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

2022 – 2023

University name: Anbar University
College Name: Engineering
Scientific Department: Civil Engineering
File filling date: 1/11/2023

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The Director of the Division Quality Assurance and University Performance	The Associate Dean for Scientific Affairs	The Dean of the College

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: **University of Anbar**

Faculty/Institute: **College of Engineering**

Scientific Department: **Civil department**

Academic or Professional Program Name: **Department of Civil Engineering**

Final Certificate Name: **Bachelor of Civil Engineering**

Academic System: **semester**

Description Preparation Date: **17/10/2022**

File Completion Date: **17/10/2022**

Signature:

Head of Department Name:

Ass. Professor Ahmed Tareq Noaman

Date: 17/10/2022

Signature:

Scientific Associate Name:

Ph.D. Professor Mohammed Abed Ahmed

Date: 17/10/2022

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: **17/10/2022**

Signature:

Approval of the Dean

1. Program Vision

1 - Raising the educational level of students with engineering specialization.

2 - Prepare professional cadres prepared for engineering work.

3 - Developing students' ability to analyze, develop, and conclude.

2. Program Mission

The overarching goal of civil engineering is to improve the quality of life through designing and developing safe, efficient, and sustainable infrastructure, which is: 1-Project Design. 2-Project Design. 3-Construction Supervision. 4-Structural Analysis. 5-Engineering Consulting. 6-Research and Development. 7-Infrastructure Management. 8-Compliance with Laws and Regulations.

3. Program Objectives

1- The ability to use the programs, devices and tools necessary for engineering work in the correct ways.

2 - Increasing the capabilities required for production within the specified specifications.

3 - Optimal utilization of the timings required to implement programs.

4. Program Accreditation

N/A

5. Other external influences

N/A

6. Program Structure

Program	Number of Courses	Credit hours	Percentage	Reviews*

Structure				
Institution Requirements	English Language I	2		
	Arabic language	2		
	Human Rights	1		
	Democracy	1		
	English Language II	2		
	English Language III	2		
	English Language IV	2		
	Management and Leadership skills	2		
College Requirements	Calculus I	3		
	Calculus II	3		
	Physics	4		
	Chemistry	4		
	Fundamentals of Electrical Engineering	3		
	Computer science	3		
	Engineering Drawing	3		
	Engineering Mechanics (Statics)	3		
	Calculus III	3		
	Calculus IV	3		
	Engineering Statistics	3		
	Engineering Numerical Methods	3		
	Final Year Project I	3		
	Final Year Project II	3		
Department Requirements	Applied Physics	3		
	Construction Materials	3		
	Concrete Properties	4		
	Building Contraction	3		
	Engineering Geology	3		
	Fluid Mechanics	3		
	Dynamics	3		
	Strength of Materials I	3		
	Strength of Materials II	3		
	Engineering Surveying I	3		
	Engineering Surveying II	3		
	Structure I	3		
	Structure II	3		
	Reinforced Concrete Design I	3		
	Reinforced Concrete Design II	3		
	Construction Management	3		
	Engineering Economy	3		
	Soil Mechanics I	3		
	Soil Mechanics II	3		
	Hydrology	3		
	Traffic Engineering	3		
	Hydraulic Structures	3		
	Foundation Engineering I	3		
	Highway Engineering	3		
	Sanitary and Environmental Engineering	4		

		Method of construction and Estimation	3				
		Steel Structure	3				
	Computer	Application in civil Engineering (CE Elective I)	2				
		CE Elective II	2				
		CE Elective III	2				
		CE Elective IV	2				
Summer Training							
Other							

