Republic of Iraq Ministry of Higher Education & Scientific Research Supervision and Scientific Evaluation Directorate Quality Assurance and Academic Accreditation International Accreditation Dept.

# Academic Program Specification Form For The Academic

Universitiy: College : Number Of Departments In The College : Date Of Form Completion :

Dean's Name

Dean's Assistant For Scientific Affairs

Date: / /

Date: /

The College Quality Assurance And University Performance Manager Date: / / Signature

Signature

Signature

Quality Assurance And University Performance Manager Date : / / Signature

# **TEMPLATE FOR PROGRAMME SPECIFICATION**

#### HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

### **PROGRAMME SPECIFICATION**

This Programme Specification provides a concise summary of the main features of the Programme 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 programme.

023-

9. Aims of the Programme

The aim of this course is preparing a network engineer with different skills especially in network managements & administrations which plays an important role in the Internet as it becomes larger and larger. The failure of a single device may interrupt the communication from one point of the Internet to the other. In this course, we first discuss the areas of network management. We then discuss how one of these areas is implemented at the application layer of the TCP/IP suite. 10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Cognitive goals

At the completion of the course, students will be able to...

A1. Understand the concept of network management

A2. Discusses five general areas of network management: configuration, fault, performance, security, and accounting.

A3. Discusses Simple Network Management Protocol (SNMP) as a framework for managing devices in an internet using the TCP/IP protocol suite.

A4. Able to use Packet Tracer software

A5. Brief discussion of a standard that provides the methods and rules to define data and objects.

B. The skills goals special to the programme.

In addition to the measurable student learning outcomes listed above, students enrolled in Networks Managements Semester will be required to demonstrate their more in-depth knowledge of the Semester material by

B1. Study different Networks case studies in real life and solving additional challenging exam problems.

Teaching and Learning Methods

Lectures notes, Presentations, Practical lab and seminars.

Assessment methods

- Quizzes + Assignment 10%
- Mid-term + Seminars 30%
- Lab 10%
- Final 50%

C. Affective and value goals

C1. Ability to apply knowledge of Networks managements according to market requirements.

C2. Ability to identify, formulate and solve engineering problems.

C3. Ability to use different techniques, skills and modern engineering tools necessary for engineering practice.

- D. General and Transferable Skills (other skills relevant to employability and personal development)
- D1. Ability to enhance the network performance.
- D2. Ability to use Packet Tracer simulator.
- D3 Ability to specify and identify the network problems and propose solutions.

11. Program	me Structure			
Level/Year	Course or Module Code	Course or Module Title	Credit rating	12. Awards and Credits
2021-2022		Network Managements		Bachelor Degree Requires ( x ) credits

#### 13. Personal Development Planning

- 1. Develop the capabilities to move on to management of corporation networks.
- 2. Build the ability to manage, monitor and modify based on system administration criteria.

## 14. Admission criteria.

According to the rules of Ministry of Higher Education and Scientific Research in Iraq.

15. Key sources of information about the programme

- 1. Books
- 2. Internet
- 3. Lectures Note

	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)	K ı	inowle inders	edge an tandin	nd g	S	ubjec sl	t-speci cills	fic	r -	Fhinkin	ıg Skill	S	Gene Sk relev and p	eral and ills (or) ( vant to en personal	Transfer Other ski nployab develop	able ills ility ment
				A1	A2	A3	A4	<b>B</b> 1	B2	<b>B3</b>	<b>B4</b>	<b>C1</b>	C2	C3	<b>C4</b>	D1	D2	D3	D4

# **TEMPLATE FOR COURSE SPECIFICATION**

#### HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

## **COURSE SPECIFICATION**

This Course Specification provides a concise summary of the main features of the course 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 should be cross-referenced with the programme specification.

1. Teaching Institution	University of Baghdad/ Al_Khwarizmi College of Engineering
2. University Department/Centre	Information and Communication Engineering Dept.
3. Course title/code	Network Managements
4. Modes of Attendance offered	attendance is according to the university rules in 2023-2024
5. Semester/Year	1 <sup>st</sup> semester/ 4 <sup>th</sup> year
6. Number of hours tuition (total)	45 Theory
7. Date of production/revision of this specification	2023

10. Course Structure							
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method		
1	3		Course Outline	Classroom lecture			
2	3		Introduction and Configuration Management	Classroom lecture	Seminars		
3	3		Fault Management and Security Management	Classroom lecture	Seminars		
4	3		Performance Management and Accounting Management	Classroom lecture	Seminars		
5	3	SNMP	Managers, Agents and Management Components with Exam	Classroom lecture	Attendance exam		
6	3		SMI	Classroom lecture	Seminars		
7	3		MIB	Classroom lecture	Seminars		
8	3		SNMP	Classroom lecture	Seminars		
9	3		ASN.1 with Language Basics	Classroom lecture	Seminars		
10	3		Data Types and Encoding with Exam	Classroom lecture	Attendance exam		
11	3	Quality of Service	DATA-FLOW CHARACTERISTICS	Classroom lecture	Seminars		
12	3		FLOW CONTROL TO IMPROVE QOS	Classroom lecture	Seminars		
13	3		INTEGRATED SERVICES (INTSERV)	Classroom lecture	Seminars		
14	3		DIFFERENTIATED SERVICES (DFFSERV)	Classroom lecture	Seminars		
15	3		Midterm Exam	Classroom lecture	Midterm Exam		

11. Infrastructure	
1. Books Required reading:	<ol> <li>Behrouz A. Forouzan, Data Communication and Newtorking, 4th and 5th Edition.</li> <li>J. Burke. "Network Management Concepts and Practice: A Hands-on Approach", Pearson Education, Inc.</li> <li>Jianguo Ding, "Advances in network management," CRC Press, 2010.</li> </ol>
2. Main references (sources)	Behrouz A. Forouzan, Data Communication and Newtorking, 4th and 5th Edition.
A- Recommended books and references (scientific journals, reports).	4\M. Subramanian. "Network Management: Principles and Practice", Addison Wesley.
B-Electronic references, Internet sites	