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: Businesses Information Technology
Date of production:

Signature:
Head of Department: Asst. Prof. Dr Mohammed Salih Mahdi
Date:

Signature: Dr Ruba Anjeel Hamid
Deputy Dean for Scientific Affairs:
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: 30/6/2025
Signature:

The approval of the Dean

Programme Specification

The need for the BIT department has emerged as the need for government and private sector institutions to understand and manage information and keep updated of the evolution of information technology. This major is considered as one of the most important modern disciplines, which is increasingly essential by students, educational and institutions employment because there is almost no institution, whatever it's field, that doesn't have a need for this specialty. Students in the BIT Department receive a wide range of courses that focus on preparing highly qualified graduates in information technology, computer science, database management, electronic and information management, communications, software and financial applications.

1. Teaching Institution	**University of Information Technology & Communications**
2. Department / Center	**Businesses Information Technology**
3. Programme Title	**Bachelor of science**
4. Title of Final Award	**Bachelor of science in Businesses Information Technology**
5. Modes of Study: Yearly / Courses / Others	**Semester**
6. Accreditation	**ABET / CAC**
7. Other external influences	**NONE**
8. Date of production	**2024/2025**
9. Aims of the Programme	
I. Offer innovative curricula and advanced infrastructure to our students to enhance their skills and abilities to solve problems that face them in the field of IT applications.	
II. Provide the market with the necessary administrative and strategic leaders which are able to improve the management and security of the IT for serving the society.	
III. Graduate leaders that are able to learn and keep up with the development in the field and to be competitive worldwide.	
IV. To qualify students for self-learning and teamwork.	
V. Prepare graduates able to face the general challenges in life by understanding ethical and social issues.	

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.

A2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.

A3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

A4. An ability to analyze the local and global impact of computing on individuals, organizations, and society.

A5. Recognition of the need for and an ability to engage in continuing professional development

A6. An ability to effectively integrate IT-based solutions into the user environment.

A7. An understanding of best practices and standards and their application.

A8. An ability to apply total quality management for it system and to develop the software.

A9. An ability to analyze quantitative models for business in a long term plan (strategy) in dynamic business.

Teaching and Learning Methods

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

Assessment Methods

1. Achievement Tests.
2. Standard Tests.
3. Individual Skills Assessment.
4. Selection of Intellectual Question in Achievement tests.

B. Subject-Specific Skills

B1. An ability to use current techniques, skills, and tools necessary for computing practice.

B2. 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.

B3. An ability to apply design and development principles in the construction of software systems of varying complexity.

B4. An ability to apply E-process for organization.

Teaching and Learning Methods

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

Assessment Methods

1. Collective Project.
2. Project consist of Random groups of Students.
3. Experience and Professionalism Assessment.
4. Students Performance Assessment.

C. Critical Thinking Skills

C1. An ability to function effectively on teams to accomplish a common goal.
C2. An understanding of professional, ethical, legal, security and social issues and responsibilities.
C3. An ability to communicate effectively with a range of audiences.
C4. An ability to assist in the creation of an effective project plan.

Teaching and Learning Methods

1. Cooperative Learning.
2. Indirect Learning.

Assessment Methods

1. Selection of Intellectual Question in Achievement tests.
2. Collective Project.
3. Student survey on labour market.
4. Student survey after graduations.

D. General and Transferable Skills

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.

