Description of Academic Program and Course Department of Information Networks

Republic of Iraq

Ministry of Higher Education and Scientific Research

Name of University: University of Babylon

College Name: Information Technology

Description of Academic Program and Course Department of Information Networks

Information networks

Introduction:

The aim of the information networks curriculum is to provide students with the knowledge and skills to understand, design and manage computer networks, which are the backbone of IT infrastructure in modern organizations. The core curriculum addresses networking protocols, communication technologies, and security fundamentals in networks, as well as performance improvement strategies and application aspects related to network development and expansion. By studying this curriculum, students gain the ability to analyze networks, solve technical problems, and apply modern solutions to meet the needs of business and information services effectively and efficiently. The profession of information technology in information networks is considered one of the most challenging and most generous professions in the modern era because it has a great impact on solving the digital gaps that exist in societies that lack modern technology, whether in messaging, communication, network design, websites, data security and networks. This technology has entered all areas of scientific, educational, social, economic and family life.

The Department of (Networks) is interested in studying the techniques and means by which information and software are dealt with and how they are analyzed and processed using computers and their networks. The study system in the college is quarterly and for a period of four years.

A department has taken it upon itself to implement the total quality management system and programmatic accreditation since the beginning of its establishment, but time is sufficient to prepare qualified cadres for this and it continues to achieve it until obtaining the certificate of conformity.

The aim of the report is to make changes that contribute to raising the level of performance, supporting strengths and eliminating weaknesses through work that achieves the national institutional accreditation standards for higher education institutions accredited by the Ministry, giving a comprehensive view of the level of activities, services and educational programs provided by the college, knowing the levels of students, ways to improve the educational reality, identifying the needs of female owners and the training courses and development programs they need for faculty members, and ensuring the quality of the college's outputs and programs in a way that ensures the effectiveness of the continuous quality processes and procedures in each discipline and the importance of cooperation between them to satisfy the achievement and sustainability of information technology systems and readiness except for everything new within this field.

Description of Academic Program

University Name: University of Babylon.
College/ Institute: College of Information Technology
Scientific Department: Information Networks Department
Name of academic or professional program: Bachelor of Information Networks
Academic System : Semester-based

Date of preparation of the description:20 /2/2025
File Filling Date: 20/2/2025

Signature
Name of Head of Department:
Prof.Dr. Al-Harith Abdul Karim Abdullah
Date:

Signature:
Name of Vice Dean for Academic Affairs
Eman Salih Al-Shimmary
Date:

Reviewed and Approved by:
Quality Assurance and University Performance Division
Director: *Asst. Lecturer. Nawras…….*
Date:
Signature:

Certified by
Dean: Prof. Dr. Wesam Sameer Bahiya

1.Program Vision

Keeping abreast of technological developments and recent innovations - Developing study programs that integrate the latest global trends such as Internet of Things (IoT), cloud computing, and artificial intelligence - Building partnerships with the industrial sector to enhance training and employment opportunities.

2.Mission

The Department of Information Networks is concerned with providing students with the academic knowledge and practical skills necessary to understand and manage complex information networks, keeping pace with the latest innovations and technologies in this field. We seek to provide students with the basics of design, implementation, and maintenance of computer networks, and to raise their level of ability to meet the accelerating technological challenges in the era of digital transformation. The department is also committed to promoting scientific research directed towards providing innovative solutions to network problems, and enhancing cooperation with industry to provide an applied learning environment that achieves excellence of graduates and enables them to effectively integrate into the labor market.

2.Objectives

1- Providing advanced educational programs that are compatible with the latest standards of education in the field of information networks, with a focus on developing students' skills in design, implementation, and effective management of networks.

2- Encouraging scientific research in the fields of information and 2 communication networks, and supporting research projects that contribute to the development of innovative solutions to contemporary technical challenges.

3- Providing practical training and realistic applications that allow students to acquire the necessary experiences to meet the challenges of the market and work in advanced network environments.

4-Preparing advanced and specialized technical cadres in designing, managing, and securing computer and communication networks, by providing high-quality academic programs that combine theoretical knowledge with practical application. The department is dedicated to developing skills and innovation

in the fields of network technology, to ensure that the needs of the local and global market are met, and to contribute to advancing digital transformation and enhancing information security, thus contributing to sustainable development and serving local and global

4.Program Accreditation
Application Submitted- Under Review

5.Other External Influences
Several aspects where many seminars and meetings were held to discuss academic and applied content with experienced professors They also discussed with colleges and universities that contain the corresponding disciplines through conferences, seminars and joint work that allow communication between teaching staff and students for the purpose of coming up with a common vision and developing plans for curriculum development.

