable information that drives business decisions. This course introduces BIS from both technical and managerial perspectives. Thus, techniques in data mining, data warehousing, online analytical processing (OLAP), data analysis, statistical reasoning and knowledge discovery will be examined from technical perspectives. Managerial perspectives discuss various applications in BIS, including customer behaviors analysis, risk analysis, financial, analysis, supply chains, and knoledge management. TO maintain successful intelligence program additional issues like strategic and tactical planning will be examined.

1903481 Quality Management: (Prerequisite 1902321 and 0301131)

Introduction; Views of quality; Profiles; Management and improvement;; Quality management system; Human quality culture; The problem of user requirements ; Assurance; The ISO9001-2000 series: Standards, generic, guidance; Capability maturity models; individual levels of the CMM; Human resource quality; Training; Supplier quality; Quality assessment.

1903485 Special Topics:

Selected Topics in advance areas of Business Information Systems, Report and Documentation required. Weekly practice in the lab.

1903495 Project:

Project includes theoretical and practical aspects in Business Information Systems, related to the current problems and applications in IT, Research oriented, technical report, and presentation. Weekly practice in the lab.

1902498 **Training**

A student is required to training according to the training regulations of Dean's council for KASIT Departments.