Republic of Iraq
Ministry of Higher Education and Scientific Research
Scientific supervision and evaluation
Department of Quality Assurance and Academic Accreditation

Form of Programme Specification for colleges and institutes

University: University of Information Technology & Communications
College / Institute: Collage of Business Informatics
Department: Information System Management
Date of production:

Signature:
Head of Department:
Date:

Signature:
Deputy Dean for Scientific Affairs:
Date:

Revised by
Quality Assurance and University Performance
Head of Quality Assurance and University Performance at BIC College:
Date:
Signature:

The approval of the Dean

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Program Specification provides a concise summary of the main features of the program and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the program.

1. Teaching Institution	University of Information Technology andCommunications
2. University Department/Centre	Informatics systems management
3. Program Title	Bachelor of Science
4. Title of Final Award	Bachelor of Science in Informatics Systems Management
5. Modes of Attendance offered	Semester
6. Accreditation	ABET / CAC
7. Other external influences	Non
8. Date of production/revision of this specification	25/5/2022

9. Aims of the Program
I. To provide students with the latest efficient academic programs of management informatics systems
II. To prepare graduates for various managerial and leading careers in field of informatics systems by excellent guidance and effective practical contribution.
III.To prepare graduates who have abilities of self-learning and as teamwork to serve the society.

IV. Introducing the graduates into ethics of profession which in turn helps graduate for facing the general challenges and realistic professional life.

V. To provide the labor market with high skilled graduates capable of establishing and managing the informatics systems

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A- Knowledge and Understanding

a1. An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline (a).

a2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution (b).

a3. An ability to design, implement, and evaluate a computer-based system, process,component, or program to meet desired needs (c).

a4. An ability to analyze the local and global impact of computing on individuals, organizations, and society (g).

a5. Recognition of the need for and an ability to engage in continuing professionaldevelopment (h)

a6. Ability to integrate IT-based solution in user environment (l).

a7. An understanding of best practices and standards and their application (m).

a8. An ability to apply total quality management for it system and to develop the software (o).

a9. An ability to analyze quantitative models for business in a long term plan (strategy) in dynamic business (p).

Teaching and Learning Methods

1 Direct Learning
2 E-Learning.
3 Self-Learning.

Assessment methods

1. Achievement test..
2. Standard Tests.
3. Displaying Individual Skills Assessment.
4. Testing intellectual questions in the achievement test..

B- Subject-specific skills

b1. An ability to use current techniques, skills, and tools necessary for computing practice (i).

b2. An understanding of processes that support the delivery and management of information systems within a specific application environment (j).

b3. An ability to apply design and development principles in the construction of software systems of varying complexity (k).

Teaching and Learning Methods

1. E-Learning.
2. Self-Learning.
3. Learning by Experimentation.
4. Indirect Learning.

Assessment methods

1. Collective Project.
2. Standard Tests.
3. Individual Skills Assessment.
4. Project consist of Random groups of Students.

C. Thinking Skills

c1. An ability to function effectively on teams to accomplish a common goal (d).

c2. An understanding of professional, ethical, legal, security and social issues and responsibilities (e).

c3. An ability to communicate effectively with a range of audiences (f).

c4. An ability to assist in the creation of an effective project plan (n).

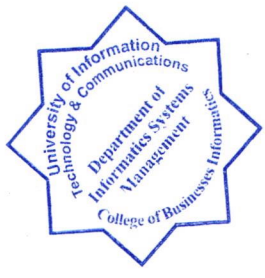
Teaching and Learning Methods

1 Cooperative Learning (Groups Learning) (students should realize that either They will pass together , or Fail Together).

2 Indirect Learning (Application Overall Knowledge Acquired to solve Certain Issue Supervised by One of Professors).

Assessment methods

1. Group project.
2. Project consist of Random groups of Students
3. Brainstorming.
4. Indirect Learning.



D. General and Transferable Skills (other skills relevant to employability and personal development)

d1. Ability to adopt lifelong learning.
d2. Ability to communicate information with other specialization.
d3. Ability to solve problems.
d4. Ability to communicate effectively with colleagues in work environment.

