



كلية الحاسوب وتكنولوجيا المعلومات

Faculty of Computer and Information Technology (FCIT)

وثيقة برنامج نظم المعلومات

Information System Program Specification

وحدة الجودة في الكلية

يونيو - 2020

Vise Dean for Quality
assurance

Head of Department

Dean of the Faculty

Dean of Academic
Development center and
Quality

Rector of Sana'a University

Dr. Anwar Al-Shamiri

Dr. Mansour N. Ali

Dr. Nagi Al-Shibani

Dr. Huda Al-Emad

Prof. Al-Qassim Mohammed
Abbas



1. Program Identification and General Information

Scientific name of the program:	Bachelor in Information System
Total credit hours required to award the degree	133
Number of years needed for completion of the program:	4 Years
The body responsible for granting the degree:	Information System department
The body responsible for the program:	Information System department
Award granted on completion of the program:	Bachelor in Information System
Study system:	Full Time
Study Language of the Program:	English /Arabic
Entry requirements:	High School degree
Departments participating in the program:	Computer Science, Information Technology
Starting year of the program:	2007
Study methods in the program:	Class Based
Location of Delivery:	Faculty Campus
The program resources:	
Minimum grade requirements:	50%
Other admission requirements:	
Date of program development:	Sep-2020
Prepared by :	Information System Department (QAU)

2. Overview

Information systems is the area of information technology that focuses on analyzing the information needs of organizations and designing information technology solutions that meet cost requirements and advance strategic objectives. Information systems professionals play a fundamental role in many sectors: implement and manage complex systems projects, design business processes and provide administrative and decision support. By obtaining a degree in information systems, students learn concepts, skills and technologies that enable organizations to manage and improve the flow of information. They explore how data is collected, stored, processed and communicated as a way to maintain operations, interact with customers and suppliers and compete in the market. Students learn to navigate software and hardware challenges by analyzing problems in real cases.

3. University Vision, Mission and Goals

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3.1 University Vision

تطمح جامعة صنعاء الى الريادة الوطنية في التعليم والتعلم والبحث العلمي وخدمة المجتمع وأن تكون من أفضل الجامعات الإقليمية وبيت الخبرة في اليمن.

3.2 University Mission

الاسهام في جهود التنمية المستدامة من خلال توفير بيئة تعليم عال يحقق معايير الجودة وخدمات بحثية متميزة في ظل شراكة وطنية مثمرة تركز على الشفافية والمهنية والإبداع.

3.3 University Goals

1. إتاحة الفرص الدراسية المتخصصة والمتعمقة للطلبة في ميادين المعرفة المختلفة تلبي احتياجات البلاد من التخصصات والفنيين والخبراء.
2. العناية باللغة العربية وتدريسها وتطويرها وتعميم استعمالها كلغة علمية وتعليمية في مختلف مجالات المعرفة والعلوم وذلك باعتبارها الوعاء الحضاري للمعاني والقيم والأخلاق للحضارة العربية والإسلامية.
3. تطوير المعرفة بإجراء البحوث العلمية في مختلف مجالات المعرفة سواء على المستوى الفردي أو الجماعي، وتوجيهها لخدمة احتياجات المجتمع وخطط التنمية.
4. الاهتمام بتنمية التقنية "التكنولوجيا" وتطويرها والاستفادة منها في تطوير المجتمع.
- 5- تشجيع حركة التأليف والترجمة والنشر في مختلف مجالات المعرفة مع التركيز بوجه خاص على التراث اليمني.
6. الاسهام في رقي الآداب والفنون وتقديم العلوم.
7. توفير المناخ الأكاديمي المساعد على حرية الفكر والتعبير والنشر بما لا يتعارض مع الإسلام وقيمه السامية ومثله العليا.
8. تقوية الروابط مع الجامعات والمؤسسات العامة والخاصة في البلاد بما يكفل التفاعل المتبادل والبناء للمعارف والخبرات والموارد والمشاركة التي تكفل الاسهام الفعال في إحداث التنمية الشاملة في البلاد.
9. توثيق الروابط العلمية والثقافية مع الجامعات والهيئات العلمية ومراكز البحوث والتطوير العربية والأجنبية بما يساعد على تطوير الجامعة وتعزيز مكانتها.
10. تقديم الدراسات والاستشارات الفنية والمتخصصة لمختلف أجهزة الدولة ومؤسساتها العامة والمختلطة.
11. المساهمة في تطوير السياسات وأساليب العمل في مؤسسات وأجهزة الدولة والقطاعين العام والخاص وتقديم النماذج والتجارب المبتكرة لحل المشاكل المختلفة.
- 12- رفع كفاءة العاملين في مؤسسات وأجهزة الدولة والقطاعين العام والخاص، وذلك من خلال المساهمة في برامج الإعداد والتأهيل أثناء الخدمة.



