Republic of Iraq

Ministry of higher education & scientific research
Supervision and scientific evaluation directorate
Quality assurance and academic accreditation

Academic Program Specification Form
For The Academic

University :Northern Technical University

Institute: Technical college of Managment

Department: Information Techniques managment

Date of form completion: 07/01 **/2024**

Head of Department
Dr. Harith Akram Hamdon
Date: 7/ 1 / 2024
Signature

Dean`s Assistant for Scientific Affairs
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HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This description of the academic program provides a necessary summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available opportunities. It is accompanied by a description of each course within the program .

1. Teaching Institution	**Northern Technical University**
2. University Department/Centre	**Technical College of Management / Mosul**
3. Programme Title	**Information Techniques Management Department.**
4. Title of Final Award	**Information technology assistant**
5. Modes of Attendance offered	**Determinant (first, second, third stage)** **Courses (fourth stage)**
6. Accreditation	**AACSB**
7. Other external influences	**Central admission / labor market**
8. Date of production/revision of this specification	**7/1/2024**
9. Aims of the Programme	
1. Providing society with scientific outputs capable of planning and organizing using electronic systems that keep pace with the labor market. 2. Preparing qualified students who are able to interact and communicate with society and who have the ability to deal with modern technologies in information management using modern technologies in a way that is compatible with the labor market.	

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

A1- Developing students' cognitive abilities and developing the basic concepts of the information technology specialization.
A2- Enhancing students' theoretical and applied knowledge that qualifies them to work in various types of institutions.
A3- Developing students' cognitive abilities in the field of identifying the latest technologies and tools used in storing, processing and retrieving information.
A4- A comprehensive understanding of the concepts, theories, foundations and philosophy of the information systems specialization.
A5- Providing a high-level scientific, professional and technical environment to graduate high-quality cadres in a manner consistent with the needs of the labor market.

B. Subject-specific skills

B1- Using programming skills and investing them in the field of providing services and simplifying procedures.
B2- Dealing with beneficiaries and studying their information needs.
B3- Scientific research and writing of scientific, administrative and technical reports.
B4- The possibility of managing databases available on local servers or available on the Internet in terms of entering and processing data, retrieving information and presenting it to beneficiaries.
B5- Contributing to the design, implementation and management of systems and programs to serve various institutions and achieve their goals.

Teaching and Learning Methods

1- Direct indoctrination (lecture) with the use of educational technology tools
2- Classroom discussion and interaction through assigning assignments
3- Teaching by practical application of the materials that require the department's laboratories
4- Education strategy based on research projects
5- E-learning strategy using Internet resources

Assessment methods

a. Periodic tests
B. Snap tests
T. Classroom interaction and participation
Th. Research assignments and reports
C. Practical and applied tests.

C. Thinking Skills

C1- Enhancing the sense of belonging to the specialty and developing the desire to work in information institutions.
C2- Enhancing the spirit of belonging to a team within the organization and the desire to provide the best.
C3- Enhancing the desire for self-development and keeping pace with everything new in the field of institutional work.

C4- Enhancing the desire to compete to raise efficiency and productivity.

Teaching and Learning Methods

1. Periodic field visits to administrative and technical institutions
2. Coexistence, actual practice, and mingling with workers through practical application (summer training), which the student carries out in coexistence with the beneficiaries.
3. Psychological and emotional stimulation through open and direct discussions with students
4. Academic or scientific supervisor

Assessment methods

1. Periodic reports of the scientific supervisor
2. Direct and indirect follow-up and monitoring
3. Self-evaluation surveys

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

D1- Teaching the student the skills of writing research and reports

D2- Teaching the student how to link the theoretical aspect with the practical application that he will practice at work

D3- Teaching the student how to deal with information sources, analyze them, and derive and write down a summary of the information he obtains as a result of the objective analysis of these sources.