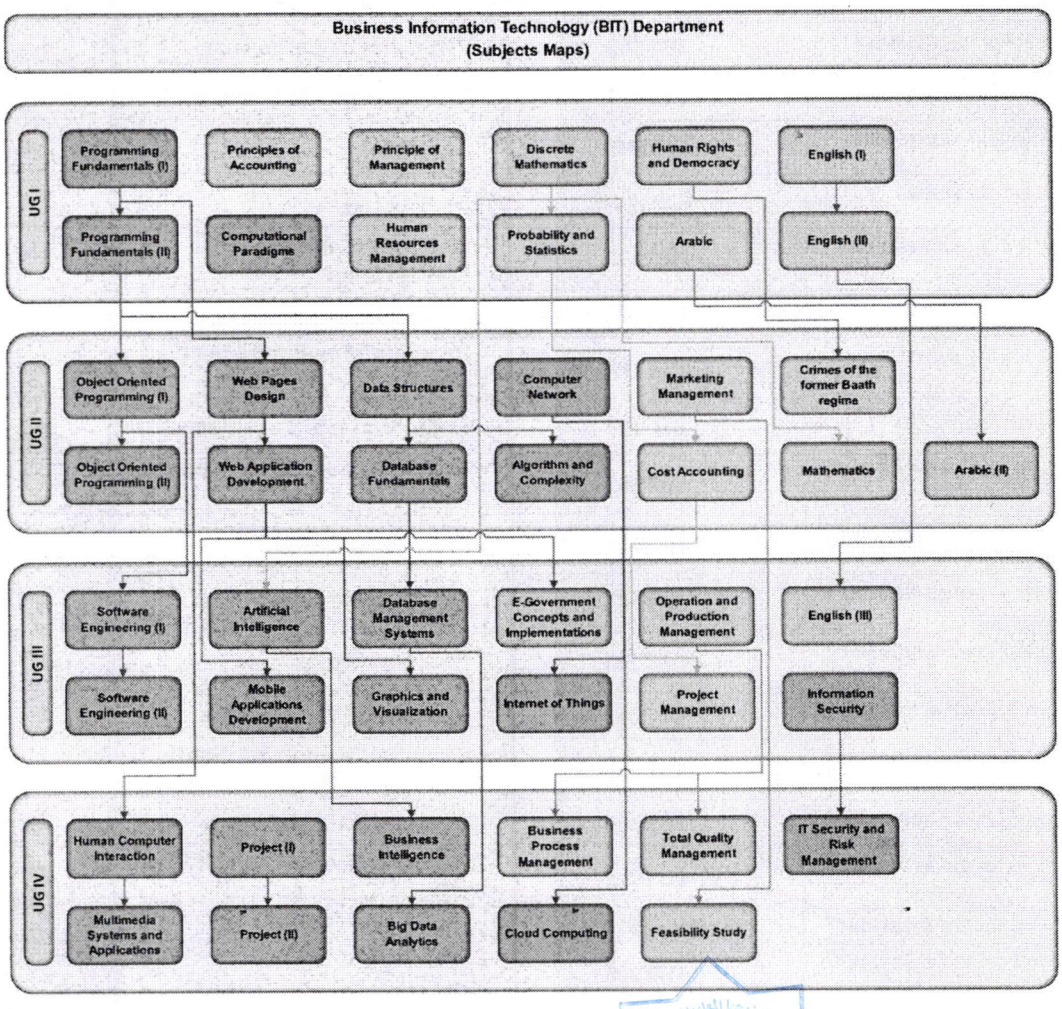
Teaching and Learning Methods

1. Brainstorming.
2. E-Learning.
3. Self-Learning (Acquiring knowledge and skills depending on his own capabilities to obtain it from various educational sources).
4. Learning by Experimentation (Applied learning) - Field learning.
5. Indirect Learning(Applying all acquired knowledge to solve a specific issue Under the supervision of one of the professors).

Assessment Methods

1. Rubrics- peer faculty evaluation.
2. Collective Project.
3. Project consist of Random groups of Students.
4. Standard Tests.
5. Students Performance Assessment.
6. Experience and Professionalism Assessment.