4. Faculty Vision, Mission and Goals:

4.1 Faculty Vision

الريادة أكاديمياً وبحثياً في مجالات الحوسبة والتكنولوجيا على المستوى الوطني والإقليمي.

4.2 Faculty Mission

تقديم برامج أكاديمية متميزة وتوفير بيئة تعليمية وبحثية محفزة في مجالات الحوسبة والتكنولوجيا وفقاً لمعايير الجودة و الاعتماد الأكاديمي وتعزيز الشراكة والمسئولية المجتمعية ومواكبة متطلبات سوق العمل.

4.3 Faculty Goals

1. تقديم وتطوير برامج أكاديمية وبحثية متميزة في مجالات الحاسوب وتكنولوجيا المعلومات وفقاً لمتطلبات الجودة والاعتماد الأكاديمي.
2. إعداد كوادر علمية وبحثية متخصصة في مجالات الحاسوب وتكنولوجيا المعلومات قادرة على المنافسة والإبداع في سوق العمل محلياً وإقليمياً.
3. المساهمة في تطوير المعرفة في مجالات الحاسوب وتكنولوجيا المعلومات من خلال تشجيع البحث العلمي وتوجيهه لخدمة المجتمع وتنميته.
4. تقديم الاستشارات العلمية والتقنية ذات العلاقة بمجالات الحاسوب وتكنولوجيا المعلومات والمساهمة في تدريب الكوادر الفنية للقطاعات المختلفة.
5. إقامة علاقات شراكة مع المؤسسات العلمية المناظرة لتبادل الخبرات في المجالات العلمية والبحثية.

5. Department Vision, Mission and Goals:

5.1 Department Vision

أن يكون رائداً أكاديمياً وبحثياً في مجالات نظم المعلومات على المستوى الوطني والإقليمي.

5.2 Department Mission

تقديم خدمات تعليمية وبحثية متميزة من خلال برامج أكاديمية وبيئة محفزة وفق معايير الجودة والاعتماد الأكاديمي بما يلبي متطلبات سوق العمل ويسهم في بناء مجتمع المعرفة.

5.3 Department Goals

1. تقديم برامج أكاديمية متميزة في مجال نظم المعلومات.
2. إعداد كوادر متخصصة في مجالات نظم المعلومات تسهم في تنمية المجتمع وتلبية متطلبات سوق العمل محلياً ودولياً.
3. المساهمة في إثراء المعرفة في مجالات نظم المعلومات من خلال تشجيع وتحفيز البحث العلمي.
4. تقديم الاستشارات العلمية ذات العلاقة بمجالات نظم المعلومات والمساهمة في تدريب كوادر القطاعات المختلفة.

6. Program Mission, Goals, and Outcomes

6.1 Program Mission

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تأهيل كوادر في تحليل وتصميم أنظمة المعلومات وطرق إدارتها من خلال توفير بيئة تعليمية وبحثية تتميز بالخطط الدراسية المحدثة والكادر التدريسي الكفو تسهم في تطوير عمل المؤسسات وتلبي متطلبات سوق العمل.

Qualifying cadres in the analysis and design of information systems and methods of managing through educational and research environment characterized by updated study plans and efficient teaching staff that contribute to the development of the work of institutions and meet the requirements of the labor market.