Teaching and Learning Methods

1 Brian storming.
2 E-Learning
3 Self-Learning.
4 Learning by Experimentation
5 Indirect Learning.

Assessment Methods

1. Collage Peer Assessment.
2. Collective Project.
3. Project consist of Random groups of Students.
4. Individual Skills Assessment.
5. Standard Test.
6. Achievement Tests.

11. Program Structure

Level/Year	Course or Module Code	Course or Module Title	Credit rating
First Level (Course I)	**ENG111**	English I	
First Level (Course I)	**HUR113**	Human rights	
First Level (Course I)	**BIC123**	Computational Paradigms	
First Level (Course I)	**IBT105**	Discrete Mathematics	
First Level (Course I)	**IBT101**	Programming Languages I	
First Level (Course I)	**IBE101**	Communication Skills	
First Level (Course I)	**WSM154**	Web Search Methods	

12. Awards and Credits

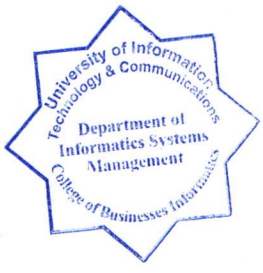
Bachelor Degree Requires (x) credits

University of Information Technology & Communications
Department of Informatics Systems Management
College of Businesses Informatics

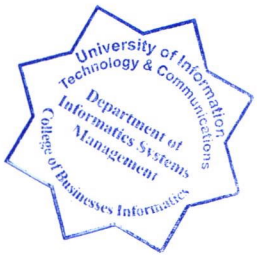
First Level (Course II)	**FAD121**	Freedom and Democracy	

First Level (Course II)	**ARB115**	Arabic	
First Level (Course II)	**BIC122**	Probability and Statistic	
First Level (Course II)	**BIC111**	Human Resources Management	
First Level (Course II)	**IBT104**	Programming LanguagesII	
First Level (Course II)	**ISM113**	Foundations of InformationSystems	
First Level (Course II)	**IBT103**	Principles of Accounting	
First Level (Course II)	**THS151**	Thinking Skill	
Second Level(Course I)	**ENG212**	English II	
Second Level(Course I)	**BIC212**	Data Structures	
Second Level(Course I)	**BIC213**	Marketing Management	
Second Level(Course I)	**IBT205**	Computer Networks	
Second Level(Course I)	**IBT202**	Object Oriented Programming I	
Second Level(Course I)	**IBT204**	Web Pages Design	
Second Level(Course I)	**BIC351**	Data Analysis	
Second Level(Course II)	**SEI221**	Social and Ethical Issues	
Second Level(Course II)	**BIC222**	Algorithms and Complexity	
Second Level(Course II)	**ISM224**	Management Information Systems	
Second Level(Course II)	**IBT206**	Object oriented Programming II	
Second Level(Course II)	**IBT208**	Web Applications Development	
Second Level(Course II)	**IBT200**	Database Fundamentals	

Second Level(Course II)	**ISM226**	Human Computer Interaction	
Third Level(Course I)	**BIC312**	English III	



Third Level(Course I)	**BIC310**	Software Engineering I	
Third Level(Course I)	**IBT300**	Database Management Systems	
Third Level(Course I)	**IBT302**	Mobile Applications Development	
Third Level(Course I)	**IBT304**	Information Security	
Third Level(Course I)	**ISM328**	E-Commerce	
Third Level(Course II)	**ISM322**	Knowledge Representation	
Third Level(Course II)	**BIC320**	Software Engineering II	
Third Level(Course II)	**ISM324**	Operations Management	
Third Level(Course II)	**ISM326**	Cyber security for Business	
Third Level(Course II)	**BIC352**	Internet of Things	
Third Level(Course II)	**ISE326**	Multimedia Technology	
Fourth Level(Course I)	**ISM411**	Project I	
Fourth Level(Course I)	**IBT404**	Cloud Computing	
Fourth Level(Course I)	**ISM412**	Decision Support Systems	
Fourth Level(Course I)	**BIC453**	IT Security and Risk Management	
Fourth Level(Course I)	**ISM416**	IS Project Management	
Fourth Level(Course I)	**ISE412**	Social Media Networks and the Society	
Fourth Level(Course I)	**ENG412**	English IV	
Fourth Level (Course II)	**ISM414**	Managing Enterprise Systems	
Fourth Level (Course II)	**IBT402**	Total Quality Management	
Fourth Level (Course II)	**ISM426**	Healthcare InformationSystems	
Fourth Level (Course II)	**IBT406**	Business Intelligence	