The chart below shows the BIT department's subject maps for four years. First and second stages are in Bologna System



11. a. Programmme Structures First and Second Stages

Level / Year	Course or Module Code	Course or Module Title	Credit Hours	
			Theory	Practical
First level/ semester 1	DHR103	Human Rights and Democracy	2	0
First level / semester1	ENG102	English (I)	2	0
First level / semester1	IBT105	Discrete Mathematics	2	0
First level / semester1	IBT101	Programming Fundamentals (I)	3	3
First level / semester1	IBT103	Principles of Accounting	3	2
First level / semester1	BIT111	Principles of Management	3	0
First level / semester1	ARB101	Arabic (I)	2	0
First level / semester2	ENG002	English (II)	2	0
First level / semester2	BIC123	Human Resources Management	3	0
First level / semester2	BIC122	Probability and Statistic	2	2
First level / semester2	IBT104	Programming Fundamentals (II)	3	3
First level / semester2	BIC111	Computational Paradigms	2	1
Second level / semester1	IBT202	Object Oriented Programming (I)	3	3
Second level / semester1	IBT204	Web Pages Design	2	2
Second level / semester1	IBT205	Computer Networks	2	2
Second level / semester1	BIC212	Data Structures	2	2
Second level/ semester 1	BIC213	Marketing Management	2	0
Second level / semester1	ARC204	Crimes of the former Baath regime	2	0
Second level / semester2	IBT200	Database Fundamentals	2	2
Second level / semester2	IBT206	Object Oriented Programming (II)	3	3
Second level / semester2	BIT210	Cost Accounting	2	2
Second level / semester2	IBT208	Web Applications Development	2	2
Second level / semester2	BIC250	Mathematics	2	0
Second level / semester2	BIC222	Algorithms and Complexity	2	2

11. b. Programmme Structures Third and Fourth Stages

Level / Year	Course or Module Code	Course or Module Title	Credit Hours	
			Theory	Practical
Third level/ semester 1	ENG312	English (III)	2	0
Third level / semester 1	BIC310	Software Engineering (I)	2	2
Third level / semester 1	IBT300	Database Management Systems	2	2
Third level / semester 1	BIT311	Operation and Production Management	2	2
Third level / semester 1	IBE300	E-Government Concepts and Implementation	2	2
Third level / semester 1	BIC352	Internet of Things	2	2
Third level / semester 2	BIC320	Software Engineering (II)	2	2
Third level / semester 2	IBT302	Mobile Applications Development	2	2
Third level / semester 2	IBT304	Information Security	2	2
Third level / semester 2	BIT322	Artificial Intelligence	2	2
Third level / semester 2	BIT324	Project Management	2	2
Third level / semester 2	BIE302	Graphics and Visualization	2	2
Fourth level/ semester 1	BIT41710	Project (I)	1	4
Fourth level / semester1	BIT41181	Human Computer interaction	2	2
Fourth level / semester1	BIT41021	Information security	2	2
Fourth level / semester1	BIT41451	E-Banking	2	2
Fourth level / semester1	BIT41441	Systems Dynamic in Business	2	0
Fourth level / semester1	BIT41411	Quantitative Analysis of Business	2	2
Fourth level / semester2	BIT42711	Project (II)	1	4
Fourth level / semester2	BIT42271	Software development	2	2
Fourth level / semester2	BIT42471	Business Strategy	2	0
Fourth level / semester2	BIT42021	IT Security &Risk Management	2	2
Fourth level / semester2	BIT42441	Total Quality Management	2	2

12. Personal Development Planning **1. Work in one team** **2. Teaching others** **3. Lead a team** **4. Negotiation** **5. Uniting team members under cultural differences** **6. Employment of decision-making skills** **7. Employ problem-solving skills** **8. Dealing with others** **9. Neutralize arguments with timing, instructions and refinement, in concise language**
13. Admission criteria **(state clearly any regulations concerning direct entry to College / Institute)**
Central Admission
14. Key sources of information about the programme 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)

j. 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

k. 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.