6.2 The overall aims of the program

1. Providing students with theoretical and practical principles and basic concepts in the fields of information systems. تزويد الطلبة بالمبادئ والمفاهيم الأساسية نظرياً وعملياً في مجالات نظم المعلومات .
2. Providing students with the skills and tools necessary to provide an effective service to the information systems sector and to meet the needs of society اكساب الطلبة المهارات والأدوات اللازمة لتقديم خدمة فعالة لقطاع نظم المعلومات وتلبية احتياجات المجتمع.
3. Qualification of graduates who are able to analyze, design and develop high-quality systems to meet the needs of different institutions. تأهيل خريجين قادرين على تحليل وتصميم وتطوير نظم عالية الجودة لتلبية احتياجات المؤسسات المختلفة .
4. Developing students' abilities to communicate, team work and continuous self-learning. تنمية قدرات الطلبة على التواصل والعمل الجماعي والتعلم الذاتي المستمر.



7. Program Standards & Benchmarks:

7.1 Academic Standards

1. National Academic Reference Standards (NARS) for Undergraduate Computing Programs, Council for Accreditation & Quality Assurance, Republic of Yemen, May 2018 (First Edition).
2. 1st Level standard of Academic Program Specification (2017), Council for Accreditation & Quality Assurance, Yemen
3. Curriculum Guidelines for Undergraduate Degree Programs in Information Systems, IS 2010, Association for Computing Machinery (ACM), Association for Information Systems (AIS).
4. ABET, Criteria For Accrediting Engineering Technology Programs, 2016 – 2017 (Refer to Annex -1)

7.2 Program Benchmarks

1. Bachelor of Computer Information System, College of Computer & Information Technology, Jordan University of Science & Technology, Jordan
 2. Bachelor of Information Systems, King Abdulaziz University, College of Computing and Information Technology, Department of Computer Information Systems, Kingdom of Saudi Arabia
 3. Bachelor of Information Systems, University of Bahrain, College of Information Technology, Department of Information Systems, Bahrain
- Refer to Annex (2): Survey of names Similar Accredited Programs at International Universities (Benchmarks)
 - Refer to annex5 - Annex-5, Survey of Course Names of Similar Program

8. Learning Outcomes:

A. Knowledge and Understanding:

Upon successful completion of the Program, graduates should be able to:

- A1.** Demonstrate an understanding of appropriate concepts, theories, mathematical foundations, models and techniques related to information systems.
- A2.** Identify various organization needs, enterprise architecture, types of information systems and strategies to monitor, control and manage organizational processes for improving organizations performance.
- A3.** Determine and illustrate different phases for developing information systems projects.



A4. Show a sound understanding of the principles of programming skills, data and information management and retrieval, and business intelligence.

B. Cognitive/ Intellectual Skills:

Upon successful completion of the program, graduates should be able to:

- B1.** Analyze, evaluate and document organization needs and propose suitable information system solutions.
- B2.** Compare and evaluate tools, techniques, models, information technology infrastructures and standards to improve organization operations and performance.
- B3.** Explore suitable enterprise architectures and process reengineering to deploy organizational information systems successfully.
- B4.** Plan and design proper enterprise system strategies that support organization and business strategies.

C. Practical and Professional Skills:

Upon successful completion of the program, graduates should be able to:

- C1.** Employ effectively principles of managerial and business concepts, information technology solutions and security to solve problems and/or take opportunities for organization.
- C2.** Use and apply effective tools, techniques and criteria to analyze, design and compare information technology solutions to enhance organization processes and performance.
- C3.** Implement and deploy the best information systems solutions to meet organization and business needs.
- C4.** Design applications using different appropriate programming tools based on different database systems and platforms.

D. General and Transferable Skills:

Upon successful completion of the program, graduates should be able to:

- D1.** Work effectively individually or within a team.
- D2.** Engage in a life-long self-learning, develop leadership skills and communicate effectively with various organizational stakeholders to collect information using a variety of techniques to solve organization problems.
- D3.** Demonstrate commitment to professional ethics, legal and security responsibilities and other related issues.