Program Description .1

Credit Hours		Course Name	Course Code	Academic Year\Stage
Practical	Theoretical			
First semester				
-	**3**	Information Security	ItInIs302801(3,0)	third / 2025-2024
2	**2**	Web Programming	ItInWp402902(3,2)	third / 2025-2024
2	**2**	Operating Systems with Linux	ItInOs303003(2,2)	third / 2025-2024
2	**3**	Java Programming	ItInJp303104(3,2)	third / 2025-2024
-	**3**	Strategic Information System Management	ItInSi303205(3,0)	third / 2025-2024
2	**1**	Group Project I	ItInGp303306(1,2)	third / 2025-2024
-	**2**	English Language - Pre-Intermediate	ItInEl303407(2,0)	third / 2025-2024
2	**2**	Data Communication and Networking I	ItInDc404101(2,2)	fourth / 2025-2024
-	**2**	WAN Technology	ItInWt404202(2,0)	fourth / 2025-2024
2	**2**	Network Operating System	ItInNo405010(2,2)	fourth / 2025-2024
2	**2**	Artificial Intelligence	ItInAi404404(2,2)	fourth / 2025-2024
-	**2**	Optical Networks	ItInOn404505(2,0)	fourth / 2025-2024
-	**2**	Project I	ItInPr404606(0,4)	fourth / 2025-2024
-	**2**	English Language – Intermediate	ItInEl404707(2,0)	fourth/ 2025-2024
Second Semester				
2	**2**	Network Security	ItInNs303508(2,2)	third / 2025-2024

2	**2**	JavaScript	ItInJs303609(2,2)	third / 2025-2024
2	**2**	Web Development	ItInWd303710(3,2)	third / 2025-2024
2	**2**	Mobil Fundamentals and Programming	ItInMf303811(3,2)	third / 2025-2024
-	**2**	Planning For Information Network	ItInPi303912(2,0)	third / 2025-2024
2	**1**	Group Project II	ItInGp304013(1,2)	third / 2025-2024
2	**2**	Data Communication and Networking II	ItInDc404808(2,2)	fourth/ 2025-2024
2	**2**	Routers Protocols	ItInRp404909(2,2)	fourth / 2025-2024
2	**2**	Web Based Applications	ItInWa404303(2,2)	fourth/ 2025-2024
-	**2**	Secure Websites Administration	ItInSw405111(2,0)	fourth / 2025-2024
-	**2**	Principles of Cloud Computing	ItInPc405212(2,0)	fourth/ 2025-2024
2	**-**	Project II	ItInPr405313(0,4)	fourth / 2025-2024

6.Program Organization

*Remarks	Percentage	Units	Number of courses	Program Structure
compulsory core course\ compulsory supporting course		71	27	**University/ Institution Requirements**
			1	College Requirements
			None	Department Requirements
			Available	Summer Training
				Others

*It can include remarks on whether the course is compulsory core course or compulsory supporting course

7.Learning Programm Outcomes

Knowledge	
	Computer Science.1 Information networks.2 Cloud Computing 3 Internet of Things4
	Skills
	1. Network Management 2. Network Security- **3. Website Programming** **4. Cloud Computing** 5. Programmatically-defined networks

	Values
	C.Emotional and value objectives: Using brainstorming to bring out the creative ideas of some talented students. -C1 Developing research skills in the Internet to expand the knowledge horizon. -2C To encourage the development of students' geometric thought in memorization and guessing and motivate it towards critical thinking and thinking at a stage before remembering. -3C -Presenting the engineering problem or design and asking to think about all possible solutions or possible developments -4C

Information on Teaching Staff					
Remarks	Field of Study	Degree	Name	Academic Title	No.
Head of Department	Electrical Engineering	Doctorate	Alharith Abdulkareem Abdullah	Prof.	.1
	Computer Sciences	Doctorate	Ali Kadhim Idrees Hasson Al saadi	Prof.	.2
	Computer Sciences	Doctorate	Huda Naji Nawaf EmranAl -Maamori	Prof.	.3
	Electrical Engineering	Doctorate	Saad Talib Hsson Al-Jubori	Prof.	.4
	Computer Sciences	Doctorate	Nawfal Turki Aubeiyes	Asst. Prof	.5
	Computer Sciences	Doctorate	Ahmed Mahdi Mohammed SAeed Alsalih	Asst. Prof	.6
	Computer Sciences	Doctorate	Firas Sabah Salih Hadi Al -Tureihi	Asst. Prof	.7
Undergraduate course coordinator	Computer Sciences	Doctorate	Alaa Eldin Abbas Abdulhasan	Asst. Prof	.8
	Arts:English	Master	Shahla Abdul Kadhim Hadi Jassim	Prof.	.9
	Computer Sciences	Doctorate	Mohammed Husein Jawad Aboud Al-Hasnawi	Asst. Prof	.10
	Computer Sciences	Doctorate	Suad Abdulilah Abdul Husein Mohammed Al-Asdi	Asst. Prof	.11
	Computer Sciences	Doctorate	Mahdi Salih Naema Almehana.	Asst. Prof	.12

