

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:

on behalf of/
Saeed Mazin

Date:

Signature:



Deputy Dean for Scientific Affairs:

Dr. Rula Amjed
Hamid

Date: 30/6/2025

Revised by

Asst. Prof. Dr. Zainab Falih Hamza

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 and Communications
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	3/1/2024
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. To Introduce 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
VI. To provide students with the latest efficient academic programs of management 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 professional development (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. 4. Learning by Experimentation. 5. Brain Storming.	
Assessment methods	
1. Collective Project. 2. Standard Tests. 3. Individual Skills Assessment. 4. Project consist of Random groups of Students.	
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. Direct Learning 2. E-Learning. 3. Self-Learning. 4. Learning by Experimentation.	
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. Project consist of Random groups of Students
2. Brainstorming.
3. Indirect Learning.

Assessment 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).

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. E-Learning 2. Self-Learning. 3. Learning by Experimentation 4. 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				12. Awards and Credits
Level/Year	Course or Module Code	Course or Module Title	Credit rating	
First Stage				
First Level (Course I)	ICT110111	Programming Fundamentals I		Bachelor Degree Requires (x) credits
First Level (Course I)	ICT110120	Discrete Mathematics		
First Level (Course I)	ICT110130	Principles of Accounting		
First Level (Course I)	ICT000000	Democracy and Human Rights		
First Level (Course I)	ICT100140	Computational Paradigms		
First Level (Course I)	ICT000031	English I		

First Level (Course II)	ICT100210	Probability and Statistics		
First Level (Course II)	ICT100220	Human resource management		
First Level (Course II)	ICT110232	Programming fundamentals II		
First Level (Course II)	ICT120240	Foundations of information systems		
First Level (Course II)	ICT000041	Arabic I		
First Level (Course II)	ICT000032	English II		
Second Stage				
Second Level(Course I)	ICT111330	Computer network		
Second Level(Course I)	ICT101340	Data structures		
Second Level(Course I)	ICT111311	Object oriented programming I		
Second Level(Course I)	ICT 111310	Web page design		
Second Level(Course I)	ICT111320	Marketing management		
Second Level(Course I)	ICT000010	The crimes of the Baath regime in Iraq		
Second Level(Course II)	ICT000042	Arabic II		
Second Level(Course II)	ICT000033	English III		
Second Level(Course II)	ICT101410	Algorithms and Complexity		
Second Level(Course II)	ICT111420	Management Information Systems		
Second Level(Course II)	ICT111432	Object Oriented Programming II		
Second Level(Course II)	ICT111440	Web Applications Development		

Second Level(Course II)	ICT111450	Database Fundamentals		
Third Stage				
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)	ISE328	E-Commerce		
Third Level(Course I)	BIC312	English III		
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)	ISM326	Multimedia Technology		
Fourth stage				
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)	ISM412	Social Media Networks and the Society		
Fourth Level (Course II)	ISM414	Managing Enterprise Systems		

Fourth Level (Course II)	IBT402	Total Quality Management		
Fourth Level (Course II)	ISM426	Healthcare Information Systems		
Fourth Level (Course II)	IBT406	Business Intelligence		
Fourth Level (Course II)	IBE404	Web Development for E-business		
Fourth Level (Course II)	ISM420	Project II		

12. 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 programmer

www.uoitc.edu.iq

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, and society
- 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)

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

Information Technology (IT)

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

Specific learning outcomes for College of Business Informatics (BI)

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

				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 skill relevant to employability and personal development			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	
The First Level (Course I)	ICT110111	Programming fundamentals I	Core	✓	✓			✓				✓					✓	✓	
The First Level (Course I)	ICT110120	Discrete Mathematics	Core			✓	✓		✓			✓			✓	✓			
The First Level (Course I)	ICT000000	Democracy Human Rights	Core			✓	✓		✓			✓					✓	✓	
	ICT100140	Computational Paradigms	Core		✓	✓				✓		✓		✓			✓		
The First Level (Course I)	ICT000003 1	English I	Core									✓		✓			✓		
	ICT110130	Principles of accounting	Core			✓	✓			✓		✓	✓				✓		

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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 Transferable Skills (or) Other skills relevant to employability and personal development			
The First Level (Course II)				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	
The First Level (Course II)	ICT100210	Probability and Statistic	Core	✓	✓			✓						✓			✓	✓	
	ICT100220	Human Resources Management	Core	✓				✓	✓				✓				✓		
The First Level (Course II)	ICT110232	Programming fundamention II	Core	✓	✓			✓				✓					✓	✓	
	ICT120240	Foundations of Information Systems	Core		✓				✓			✓						✓	
	ICT00041	Arabic I	Core			✓	✓			✓			✓	✓		✓			
	ICT0000032	English II	Core									✓		✓			✓		

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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 Transferable Skills (or) Other skills relevant to employability and personal development		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
The Second Level (Course I)																		
	ICT1113110	Web Pages Design	Core	✓		✓		✓		✓					✓			
The Second Level (Course I)	ICT111311	Object Oriented Programming I	Core	✓	✓	✓				✓					✓		✓	✓
The Second Level (Course I)	ICT111320	Marketing Management	Core		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
	ICT111330	Computer Networks	Core	✓	✓			✓	✓					✓				✓
The Second Level (Course I)	ICT101340	Data Structures	Core	✓	✓	✓		✓	✓	✓		✓				✓	✓	✓
	ICT000010	The crimes of the baath regime in Iraq	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 Transferable Skills (or) Other skill relevant to employability and personal development			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
	ICT1014 10	Algorithms and Complexity	Core			✓	✓		✓					✓	✓		✓		
The Second Level (Course II)	ICT1114 20	Management Information Systems	Core		✓			✓					✓				✓		
	ICT1114 32	Object oriented Programming II	Core	✓	✓	✓				✓					✓		✓	✓	
The Second Level (Course II)	ICT1114 40	Web Applications Development	Core		✓	✓			✓	✓		✓				✓	✓		
	ICT1114 50	Database Fundamentals	Core	✓					✓			✓				✓			
	ICT00003 2	English II	Core									✓		✓			✓		
	ICT00004 2	Arabic II	Core			✓	✓			✓			✓	✓		✓			

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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 Transferable Skills (or) Other skill relevant to employability and personal development			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	
third level (Course I)	IBT3•4	Information Security	Core	✓	✓			✓	✓			✓	✓			✓	✓	✓	
	IBT3•2	Mobile Applications Development	Core		✓	✓		✓				✓						✓	
third level (Course I)	ISE328	E-Commerce	Option	✓		✓		✓	✓			✓					✓	✓	
	IBT3•0	Database Management Systems	Core		✓	✓		✓	✓				✓			✓	✓		
third level (Course I)	BIC310	Software Engineering I	Core	✓	✓	✓	✓		✓			✓			✓		✓	✓	✓
	ENG312	English III	Option									✓		✓			✓		✓

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Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Programme Learning Outcomes															
				Knowledge and understandin g				Subject- specific skills				Thinking Skills				General and Transferable Skills (or Other skill relevant to employabil and personal developm			
				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																			
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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 Transferable Skills (or) Other skill relevant to employability and personal development			
				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	✓			✓	✓	✓			✓		✓				✓	
	ENG411	Project I	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 Transferable Skills (or) Other skill relevant to employability and personal development			
				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	✓	✓				✓				✓				✓	✓	