9. Graduates Attributes

- 1- Demonstrate an understanding of organization theory, mathematical foundations and business needs.
- 2- Demonstrate a sound understanding of concepts of the data and information management, information systems development and organization process modeling including different phases.
- 3- Identify problems using modern computing technologies, and systematic tools and techniques to provide appropriate information system solutions.
- 4- Describe, analyze, design, evaluate and apply information system strategies for different organization levels to improve organization business processes.
- 5- Extract and manage knowledge and Information from information systems of organization using business intelligence, different decision-making methodologies, techniques and/or tools to improve the organization performance.
- 6- Monitor, control and manage ongoing information technology operations, and organizational risks and security to improve the organization performance.
- 7- Apply the acquired knowledge to plan, evaluate and select different alternatives among available information systems.
- 8- Employ efficiently project management, research capability, leadership, communication and life-long learning skills in different environments related to information system.
- 9- Demonstrate commitment to ethical, legal, security and social responsibilities as a professional in information systems.

10. Teaching and Learning Strategies

1. Active lectures
2. Tutorials
3. Seminar/ project/presentation
4. Interactive class discussions
5. Exercises and homework
6. Laboratory based session
7. Directed self- study/ Independent learning
8. Problem solving
9. Teamwork (group learning)

11. Assessment Tools

1. Written tests
2. Exams
3. Written assignments
4. Oral exams
5. Project Report
6. Coursework Activities



7. Homework and assignments
8. Case studies
9. Presentations
10. Discussion

11.1 Project Assessment

Each project will be assessed by a committee of three members as follows

Item	Marks Distribution
Presentations	10%
Project Report	10%
Discussion	10%
Total	30%

11.2 Training Course Assessment:

- Report
- Presentations
- Discussion

11.3 Alignment of Program Intended Learning Outcomes (PILOs) with Teaching Strategies and Assessment Methods:

PILOs	Teaching Strategy	Assessment Methods
Knowledge and Understanding	Active lectures, Seminars/ projects	Written tests, Exams, Written assignments
Intellectual Skills	Interactive class, discussions, Exercises and home works, Problem solving	Coursework Activities, Case studies, Discussion
Professional & practical skills	Tutorials, Exercises and home works, Laboratory based session	Report, Presentations, Assignments, projects
General & Transferable Skills	Seminar, project, presentation, group learning	Presentations, Project Report



12. Intended Learning Outcomes Mapping:

See Annexes 6,7, and 8.

(Annex 6: Alignment of Program Themes with Program Intended Learning Outcomes (PILOs))

(Annex 7: Coding System and Alignment of Courses with Program Intended Learning Outcomes (PILOs))

(Annex 8: Matrix of Mapping Program PILO's With Courses)

13. Program Structure

13.1 Requirements

No	Requirements	No. of Courses	Credit Hours	Rational Weight %
1	University Requirements	Compulsory	8	17
		Elective	-	-
2	Faculty Requirements	Compulsory	6	15
		Elective	-	-
3	Program Requirements	Compulsory	29	89
		Elective	4	12
4	Field training, and the rate of the total hours of the program	--	-	-
Total:			133	100%

13.2 University Requirements

Compulsory Courses (13 hrs)								
No	Course Code	Course Name	L	T	P	Cr. Hrs.	Prerequisites, Co-requisites	Level/ Semester
1		Islamic Culture	2	-	-	2		L1,S1
2		Arabic Language (101)	2	-	-	2		L1,S1
3		English Language (101)	2	-	-	2		L1,S1
4		Arabic Language (102)	2	-	-	2	Arabic Language (101)	L1,S2
5		English Language (102)	2	-	-	2	English Language (101)	L1,S2
6		Arabic Israeli Conflict	2	-	-	2		L1,S1
7		National Culture	2	-	-	2		L1,S2
8		Computer skills	2		2	3		
Total Credit						17		