	Mathematics	Doctorate	Husein Abdulwasei Husein Al-Huseini	Lec.	13
Postgraduate course coordinator	Computer Sciences	Doctorate	Aala Shawqi	Lec.	14
	Computer Sciences	Doctorate	Anwar Jaafar Musa	Lec.	15
	Electrical Engineering	Doctorate	Rasim Aziz Kadhim Khdieyr Al Mansouri	Lec.	16
	Computer Sciences	Doctorate	Hasan Haleem Hasan Khdeir Al Reheemi	Lec.	17
	Computer Sciences	Doctorate	Saba mohmmed Husien Salman Alshabeeb	Lec.	18
	Computer Sciences	Doctorate	Tariq Alwan Kadhim Muhameid Al murshidi	Lec.	19
	Computer Sciences	Master	Hiba Ameer Jabir Kadhim Al khafaji	Lec,	20
	Computer Sciences	Doctorate	Goerge Iskander Husein Musa Ijam	Lec.	21
	Computer Sciences	Doctorate	Samraa Adnan ABd Muslim Alasdi	Lec.	22
	Computer Sciences	Master	Sarah Kadhim Idrees Hasson Alsaadi	Asst. Lec	23
	Communication Engineering	Master	Oula Ali AUbied Kadhim	Asst. Lec	24

	Electrical and Electronics Engineering	Doctorate	Alaa Hamood Abid Jarrah Alkhafaji	Asst. Lec	25
	Mathematics	Master	Eman Dakhil eadan dahi Alsaeedi	Asst. Lec	26
	Computer Sciences	Master	Bashar Hamid Hasan Dahir Tajuldin	Asst. Lec	27
	Computer Sciences	Master	Mohammed khudeiyer Mahdi Al-Jubori	Asst. Lec	28
	Mathematics	Master	Nadia Ali Abbas Husein	Asst. Lec	29

8. Teaching and Learning Strategies

There are many methods of teaching and learning used in the Faculty of Information Technology, and the most important of these methods are: (theoretical and practical lecture,discussion and dialogue, field visits to relevant governmental and civil institutions, seminars on specific topics, students' theoretical and practical research, library activities ,

9.Evaluation Methods

1- Seminars .

2- Scientific discussion, oral dialogue, and theoretical and practical quarterly and final examinations.

3- Writing and submitting reports and taking notes on the technical expertise gained during field visits

4-Quizes

5- Quarterly and annual tests

Professional Development
(New faculty members)
Through seminars, seminars and attending conferences
Professional development of teaching staff:

Through conferences, seminars, panel discussions, and the presence of teachers in postgraduate discussions

10.Acceptance Criteria

Centralized Admission

11 The most important sources of information about the program

1-Free education
College Library-2
Internet-3
E-books-4

12. **Program Development Plan**

Reviewing and updating curricula - Updating curricula to include the latest 1
.G networks, cloud computing, Internet of Things (IoT), and cybersecurity5

.hands-on training, applied projects, and real-life case studies ingIntegrat2
Organizing training , 4. Developing academic and administrative staff3.
courses and workshops for faculty members to keep abreast of technical
Encouraging scientific research and publishing in refereed -5 .developments
.journals and related conferences

Program Skills Framework															
Target learning Outcomes															
Values				Skills				Knowledge				Core course\ Supporting Course	Course Name	Course Code	Academic Year Stage\
C **4**	C **3**	C **2**	C **1**	B **4**	B **3**	B **2**	B **1**	A **4**	A 3	A2	A 1				
	*		*		*	*	*	*	*		*	Core course	Information Security	ItInIs302**8**0**1**(3,0)	2024-2025 Third**/**
		*		*	*		*	*		*	*	Core course	Web Programming	ItInWp40**2**902(3,2)	
*		*	*			*	*		*	*	*	Core course	Operating Systems with Linux	ItInOs303**0**03(2,2)	
			*	*	*		*		*	*	*	Core course	Java Programming	ItInJp303**1**04	

														(3,2)	
*			*	*	*		*		*	*	*	Core course	Strategic Information System Management	ItInSi303**2**05(3,0)	
			*		*		*	*	*	*	*	Core course	Group Project I	ItInGp303**3**06(1,2)	
*		*	*				*			*	*	Core course	English Language - Pre-Intermediate	ItInEl303**4**07(2,0)	

*	*	*	*	*	*		*	*			*	Core course	Data Communication and Networking I	ItInDc404**1**01(2,2)	2024-2025 \Fourth
*	*	*	*		*		*	*		*	*	Core course	WAN Technology	ItInWt404**2**0**2**(2,0)	
*	*	*	*		*	*	*	*	*	*	*	Core course	Network Operating System	ItInNo40**5010**(2,2)	
*	*	*	*	*	*	*	*	*	*	*	*	Core course	Artificial Intelligence	ItInAi404404(2,2)	
*	*	*	*	*	*	*	*	*	*	*	*	Core course	Optical Networks	ItInOn404**5**05(2,0)	
*	*	*	*	*	*	*	*	*	*	*	*	Core course	Project I	ItInPr40**46**06(0,4)	

Please mark the checkbox corresponding to the individual learning outcomes of the program under evaluation*