Fourth Level (Course II)	**IBE404**	Web Development for E-business	
Fourth Level (Course II)	**ISM420**	Project II	

13. Personal Development Planning

1. Teaching others
2. Team Leadership
3. Work in one team
4. Negotiation
5. Exploit Decision-making skills
6. Exploit the skills to solve the problem
7. Arguments Neutral with timing, instructions and refinements in concise language

14. Admission criteria .

(state clearly any regulations concerning direct entry to College / Institute)

15. Key sources of information about the programme

Learning outcomes for computing programs according to ABET \ CAC

a. An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
b. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
c. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
d. An ability to function effectively on teams to accomplish a common goal
e. An understanding of professional, ethical, legal, security and social issues and responsibilities
f. An ability to communicate effectively with a range of audiences
g. An ability to analyze the local and global impact of computing on individuals, organizations, andsociety
h. Recognition of the need for and an ability to engage in continuing professional development
i. An ability to use current techniques, skills, and tools necessary for computing practice

Computer Science (CS)

a. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
b. An ability to apply design and development principles in the construction of software systems of varying complexity

Information Systems (IS)

J - An understanding of processes that support the delivery and management of information systems within a specific application environment.

Information Technology (IT)

j- An ability to use and apply current technical concepts and practices in the core information technologies
k- An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems
l. An ability to effectively integrate IT-based solutions into the user environment
m-An understanding of best practices and standards and their application
n- An ability to assist in the creation of an effective project plan

Specific learning outcomes for College of Business Informatics (BI)

o- An ability to apply total quality management for it system and to develop the software.
p- An ability to analyze quantitative models for business in a long term plan (strategy) in dynamic business.
q- An ability to apply E-process for organization.

Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Programme Learning Outcomes														
				Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfera Skills (or Other skill relevan to employabil and personal developm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The First Level(Course I)	IBE101	Communication Skills	option	✓	✓			✓				✓			✓	✓		
The First Level(Course I)	IBT101	Programming Languages I	Core	✓	✓			✓				✓					✓	✓
The First Level(Course I)	IBT105	Discrete Mathematics	Core			✓	✓		✓			✓			✓	✓		
	WSM154	Web Search Methods	Core		✓			✓					✓	✓				
The First Level(Course I)	HUR113	Human Rights	Core			✓	✓		✓			✓					✓	✓
The First Level(Course I)	BIC123	Computational Paradigms	Core		✓	✓				✓		✓		✓			✓	
The First Level(Course I)	ENG111	English I	Core									✓		✓			✓	

Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

				Programme Learning Outcomes														
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfer Skills (or) Other skil relevant to employabi and personal developm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The First Level (Course II)	FAD121	Freedom and Democracy	Core	✓	✓			✓				✓				✓		
	ARB115	Arabic	Core			✓	✓			✓			✓	✓		✓		
The First Level (Course II)	BIC122	Probability and Statistic	Core	✓	✓			✓						✓			✓	✓
	BIC111	Human Resources Management	Core	✓				✓	✓				✓				✓	
The First Level (Course II)	IBT104	Programming Languages II	Core	✓	✓			✓				✓					✓	✓
	ISM113	Foundations of Information Systems	Core		✓				✓			✓						✓
The First Level (Course II)	IBT103	Principles of Accounting	Core			✓	✓			✓		✓	✓				✓	
	THS151	Thinking Skill	Core	✓	✓	✓	✓		✓	✓		✓	✓			✓	✓	

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Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Programme Learning Outcomes														
				Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfer Skills (or) Other skil relevant to employabi and personal developm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The Second Level (Course I)	ENG212	English II	Core									✓		✓			✓	
	IBT204	Web Pages Design	Core	✓		✓		✓		✓					✓			
The Second Level (Course I)	IBT202	Object Oriented Programming I	Core	✓	✓	✓				✓					✓		✓	✓
	BIC351	Data Analysis	Core	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓
The Second Level (Course I)	BIC213	Marketing Management	Core		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
	IBT205	Computer Networks	Core	✓	✓			✓	✓					✓				✓
The Second Level (Course I)	BIC212	Data Structures	Core	✓	✓	✓		✓	✓	✓		✓				✓	✓	✓