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours		
			theoretical	Tutorial	practical
First Year Semester I	CE1201	Calculus I	3	1	-
	CE1203	Physics	3	-	2
	CE1204	Chemistry	3	-	2
	CE1205	Fundamentals of Electrical Engineering	2	1	2
	CE1206	Computer Science	2	1	2
	CE1101	English Language I	2	-	-
	CE1103	Human Rights	1	-	-
Total Hours and Units			**16**	**3**	**8**
First Year Semester II	CE1202	Calculus II	3	1	-
	CE1301	Applied Physics	3	-	-
	CE 1208	Engineering Mechanics (Static)	3	1	-
	CE1302	Construction Materials	2	1	2
	CE 1207	Engineering Drawing	2	2	2
	CE1102	Arabic Language	2	-	-
	CE1104	Democracy	1	-	-
Total Hours and Units			**17**	**4**	**4**
Second Year Semester I	CE2201	Calculus III	3	1	-
	CE2308	Engineering Surveying I	2	1	2
	CE2306	Strength of Materials I	3	1	-
	CE2301	Concrete Properties	3	1	2
	CE2305	Dynamics	3	1	-
	CE2101	English Language II	2	-	-
Total Hours and Units			**16**	**5**	**4**
Second Year Semester II	CE2202	Calculus IV	3	1	-
	CE2309	Engineering Surveying II	2	1	2
	CE2307	Strength of Materials II	2	1	2
	CE2302	Building Construction	2	1	2
	CE2303	Engineering Geology	3	-	-
	CE2304	Fluid Mechanics	2	1	2
Total Hours and Units			**14**	**5**	**8**

Third Year Semester I	CE3301	Structure I	**3**	**1**	**-**
	CE3303	Reinforced concrete I	**3**	**1**	**-**
	CE3305	Construction Management	**3**	**-**	**-**
	CE3307	Soil Mechanics I	**2**	**1**	**2**
	CE3309	Hydrology	**3**	**1**	**-**
	CE3201	Engineering Statistics	**3**	**-**	**-**
	CE3101	English Language III	**2**	**-**	**-**
Total Hours and Units			**19**	**4**	**2**
Third Year Semester II	CE3302	Structure II	**3**	**1**	**-**
	CE3304	Reinforced concrete II	**3**	**1**	**-**
	CE3306	Engineering economy	**3**	**-**	**-**
	CE3308	Soil Mechanics II	**2**	**1**	**2**
	CE3202	Engineering Numerical methods	**2**	**1**	**2**
	CE3310	Traffic Engineering	**3**	**1**	**-**
Total Hours and Units			**16**	**5**	**4**
Fourth Year Semester I	CE4301	Hydraulic Structures	**3**	**-**	**-**
	CE 4302	Foundation Engineering I	**3**	**1**	**-**
	CE4303	Highway Engineering	**2**	**2**	**2**
	CE4307	Computer Applications in Civil Engineering (Course Elective I)	**1**	**-**	**2**
	CE 4310	Course Elective II	**2**	**1**	**-**
	CE4201	Final Year Project I	**2**	**1**	**2**
	CE4101	English Language IV	**2**	**-**	**-**
Total Hours and Units			**15**	**5**	**6**
Fourth Year Semester II	CE4304	Sanitary and Environmental Engineering	**3**	**1**	**2**
	CE4305	Methods of Construction and Estimation	**3**	**1**	**-**
	CE4306	Steel Structures	**3**	**1**	**-**
	CE4309	Course Elective III	**2**	**2**	**-**
	CE4317	Course Elective IV	**2**	**2**	**-**
	CE4202	Final Year Project II	**2**	**1**	**2**
	CE4102	Management and Leadership Skills	**2**	**-**	**-**
Total Hours and Units			**17**	**8**	**4**

8.Expected learning outcomes of the program

Knowledge	
Learning Outcomes 1	1- Full knowledge of the scientific aspects within the specialty. 2- Complete preparation for conclusion, analysis and development. 3- The correct preparation to confront problems and how to solve them. 4- Raising the level of knowledge in order to develop the capabilities necessary to follow up on scientific innovations.
Skills	
Learning Outcomes 2	Possibility of using programs and devices for engineering works.
Learning Outcomes 3	Optimal exploitation of the timing required to implement programs.
Ethics	
Learning Outcomes 4	Maintaining the basic infrastructure for implementing scientific

	programs.
Learning Outcomes 5	Paying attention to everything possible through which the necessary qualifications for development are raised.