D4- Teaching the student how to design databases and websites and implement programs to serve various scientific fields

Teaching and Learning Methods

1- Continuous guidance of students by the professor during the daily lecture
2-Open discussions between students and teachers
3-Scientific trips to learn about successful experiments
4- Using the Internet in education through special websites that publish topics and complete texts

Assessment Methods

1- Excellence in good research and reports
2-Student interaction with the lecture
3-Continuous observation of the student by the teacher

11. programme structure

stage	Course name	Course name	theoretical	practical
First stage	ELM	Department of Information Technology Management	13 Hours a week	12 Hours a week
Second stage	ELM	Department of Information Technology Management	14 Hours a week	11 Hours a week
Third stage	ELM	Department of Information Technology Management	15 Hours a week	16 Hours a week
Fourth stage	ELM	Department of Information Technology Management	14 Hours a week	13 Hours a week

12. personal development Planning

1. Annual plans developed by the department's scientific committee and the department council to develop the performance of both the teaching and the course and its use of more modern vocabulary at a rate ranging between 15-20% of the subject.
2. Enrolling in training programs and courses and participating in distinguished scientific discussions, seminars and conferences
3. Urging teachers to communicate with their colleagues in corresponding departments, as this is of great benefit.

13. Admission criteria

1- Standards set by the Ministry of Higher Education and Scientific Research
2- The general average of preparatory school is not less than.....
3- Free from physical and mental disabilities
4- Good conduct and behavior.

14. Key sources of information about the programme

1- Corresponding departments and colleges in local Arab and international universities
2- Scientific methodological books in the field of specialization
3- Specialized practical books
4- General and specialized computer programs.

Curriculum Skills Map																			
Please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed																			
Programme Learning Outcomes																			
Year/ le vel	**Cou r se Cod e**	**Course Title**	**Core (C) Title or Option (O)**	**Knowledge and understanding**				**Subject-specific skills**				**Thinking Skills**				**General and Transferable Skills relevant to employability and personal development**			
				A1	**A2**	**A3**	**A4**	**B1**	**B2**	**B3**	**B4**	**C1**	**C2**	**C3**	**C4**	**D1**	**D2**	**D3**	**D4**
First stage		**Administration principles**	**Core**				✓		✓				✓					✓	
		Statistics principles	**Core**				✓				✓			✓					✓
		mathematics	**Core**				✓			✓				✓					✓
		Accounting principles	**Core**		✓			✓				✓					✓		
		Computer application	**Core**		✓					✓		✓						✓	
		Democracy & Human Rights	**Core**	✓			✓				✓				✓				✓
		English language	**Core**				✓				✓				✓				✓
		Essential IT	**Option**		✓						✓			✓					✓

		Program language c++	**Option**	✓					✓				✓				✓		
Second stage		**English language 2**	**Core**		✓						✓			✓					✓
		Professional ethics	**Core**				✓			✓				✓			✓		
		Human resources management	**Core**			✓			✓				✓			✓			
		Operation management	**Core**				✓		✓				✓					✓	
		Markting management	**Core**				✓			✓				✓					✓
		Data base management	**Core**		✓			✓				✓					✓		
		Visual basic	**Core**		✓				✓				✓					✓	
		Organizational behavior	**Core**	✓			✓				✓				✓				✓
		Organizational management	**Core**				✓				✓				✓				✓
		multimedia	**Core**	✓			✓				✓				✓				✓
		E- marketing	**Core**			✓			✓				✓			✓			
		Image processing management	**Option**		✓						✓				✓				✓
		Numerical analysis	**Option**			✓		✓						✓			✓		
		sport	**Option**	✓						✓				✓				✓	
		French language	**Option**		✓				✓					✓					✓

Third stage		Training	Core				✓				✓				✓				✓
		English language	Core		✓					✓					✓				✓
		Financial management	Core				✓		✓				✓					✓	
		Web design	Core			✓				✓			✓					✓	
		E - business	Core		✓			✓				✓					✓		
		Information systems management	Core				✓		✓				✓					✓	
		Data base management	Core				✓		✓				✓					✓	
		Operating systems	Core		✓			✓				✓					✓		
		Visual programming	Core		✓			✓				✓					✓		
		Internet technology 1	Core	✓						✓				✓			✓		
		Commercial law	Core		✓			✓				✓							✓
		Strategy management	Core			✓				✓				✓			✓		
		Internet technology 2	Core		✓			✓					✓			✓			
		Image processing	Core	✓						✓				✓			✓		
		Network security	Option				✓			✓				✓					✓
		Projects management	Option		✓				✓						✓			✓	