Curriculum Skills Map

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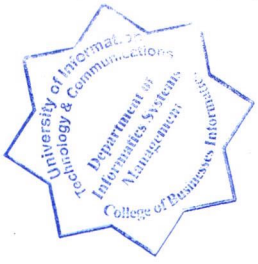
				Programme Learning Outcomes														
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfer Skills (or) Other skil relevant to employabil and personal developm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The Second Level (Course II)	SEI221	Social and Ethical Issues	Core	✓				✓		✓		✓		✓			✓	✓
	BIC222	Algorithms and Complexity	Core			✓	✓		✓					✓	✓		✓	
The Second Level (Course II)	ISM224	Management Information Systems	Core		✓			✓					✓				✓	
	IBT206	Object oriented Programming II	Core	✓	✓	✓				✓					✓		✓	✓
The Second Level (Course II)	IBT208	Web Applications Development	Core		✓	✓			✓	✓		✓				✓	✓	
	IBT200	Database Fundamentals	Core	✓					✓			✓				✓		
The Second Level (Course II)	ISE226	Huma computer interaction	Option				✓				✓		✓			✓		

Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

				Programme Learning Outcomes														
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfera Skills (or) Other skil relevant to employabil and personaldevelopm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
third level (Course I)	IBT304	Information Security	Core	✓	✓			✓	✓			✓	✓			✓	✓	✓
	IBT302	Mobile Applications Development	Core		✓	✓		✓				✓						✓
third level (Course I)	ISE328	E-Commerce	Option	✓		✓		✓	✓			✓					✓	✓
	IBT300	Database Management Systems	Core		✓	✓		✓	✓				✓			✓	✓	
third level (Course I)	BIC310	Software Engineering I	Core	✓	✓	✓	✓		✓			✓			✓		✓	✓
	ENG312	English III	Option									✓		✓			✓	



Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

				Programme Learning Outcomes														
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfer Skills (or) Other skil relevant to employabi and personaldevelopm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
third level (Course II)	BIC320	Software Engineering II	Core		✓	✓			✓			✓				✓		
	ISM322	Knowledge Representation	Core		✓	✓			✓	✓				✓			✓	✓
third level (Course II)	ISM326	Cyber security for Business	Core	✓	✓			✓	✓			✓	✓			✓	✓	✓
	ISM324	Operations Management	Core	✓	✓			✓	✓			✓					✓	✓
third level (Course II)	ISE326	Multimedia Technology	Option		✓	✓		✓	✓				✓			✓	✓	
	BIC352	Internet of Things	Core	✓	✓				✓				✓			✓		✓

Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Program Learning Outcomes														
				Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfera Skills (or) Other skil relevant to employabil and personaldevelopm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The Fourth Level (Course I)	IBT404	Cloud Computing	Core		✓	✓		✓	✓				✓		✓	✓	✓	
	ISM412	Decision Support Systems	Core	✓	✓	✓	✓	✓	✓			✓			✓	✓	✓	✓
The Fourth Level (Course I)	BIC453	IT Security and Risk Management	Core		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	ISM416	IS Project Management	Core		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
The Fourth Level (Course I)	ISE412	Social Media Networks and the Society	Option	✓			✓	✓	✓			✓		✓				✓
	ENG412	English IV	Core									✓		✓			✓	
The Fourth Level (Course I)																		

Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Programme Learning Outcomes														
				Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transfera Skills (or) Other skil relevant to employabil and personaldevelopm		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The Fourth Level (Course II)	ISM414	Managing Enterprise Systems	Core	✓	✓	✓			✓			✓					✓	✓
	IBT402	Total Quality Management	Core		✓	✓		✓					✓	✓			✓	
The Fourth Level (Course II)	ISM426	Healthcare Information Systems	Core	✓	✓			✓	✓			✓					✓	
	IBT406	Business Intelligence	Core	✓			✓	✓	✓				✓				✓	
The Fourth Level (Course II)	ISM420	Project II	Core	✓	✓					✓				✓		✓	✓	
	IBE404	Web Development for E-business	Core	✓	✓				✓				✓				✓	✓