

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department**



# **Academic Program and Course Description Guide**

**2024**

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are

followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

### Academic Program Description Form

University Name: .....

Faculty/Institute: Kut University College

Scientific Department: Medical Instrumentation Engineering Technology

Academic or Professional Program Name: Engineering technician

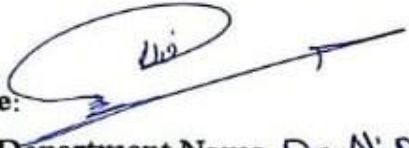
Final Certificate Name: Bachelor's

Academic System: annual

Description Preparation Date: 19/10/2024

File Completion Date: 19/10/2024

Signature:



Head of Department Name: Dr. Ali Dhebi

Signature:



Scientific Associate Name:

Prof. Abdurrahman M. Alwan

Date:

20/10/2024

Date:

20/10/2024

The file is checked by: Dr. Ali Saad Alwan

Department of Quality Assurance and Performance Evaluation:

Director of the Quality Assurance and Performance Evaluation:

Date:

Signature:



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### **1. Program Vision**

The Department of Medical Equipment Engineering Technology seeks to qualify distinguished and innovative competencies scientifically, skillfully and behaviorally in the field of medical equipment technology and to keep pace with similar departments in reputable local and international universities by providing community services by offering the latest academic programs to provide an advanced academic environment that provides everything the student needs in this department.

### **2. Program Mission**

The department seeks to graduate medical engineering and technical cadres with a level of education and training, capable of working in the health sectors, understanding human needs, and keeping pace with technical developments.

### **3. Program Objectives**

- 1- Providing the student with scientific and practical skills that qualify him to diagnose malfunctions resulting from medical devices.
- 2- Graduating students who are able to master the different parts of medical devices and keep pace with the developments in their various technologies.
- 3- Providing the graduate with the ability to have detailed knowledge of all modern technologies in the field of medical device engineering.
- 4- Developing the research, scientific and technical capabilities of teachers and graduates and keeping pace with modern developments and encouraging the use of advanced methods in areas of specialization.
- 5- Working to establish strong and joint scientific and research relations with similar departments in other universities through participation in seminars, courses and training workshops.

### **4. Program Accreditation**

ABTE

### 5. Other external influences

There is a close relationship with the labor market that receives our graduates, so the opinion of the labor market is taken according to the curricula approved for the corresponding department at the Middle Technical University / College of Engineering - Department of Medical Devices Engineering Technology

### 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	60			
College Requirements	yes			
Department Requirements	yes			
Summer Training	yes			
Other				

\* This can include notes whether the course is basic or optional.

### 7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
2024-2025/ second stage				

### 8. Expected learning outcomes of the program

#### Knowledge

Learning Outcomes 1 Cognitive objectives 1- Developing work plans and programs, especially in the maintenance of medical devices 2- On-site supervision of the implementation of work	
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<p>3- Preparing research and studies To improve the development of medical equipment work</p> <p>4-Participation in committees related to medical equipment activity</p> <p>5- Participation in analyzing tenders for medical equipment and choosing the alternative</p>	
<b>Skills</b>	
<p>Program Skills Objectives</p> <p>1- Training engineers and technicians to operate and maintain medical devices</p> <p>2- Installing and operating medical devices (supervision and implementation)</p> <p>3- Providing advice in the field of medical devices</p>	
<b>Evaluation</b>	
<p>Interactive assessment that takes place directly between the student and the professor is one of the feedback methods that faculty members rely on to evaluate the teaching and learning process, in addition to semester assessment - practical assessment - final assessment - daily attendance - weekly reports</p>	

## 9. Teaching and Learning Strategies

The main strategy that will be adopted in delivering this unit is to encourage student participation in design, while at the same time refining and expanding their thinking skills in medical devices. This will be achieved through classroom, interactive lessons, and by considering the types of simple experiments that involve some sampling activities that interest students.

## 10. Evaluation methods

Daily evaluation - semester evaluation - practical evaluation - final evaluation - presentation - daily attendance - weekly reports

## 11. Faculty

### Faculty Members

Academic Rank	Number	Special Requirements/Skills (if applicable)		Number of the teaching staff	
				Staff	Lecturer
Professor	2			Staff	
Assistant Professor	5			Staff	
Assistant Professor	1				Lecturer
Lecturer	6			Staff	
Assistant Lecturer	11			Staff	
Assistant Lecturer	6				Lecturer

## Professional Development

### Mentoring new faculty members

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

### Professional development of faculty members

Briefly describe the academic and professional development plan and arrangements for faculty such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

## 12. Acceptance Criterion

(Setting regulations related to enrollment in the college or institute, whether central



admission or others)

**13. The most important sources of information about the program**

- 1- Medical Instrumentation Application and Design
- 2- Biomedical Engineering Handbook- J.D.bronzino
- 3- S. Ananthi, 2005, A text book of medical instruments

**14. Program Development Plan**

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

## Course Description Form

1. Course Name:					
2. Course Code:					
3. Semester / Year:					
4. Description Preparation Date:					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
7. Course administrator's name (mention all, if more than one name)					
Name:					
Email:					
8. Course Objectives					
<b>Course Objectives</b>			<ul style="list-style-type: none"> <li>• .....</li> <li>• .....</li> <li>• .....</li> </ul>		
9. Teaching and Learning Strategies					
<b>Strategy</b>					
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

<b>11. Course Evaluation</b>					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc					
<b>12. Learning and Teaching Resources</b>					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					