		Mobile programming techniques	**Core**	✓				✓					✓					✓	
		Knowledge management	**Core**				✓				✓				✓				✓
Fourth stage		**Electronic governments management**	**Core**		✓			✓				✓					✓		
		Total quality management	**Core**		✓			✓				✓					✓		
		Entries administrative approaches	**Core**	✓			✓				✓				✓				✓
		Expert system	**Core**		✓			✓				✓					✓		
		System analysis	**Core**	✓			✓				✓				✓				✓
		Software engineering 1	**Core**		✓			✓				✓					✓		
		English language	**Core**		✓			✓				✓					✓		
		Research project	**Core**				✓				✓				✓				✓
		Electronic management	**Core**		✓						✓			✓					✓
		Quality control management	**Core**	✓			✓				✓				✓				✓
		Artificial intelligence	**Core**			✓			✓				✓					✓	
		Software engineering 2	**Core**	✓				✓									✓		
		Business ethics	**Core**		✓						✓			✓					✓

		English language	**Core**		✓					✓			✓						✓
		Methodology of scientific research	**Core**				✓		✓						✓			✓	

Course Description Form

Reviewing the performance of higher education institutions (Academic Program Review)

Course description

This course description provides a necessary summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available learning opportunities.

1. The educational institution	Northern Technical University
2. The university department/center	Information Techniques Management Department
3. Course name/code	System analysis / ELM405
4. programs that are included in it	Software Development, Data Management, Project Management, Tech Support, Infrastructure Management
5. Attendance forms available	weekly
6. season/year	Courses (fourth Semester)
7. Study hours (total)	56 hours
8. The date this description was prepared	7/1/2024
9. Course objectives	
This material aims to give a clear vision of how to analyze systems, whether they are old, ineffective systems or new systems, and whether the system is manual, automated, or semi-automatic. This requires the student to study the following stages: the planning stage, the analysis stage, the design stage, the application and testing stage, and the operation and maintenance stage. This course provides the student with an opportunity to do a set of practical exercises in various sectors, enabling him to acquire systems analysis skills at different stages.	

10. Learning outcomes and methods of teaching, learning and assessment

A- Knowledge and understanding

A1- Familiarity with the concept of systems analysis and the duties of a systems analyst

A2- Knowing the levels of information in the organization and how to collect, analyze and document it.

A3- Knowing the steps and requirements of systems design

A4- Knowing the basis on which the available alternatives are evaluated and the best alternative is chosen from them.

b- Subject-specific skills

B1-Familiarity with the importance and components of communication in systems analysis and design.

B2- The ability to choose and then employ appropriate analytical tools to study a specific system.

B3 - The ability to understand and read systems analysis tools such as:

- Decision tables.
- Flow charts.
- Gantt model.
- Class model.
- Business network model.

B4- Giving the student the ability to analyze systems and track administrative problems using scientific and applied means and methods.

B5-Teaching the student to discover different alternatives and compare between them, and then choose the optimal alternative .

B6-Introducing the student to ways to communicate with others at various levels inside and outside the system.

B7-Accustom the student to establishing working relationships with those concerned with the system.

B8-To accustom the student to preparing a research project, providing a detailed presentation, and being able to answer questions related to it.

B9-Accustoming the student to performing the required tasks through his active participation in a work team.

Methods of teaching and learning

1- Direct indoctrination (lecture) with the use of educational technology tools.

2- Class discussion and interaction through assignment of duties.

3- Teaching by practical application of the subjects that require the department's laboratories.

4- Research project-based education strategy.

Evaluation modalities

A. Regular testing

B. Quiz

T. Classroom interaction and participation

Th. Research assignments and reports C. Practical and practical tests
C- thinking skills C1- Enhancing the spirit of belonging to a team within the organization and the desire to provide the best C2- Enhancing the desire to compete to raise the educational level C3- Enhancing the sense of belonging to the specialty and developing the desire to work in information institutions.