I- 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 Program Learning Outcomes are being assessed

Program Learning Outcomes																				Core (C) or Option (O)	Course Title	Course Code	Year / Level
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding											
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
✓	✓	✓	✓	✓	✓	✓	✓									✓	✓				Basic	Human Rights	DHR103	First Level (First Semester)
✓	✓				✓	✓	✓				✓						✓	✓	✓	✓	Basic	English (I)	ENG102	
	✓	✓	✓				✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	Basic	Programming Fundamentals (I)	IBT101	
	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	Basic	Principles of Accounting	IBT103	First Level (First Semester)
	✓	✓	✓			✓	✓		✓	✓	✓				✓	✓	✓	✓	✓	✓	Basic	Principles of Management	BIT111	
✓	✓	✓	✓			✓	✓			✓	✓						✓	✓	✓	✓	Basic	Discrete Mathematics	IBT105	First Level (First Semester)

Curriculum Skills Map

Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes																				Core (C) or Option (O)	Course Title	Course Code	Year / Level
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding											
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
	✓	✓	✓	✓	✓		✓			✓	✓						✓	✓		✓	Basic	Human Resources	BIC123	First Level (Second Semester)
✓	✓	✓	✓		✓		✓				✓		✓						✓	✓	Basic	Probability and Statistic	BIC122	
✓	✓	✓	✓			✓	✓			✓	✓						✓	✓	✓	✓	Basic	Programming Fundamentals (II)	IBT104	
✓	✓				✓	✓	✓				✓						✓	✓	✓	✓	Basic	English (II)	ENG002	First Level (Second Semester)
✓	✓	✓	✓			✓	✓	✓		✓	✓		✓	✓			✓	✓	✓	✓	Basic	Computational Paradigms	BIC111	
✓	✓	✓	✓	✓	✓	✓	✓									✓	✓				Basic	Arabic	ARB101	First Level (Second Semester)

Curriculum Skills Map																							
Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed																							
Program Learning Outcomes																							
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding									Core (C) or Option (O)	Course Title	Course Code	Year / Level
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓							✓	✓	✓	Basic	Computer Networks	IBT205	Second Level (First Semester)
		✓	✓			✓	✓				✓	✓	✓	✓				✓	✓	✓	Basic	Data Structures	BIC212	
✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	Basic	Object Oriented Programming (I)	IBT202	
✓	✓	✓	✓			✓	✓			✓	✓					✓	✓	✓	✓	✓	Basic	Web Pages Design	IBT204	Second Level (First Semester)
✓	✓	✓	✓		✓	✓	✓			✓	✓							✓	✓	✓	Basic	Marketing Management	BIC213	

Curriculum Skills Map

Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes																							
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding									Core (C) or Option (O)	Course Title	Course Code	Year / Level
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓							✓	✓	✓	Basic	Computer Networks	IBT205	Second Level (First Semester)
		✓	✓			✓	✓				✓	✓	✓	✓				✓	✓	✓	Basic	Data Structures	BIC212	
✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	Basic	Object Oriented Programming (I)	IBT202	
✓	✓	✓	✓			✓	✓			✓	✓					✓	✓	✓	✓	✓	Basic	Web Pages Design	IBT204	Second Level (First Semester)
✓	✓	✓	✓		✓	✓	✓			✓	✓							✓	✓	✓	Basic	Marketing Management	BIC213	

Curriculum Skills Map																							
Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed																							
Program Learning Outcomes																							
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding									Core (C) or Option (O)	Course Title	Course Code	Year / Level
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
	✓	✓	✓			✓	✓			✓	✓						✓	✓	✓	✓	Basic	Mathematics	BIC250	Second Level (Second Semester)
	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓	✓	Basic	Algorithms and Complexity	BIC222	
✓	✓	✓	✓		✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	Basic	Cost Accounting	BIT210	
✓	✓	✓	✓	✓	✓	✓	✓			✓	✓				✓	✓	✓	✓	✓	✓	Basic	Object Oriented Programming (II)	IBT206	Second Level (Second Semester)
✓	✓	✓	✓			✓	✓			✓	✓		✓	✓			✓	✓	✓	✓	Basic	Web Applications Development	IBT208	
			✓		✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	Basic	Database Fundamentals	IBT200	Second Level (Second Semester)