13.3 Faculty Requirements

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No	Course Code	Course Name	L	T	P	Cr. Hrs.	Prerequisites, Co-requisites	Level/ Semester
1		Programming Fundamentals	2	-	2	3		1/1
2		Communication Skills	2	-	-	2	English Language (1)	2/2
3		Professional Ethics	2	-	-	2		4/1
4		Research Methodology	2	-	-	2		3/1
5		Graduation Project (1)	3	-		3	Graduation Project (1)	4/1
6		Graduation Project (2)	3			3		4/2
Total Credit						15		

13.4 Program Major

Compulsory Courses (96 hrs)								
No	Course Code	Course Name	L	T	P	Cr. Hrs.	Prerequisites, Co-requisites	Level/ Semester
1		Mathematics (1).	2	2	-	3		1/1
2		Mathematics (2).	2	2	-	3	Mathematics (1).	1/2
3		Probability and Statistics	2	2	-	3		2/1
4		Web Design	2	-	2	3	Programming Fundamentals	2/1
5		Discrete Mathematics	2	2		3		1/2
6		Information System Fundamentals	3	-	-	3	-----	1/2
7		Computer Programming	2	-	2	3	Programming Fundamentals	1/2
8		Data Structures and algorithms	2	-	2	3	Programming Fundamentals	2/1
9		Database Fundamentals	2	-	2	3	-----	2/1
10		Enterprise Architecture	3	-	-	3	-----	2/1
11		Computer Networks	2	-	2	3	-----	2/1
12		Operating Systems	2	-	2	3	-----	2/2
13		Object-oriented Programming	2	-	2	3	Programming Fundamentals	2/2
14		Web Development	2	-	2	3	Web Design	2/2
15		Database Management Systems	2	-	2	3	Database Fundamentals	2/2
16		Business Administration	-	-	-	3	-----	2/2
17		Systems analysis and Design	-	-	-	3	-----	3/1
18		Human-computer Interaction	-	-	-	3	-----	3/1
19		Accounting	-	-	-	3	-----	3/1
20		Information Security	2		2	3	-----	3/1

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21		Mobile Applications Development	2	-	2	3	Database Fundamentals -Object-oriented Programming	3/1
22		Advanced Systems analysis and Design	2	-	2	3	Systems analysis and Design (I)	3/2
23		Project Management	3	-	-	3	-----	3/2
24		E-business	3	-	-	3		3/2
25		Artificial intelligence	3	-	-	3		3/2
26		Data Mining and Warehousing	3	-	-	3	Database Systems	3/2
27		Geographical Information Systems	2	-	2	3	-----	3/2
28		Decision Making and Business Intelligence	-	-	-	3	-----	4/1
29		Cloud Computing & IoT	2	-	2	3	Computer Networks, Operating Systems	4/2
30		Entrepreneurship				2		
31		Elective (1)	-	-	-	3	-----	4/1
32		Elective (2)	-	-	-	3	-----	4/1
33		Elective (3)	-	-	-	3	-----	4/2
34		Elective (4)	-	-	-	3	-----	4/2
Total						101		

13.5 Program Elective Courses:

Elective Course								
No	Course Code	Course Name	L	T	P	Cr. Hrs.	Prerequisites, Co-requisites	Level/ Semester
1		Big Data Management	3					
2		Business Process Management	3					
3		Health Information Systems	3					
4		Knowledge Management	3					
5		Human Resources Information Systems	3					
6		Marketing information Systems	3					
7		Special Topics in Information Systems	3					
8		Mobile computing	3					
9		ERP systems	3					
10		Data Science	3					
11		Selected Topics in Information Systems	3					
12		Knowledge Discovery in database	3					
13		Linear algebra	3					
14		Machine Learning	3					
15		Business Analysis	3					
16		E-learning	3					
17		Intelligent Systems	3					
18		Multimedia	3					
19		Information Retrieval	3					