Methods of teaching and learning
1.Periodic field visits to administrative and technical institutions 2. Coexistence, actual practice, and mingling with workers through practical application (summer training), which the student carries out in coexistence with the beneficiaries. 3.Psychological and emotional stimulation through open and direct discussions with students
Evaluation modalities
1.The scientific supervisor's periodic reports 2.Direct and indirect follow-up and monitoring 3. Self-evaluation questionnaires
D - General and transferable skills (other skills related to employability and personal development). D1- Teaching the student the skills of writing research and reports D2- Teaching the student how to link the theoretical aspect with the practical application that he will practice at work D3- Teaching the student how to deal with information sources, analyze them, and derive and write down a summary of the information he obtains as a result of the objective analysis of these sources. D4- Teaching the student how to design databases and websites and implement programs to serve various scientific fields.

11. Course structure					
the week	**hours**	**required learning outcomes**	**Name of the unit/course or topic**	**education method**	**Evaluation method**
the first	**4**	Show a clear idea of the vocabulary of the subject	Present the material, divide into groups	Lectures and discussion	Interaction and participation
second The	**4**	The student's knowledge of the concept of systems: - Introduction to the system and its characteristics Definition of systems levels	Systems concept	Lectures and discussion	Interaction and participation

Third	**4**	-Defining the system's boundaries -Introducing the system's tasks	Components, boundaries and tasks of systems	Lectures and discussion	Interaction, participation and daily testing
the fourth	**4**	-Systems levels - System relations	Systems relationships	Lectures and discussion	Interaction, participation and surprise quiz
Fifth	**4**	Systems analysis: - The nature of systems analysis - Systems analysis procedures - Forming a systems team - Duties and responsibilities of the systems team (team leader and members)	Systems analysis	Lectures and practical implementation	Interaction, participation and semester testing
Sixth	**4**	Systems analysis tools: - Organizational structures - Gantt model - Network model - Class model - Decision tables - Flow maps	Analysis tools: structures	Lectures and discussion	Interaction, sharing and reporting
Seventh	**4**	Systems analysis tools: - Organizational structures - Gantt model - Network model - Class model	Analysis tools: Gantt and grid	Lectures and practical implementation	Interaction, participation and duties
Eighth	**4**	Systems analysis tools: - Class model - Decision tables - Flow maps	Analysis tools: classes and decisions	Lectures and practical implementation	Interaction, participation and duties
ninth	**4**	Systems analysis tools: - Network model - Class model - Flow maps	Midterm, presenting diagrams	Lectures and practical implementation	Giving and explaining reports through presentation
The tenth	**4**	Systems analysis tools: - Flow maps	Analysis tools: flow charts	Lectures and practical implementati	Interaction, participation and duties

				on	
eleventh	**4**	The importance of communication in systems analysis and design: - The concept of communication - Types of communication (formal - informal(- Forms of communication (vertical - horizontal - lateral(- Essentials of effective communication - Information flow - Feedback - Sources of information	Connection	Lectures and discussion	Daily testing
twelveth	**4**	Tenders and offers: - Evaluating the needs of the library or information center - Preparing the tender request brochure - Forms and contents of request for bids - Invitation to tender - Receiving and evaluating offers	Tenders and offers	Lectures and discussion	Interaction and participatio n
Thirteenth	**4**	Model design: - Basics of preparing models - Model elements - Uses of the model - The most important defects in designing models	Model design	Practical application	Reports
fourteenth	**4**	Codes and coding: - Definition of code - Code shapes - Types of code - Fundamentals of code design	Codes and coding	Practical application	Giving and explaining reports through presentation

12. Infrastructure	
Required reading: **· CORE TEXTS** **· COURSE MATERIALS** **· OTHER**	
Special requirements (include for example workshops, periodicals, IT software, websites).	**Saad Ghaleb Yassin. Analysis and design of information systems. Cairo: Dar Al-Manhaj for Publishing and Distribution, 2000, 1st edition.**
Community-based facilities (include for example, guest Lectures , internship , field Studies.	**Scientific journals in the fields of information technology.**

.**13Course development plan**
1. pre-requisites. 2. minimum number of students. 3. maximum number of students.