Curriculum Skills Map

Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes																							
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding									Core (C) or Option (O)	Course Title	Course Code	Year / Level
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
✓	✓				✓	✓	✓				✓						✓	✓	✓	✓	Basic	English (III)	ENG312	Third Level (First Semester)
✓	✓	✓				✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	Basic	Software Engineering (I)	BIC310	
		✓	✓		✓	✓	✓			✓	✓		✓	✓		✓	✓	✓	✓	✓	Basic	Database Management Systems	IBT300	
		✓	✓		✓	✓	✓			✓	✓							✓	✓	✓	Basic	Operation and Production Management	BIT311	Third Level (First Semester)
	✓	✓	✓			✓	✓	✓	✓	✓	✓						✓	✓	✓	✓	Basic	E-Government Concepts and Implementation	IBE300	
✓	✓	✓	✓	✓			✓		✓	✓								✓	✓	✓	Basic	Internet of Things	BIC352	Third Level (First Semester)

Curriculum Skills Map

Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes																							
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding									Core (C) or Option (O)	Course Title	Course Code	Year / Level
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
✓	✓			✓	✓			✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	Basic	Software Engineering (II)	BIC320	Third Level (Second Semester)
		✓	✓		✓	✓	✓		✓	✓	✓		✓	✓			✓	✓	✓	✓	Basic	Mobile Applications Development	IBT302	
	✓	✓	✓			✓	✓				✓					✓	✓	✓	✓	✓	Basic	Information Security	IBT304	
	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	Basic	Artificial Intelligence	BIT322	Third Level (Second Semester)
✓	✓		✓	✓	✓			✓	✓	✓	✓					✓	✓	✓	✓	✓	Basic	Project Management	BIT324	
✓	✓		✓	✓	✓			✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	Basic	Graphics and Visualization	BIE302	Third Level (Second Semester)

Curriculum Skills Map

Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes																				Core (C) or Option (O)	Course Title	Course Code	Year / Level
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding											
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓		✓		✓	✓	Basic	Project (I)	BIT41710	Fourth Level (First Semester)
✓		✓					✓		✓	✓			✓			✓	✓	✓	✓		Basic	Human Computer interaction	BIT41181	
	✓	✓			✓	✓			✓		✓			✓	✓	✓			✓	✓	Basic	Information security	BIT41021	
	✓	✓		✓	✓		✓	✓				✓		✓					✓	✓	Basic	E-Banking	BIT41451	Fourth Level (First Semester)
	✓	✓	✓			✓	✓				✓					✓	✓	✓	✓	✓	Basic	Systems Dynamic in Business	BIT41441	
	✓	✓		✓						✓	✓			✓	✓				✓	✓	Basic	Quantitative Analysis of Business	BIT41411	Fourth Level (First Semester)

Curriculum Skills Map

Please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Program Learning Outcomes																				Core (C) or Option (O)	Course Title	Course Code	Year / Level
General and Transferable Skills				Critical-Thinking Skills				Subject- Specific Skills				Knowledge and Understanding											
D.4	D.3	D.2	D.1	C.4(IT/n)	C.3(f)	C.2(e)	C.1(d)	B.4(BI/q)	B.3(CS/k)	B.2(CS/j)	B.1(i)	A.9(BI/p)	A.8(BI/o)	A.7(IT/m)	A.6(IT/1)	A.5(h)	A.4(g)	A.3(c)	A.2(b)	A.1(a)				
✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓		✓		✓	✓	Basic	Project (II)	BIT42711	Fourth Level (Second Semester)
	✓				✓	✓	✓	✓		✓	✓	✓			✓	✓			✓	✓	Basic	Software development	BIT42271	
✓	✓	✓		✓		✓	✓		✓		✓		✓		✓	✓		✓	✓	✓	Basic	Business Strategy	BIT42471	
	✓	✓	✓		✓	✓	✓		✓		✓				✓	✓	✓	✓	✓	✓	Basic	IT Security &Risk Management	BIT42021	Fourth Level (Second Semester)
	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	Basic	Total Quality Management	BIT42441	