14. Study Plan

Level 1

Semester 1								
No.	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1	SUI100	Islamic Culture	1/1	2	2	-	-	
2	SUA101	Arabic Language (101)	1/1	2	2	-	-	
3	SUE101	English Language (101)	1/1	2	2	-	-	
4	SUCONF	Arabic Israeli Conflict	1/1	2	2	-	-	
5	CCS100	Computer Skills	1/1	3	2	2	-	
6	CCS111	Programming Fundamentals	1/1	3	2	2	-	
7	MAT101	Mathematics (1)	1/1	3	2	-	2	
Total Credit Hours				17	14	4	2	
Semester 2								
No.	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1	SUA102	Arabic Language (102)	1/2	2	2	-	-	SUA101
2	SUE102	English Language (102)	1/2	2	2	-	-	SUE101
3	SUNC	National Culture	1/2	2	2	-	-	
4	MAT102	Mathematics (2)	1/2	3	2	-	2	MAT101
5		Discrete Mathematics	1/2	3	2	-	2	
6		Computer Programming	1/2	3	2	2	-	
7		Information System Fundamentals	1/2	3	2	2	-	
Total Credit Hours				18	14	4	4	

Level 2

Semester 1								
No.	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1		Object-Oriented Programming	2/1	3	2	2	-	
2		Web Design	2/1	3	2	2	-	
3		Computer Networks	2/1	3	2	2	-	
4		Probabilities and Statistics	2/1	3	2	-	2	
5		Database Fundamentals	2/1	3	2	2	-	
6		Enterprise Architecture	2/1	3	3	-	-	
Total Credit Hours				18	13	8	2	

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Semester 2								
No.	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1	FRCS202	Communication Skills	2/2	2	2	-	-	
2		Operating Systems	2/2	3	2	2	-	
3		Data Structures and algorithms	2/2	3	2	2	-	
4		Web Development	2/2	3	2	2	-	
5		Database Management Systems	2/2	3	2	2	-	
6		Business Administration	2/2	3	3	-	-	
Total Credit Hours				17	13	8	0	

Level 3

Semester 1								
No.	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1	FCRM301	Research Methodology	3/1	2	2	-	-	
2		Information Security	3/1	3	2	2	-	
3		Human-Computer Interaction	3/1	3	2	2	-	
4		Systems analysis and Design	3/1	3	2	-	2	
5		Artificial Intelligence	3/1	3	2	2	-	
6		Accounting	3/1	3	2	-	2	
Total Credit Hours				17	12	6	4	

Semester 2								
No	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1		Professional Ethics	3/2	2	2	-	-	
2		Project Management	3/2	3	2	2	-	
3		Mobile Applications Development	3/2	3	2	2	-	
4		Advanced Systems analysis and Design	3/2	3	2	2	-	
5		E-business	3/2	3	3	-	-	
6		Data Mining and Warehousing	3/2	3	2	2	-	
7		Geographical Information Systems	3/2	3	2	2	-	
Total Credit Hours				20	15	10	0	

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Level 4

Semester 1								
No.	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1		Decision Making and Business Intelligence	4/1	3	2	2	-	
2		Elective (1)	4/1	3	-	-	-	
3		Elective (2)	4/1	3	-	-	-	
4		Entrepreneurship	4/1	2	2	-	-	
5		Graduation Project (1)	4/1	3	1	-	4	
Total Credit Hours				14	5	2	4	
Semester 2								
No	Course Code	Course Name	L/S	CHs	L	P	T	Prerequisites, Co-requisites
1		Cloud Computing and IoT	4/2	3	2	2	-	
2		Elective (3)	4/2	3	-	-	-	
3		Elective (4)	4/2	3	-	-	-	
4		Graduation Project (2)	4/2	3	1	0	4	
Total Credit Hours				12	3	2	4	
Program Total Credit Hours							133	

