وزارة التعليم العالي والبحث العلمي جـــهاز
الإشـــراف والتقـــويم العلـمي
دائرة ضمان الجودة والاعتماد الأكاديمي

استمارة وصف البرنامج الاكاديمي للعام الدراسي ٢٠٢٤_٢٠٢٥ للكليات والمعاهد

الجامعة : جامعة شط العرب الاهلية
الكلية /المعهد : الكلية التقنية الهندسية
القسم العلمي : قسم هندسة تقنيات الأجهزة الطبية
تاريخ ملء الملف : 2025/8/4

التوقيع :
اسم رئيس القسم : أ.م.د. نبيل حسين
التاريخ : 2025/8/4

التوقيع :
اسم المعاون العلمي: أ.د. كامل حسين السوداني
التاريخ : 4/8/2025

الاستاذ الدكتور
كامل حسين السوداني
كيمياء تحليلية

الكلية التقنية الهندسية
اللجنة الامتحانية
هندسة تقنيات الاجهزة الطبية

دقق الملف من قبل
شعبة ضمان الجودة والأداء الجامعي
اسم مدير شعبة ضمان الجودة والأداء الجامعي: التاريخ
/ /
التوقيع

مصادقة السيد العميد

أ.م.د. مازن عبدالاله علوان
عميد الكلية التقنية الهندسية

Ministry of Higher Education and Scientific Research

Supervision and Scientific Evaluation Body

Quality Assurance and Academic Accreditation Office

Course Description Sample

Subject:Electrical Machines

This course description provides a concise summary of the main features of the course and the learning outcomes expected of the student, demonstrating whether the student has made the most of the learning opportunities available. It must be linked to the programme description.

1. Educational Institution	Shatt Al Arab University
2. Department / Center	Medical Devices Technology Engineering
3. Course Title /Code	MIET2106
4. Lecturer Name	**Assistant Lecturer Aya Abdul Hussein**
5. Type of Teaching	Theory – Lab – Tutorial
6. Academic Year /Term	2024/2025
7. Total No. of Teaching Hours	75
8. Date f Preparing this Course Description	

9. **Course Objectives**

1. Understand the basic concepts of the MATLAB programming language environment.
2. Students will understand and learn how to use MATLAB as an effective programming language.
3. Students will be able to solve various mathematical and engineering problems, as well as use planning functions and design projects using code or a graphical user interface.
4. Students will gain knowledge of basic MATLAB concepts, such as variables, inputs, outputs, vectors, matrices, functions, planning, and the graphical user interface.

10. **Course Output, Methodology and Evaluation**

(A) **Cognitive Objectives**

1. Understand the MATLAB environments and windows (Command Window, Workspace Window, Command History Window, Help Window, Editor Window).

2. Students learn how to write a basic program, and learn expressions, constants, matrix insertion, useful matrix generators, writing under the index, terminating text with an index, the colon operator, and moving and deleting rows or columns.

3. Explain how to use variables, assignment statements, and the logical operator.

4. Practice using matrices, built-in functions, and basic matrix functions (sum, max, min, mean, magic, diagnostic, length, size, median, product, and sort).

5. Learn how to perform basic plotting (multiple data sets in a single graph, specifying line styles and colors, plotting multiple charts in a single figure, and setting axis boundaries).

6. Understand arguments and return values, the M file, and input and output statements.
7. Practice using control statements (conditional statements: If, Else, Elseif, and switching case).
8. Identify loop statements (While statements, For statements).
9. Learn how to use a combination of conditional and loop statements.
10. Understand procedures and functions (a custom MATLAB function, defining function names, input and output variables, and function calls).
11. Learn how to work with graphics and the user interface.

(B) **Skill Objectives Related to the Program**:

Methods of Teaching and Learning

1-Lecturers.

2-Class discussion.
3-Lab Experiments.
4-Researchs.
5-Homework.

Methods of Evaluation

Number	calendar element	degree
1-Examinations.		
2-Lab Experiments.		
3-Quizz.		
4-Oral Exam.		
5-Researchs.		

(C) **Sentimental and Value Objectives**

Methods of Teaching and Learning

Methods of Evaluation

D) **General and Qualitative Skills (other skills related to the ability of employment and personal development)**

11. **Course Structure**

(In the table of course weekly outline)

Week	No of Hours	Required Learning Output	Title of Subject	Teaching Method	Evaluation
1					
2					
3					
4					
5					
6					
7					

12.**Infrastructure**

a. Textbooks	. Introduction to MATLAB for Engineers William J. Palm III
b. References	INTRODUCTION TO MATLAB FOR ENGINEERING STUDENTS ,David Houcque
c. Recommended books and periodicals (journals, reports, etc.)	
d. Electronic references, internet websites, etc	The Collage E-Library

13. **The Plan of Improving the Course**

1. Add advanced skills 2. Link new skills to the overall knowledge objectives of the department