9.Teaching and Learning Strategies

1-Activities and exercises in the classroom.

2-Guiding students to some scientific sources that contain exercises and examples.

10.Evaluation methods

1-Monthly tests. 2-Daily surprise tests. 3-Practical testing in laboratories.

4-Monthly reports.

11.Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer

12.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.

13.Acceptance Criterion
(Setting regulations related to enrollment in the college or institute, whether central admission or others)

14.The most important sources of information about the program
State briefly the sources of information about the program.

15.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
First Year	CE1201	Calculus I	Basic	*					*				*		
	CE1203	Physics	Basic	*				*					*		
	CE1204	Chemistry	Basic		*				*			*			
	CE1205	Fundamentals of Electrical Engineering	Basic		*				*			*			
	CE1206	Computer Science	Basic	*					*			*			
	CE1101	English Language I	Basic		*				*			*			
	CE1103	Human Rights	Basic		*				*			*			
	CE1202	Calculus II	Basic		*				*			*			
	CE1301	Applied Physics	Basic		*			*				*			
	CE 1208	Engineering Mechanics (Static)	Basic		*			*				*			

	CE1302	Construction Materials	Basic	*					*				*		*
	CE 1207	Engineering Drawing	Basic	*				*					*		*
	CE1102	Arabic Language	Basic		*				*			*			
	CE1104	Democracy	Basic		*				*			*			
Second Year	CE2201	Calculus III	Basic	*					*			*			*
	CE2308	Engineering Surveying I	Basic		*				*			*			
	CE2306	Strength of Materials I	Basic		*				*			*			
	CE2301	Concrete Properties	Basic		*				*			*			
	CE2305	Dynamics	Basic		*			*				*			
	CE2101	English Language II	Basic		*			*				*			
	CE2202	Calculus IV	Basic	*					*				*		*
	CE2309	Engineering Surveying II	Basic	*				*					*		*
	CE2307	Strength of Materials II	Basic		*				*			*			

	CE2302	Building Construction	Basic	*					*				*		*
	CE2303	Engineering Geology	Basic	*				*					*		*
	CE2304	Fluid Mechanics	Basic		*				*			*			
Third Year	CE3301	Structure I	Basic		*				*			*			
	CE3303	Reinforced concrete I	Basic	*					*			*			*
	CE3305	Construction Management	Basic		*				*			*			
	CE3307	Soil Mechanics I	Basic		*				*			*			
	CE3309	Hydrology	Basic		*				*			*			
	CE3201	Engineering Statistics	Basic		*			*				*			
	CE3101	English Language III	Basic		*			*				*			
	CE3302	Structure II	Basic	*					*				*		*
	CE3304	Reinforced concrete II	Basic	*				*					*		*
	CE3306	Engineering economy	Basic		*				*			*			

	CE3308	Soil Mechanics II	Basic	*					*				*		*
	CE3202	Engineering Numerical methods	Basic	*				*					*		*
	CE3310	Traffic Engineering	Basic		*				*			*			
Fourth Year	CE4301	Hydraulic Structures	Basic		*				*			*			
	CE 4302	Foundation Engineering I	Basic	*					*			*			*
	CE4303	Highway Engineering	Optional		*				*			*			
	CE4307	Computer Applications in Civil Engineering (Course Elective I)	Optional		*				*			*			
	CE 4310	Course Elective II	Optional		*				*			*			
	CE4201	Final Year Project I	Basic		*			*				*			
	CE4304	English Language IV	Basic		*			*				*			
	CE4305	Sanitary and Environmental Engineering	Optional	*					*				*		*

	CE4306	Methods of Construction and Estimation	Basic	*					*				*		*
	CE4309	Steel Structures	Basic	*				*					*		*
	CE4317	Course Elective III	Basic		*				*			*			
	CE4202	Course Elective IV	Basic		*				*			*			
	CE4102	Final Year Project II	Basic	*					*			*			*
	CE4304	Management and Leadership Skills	Basic		*				*			*			

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