15. Distribution of Total Credit Hours

Level	Term	University Requirements		Faculty Requirements		Program Requirements		Program Electives		Training		Total Cr. Hrs		Total Cr. Hrs./Level
		No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	
First	First	4	8	2	6	1	3	0	0	0	0	7	17	35
	Second	3	6	0	0	4	12	0	0	0	0	7	18	
Second	First	0	0	0	0	6	18	0	0	0	0	6	18	35
	Second	0	0	1	2	5	15	0	0	0	0	6	17	
Third	First	0	0	1	2	5	15	0	0	0	0	6	17	37
	Second	0	0	0	0	6	18	0	0	0	0	6	18	
Fourth	First	0	0	2	5	1	3	2	6	0	0	5	14	26
	Second	0	0	1	3	1	9	2	6	0	0	4	12	
Total		7	14	7	18	29	87	4	12	0	0	47	131	133
Percentage:		10.69%		13.74%		66.41%		9.16%		0%				

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16. Admission Requirements:

1. Admissions to the program shall be made as per the admission rules set by the Ministry of Higher Education and Scientific Research as well as University admission guidelines.
2. General Secondary school certificate (Science Section) or any equivalent certificate with grade as specified in the admission rules made by Ministry of Higher Education and Scientific Research.
3. Pass the aptitude test and personal interview.
4. Any necessary requirement for specialization, decided by the Scientific Section.

17. Attendance and Graduation Requirements:

1. Student attendance should not be less than 75%
2. Student will graduate after successfully passing all program requirements.
3. Total credit hours for the program is 131 credit hours.
4. Minimum score for any student to pass any credit hours' course is 50 degree.

18. Grading System:

From 90% to 100% of total marks	Excellent
From 80% to less than 89%	Very Good
From 65% to less than 79%	Good
From 50% to less than 64%	Pass
Less than 50%	Poor/Fail

19. Facilities Required for Running the Program

1. Lecture Rooms with facilities such as chairs and tables, data show, Smart Board, etc.
2. Lab with facilities such as chairs and tables, laboratory equipment, hardware and software, data show, Smart Board, etc.
3. Library and study room.
4. Internet

20. Learning Resources:

Learning Resources	Required Material
References and Textbooks	Books (softcopy, Hardcopy)
Scientific Journals	-
Computers and Electronic Devices	Computer Labs & simulation Tools
Computer software	Applications, Programming Languages, DBMS
Library needs	Hardcopy Books, Digital Library
Other Resources	



21. Program Policies

Based on University Regulations

1. (Class Attendance):

A student should attend not less than 75 % of total hours of the subject; otherwise he/she will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic. If the absent is more than 25% of a course total contact hour, student will be required to retake the entire course again.

2. (Tardy) :

For late in attending the class, the student will be initially notified. If he repeated lateness in attending class, he/she will be considered as absent.

3. (Exam Attendance/Punctuality) :

A student should attend the exam on time. He/she is permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.

4. (Assignments & Projects) :

In general one assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time, mostly one week after given the assignment.

5. (Cheating) :

For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.

6. (Plagiarism) :

Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he/she will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Council Affair of the university or according to the university roles.

7. (Other policies) :

- Mobile phones are not allowed to use during a class lecture. It must be closed; otherwise the student will be asked to leave the lecture room.
- Mobile phones are not allowed in class during the examination.



- Lecture notes and assignments might be given directly to students using soft or hard copy.

22. Team Work

No.	Full Name	Signature
1	Dr. Mansoor Marhoob	
2	Dr. Mukhrar Ghalilan	
3	Dr. Anwar Al-Shamiri	
	Dr. Ebrahim Al-Hadad	

Attached Appendices

No.	Appendix No.	Description
1	(Annex-1)	Academic Standards Curriculum Criteria of Accreditation Board
2	Annex (2)	Survey of names Similar Accredited Programs at International Universities (Benchmarks)
3	Annex-5	Survey of Course Names of Similar Program
4	Annex-6	Alignment of Program Objectives with Program Intended Learning Outcomes
5	Annex-7	Alignment of Program Objectives with Council of Accreditation Standards
6	Annex-8	Themes and their Weightage with Program Intended Learning Outcomes (PILOs)
7	Annex-9	Coding System and Alignment of Courses with Program Intended Learning Outcomes (PILOs)
8	Annex (10)	Matrix of mapping program (P ILO's) with courses