University of Warith Al-Anbiyaa / College of Engineering

Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Authority
Quality Assurance and Accreditation Directorate
Accreditation Department

Academic Program and Course Description Guide

2026-2025

University of Warith Al-Anbiyaa / College of Engineering

Aacademic Program Description Form

University Name: University of Warith AL-Anbiya

Faculty/Institute: College of Engineering

Scientific Department: Civil Engineering Department

Academic or Professional Program Name: Bachelor's in Civil Engineering

Final Certificate Name: Bachelor of Civil Engineering

Academic Degree System: Semester System

Description Preparation Date: 2025/9/2

File Completion Date: 2025/9/2

Signature

Head of Department Name: Dr.Qassim Ali

Date: 2025/9/11

Signature

Scientific Associate Name: Dr. Hassan. T.Hashim

Date:2025/9/15

The file is checked by: Dr. Salam Al-Rbeawi

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 16 / 9 /2025 **Signature:**

Approval of the Dean

أ.م.د. حسين هادي حسين

عميد كلية الهندسة

Introduction

The academic program is regarded as a coordinated and organized package of study courses that includes procedures and experiences systematically designed to cover the fundamental purpose of building and refining graduates' skills. This qualifies them to meet the requirements of the labor market. The program is reviewed and evaluated annually through internal and external auditing procedures, such as the external examiner program.

The program description provides a concise summary of the main features of the program and its courses, highlighting the skills intended to be developed in students in alignment with the academic program's objectives. The importance of this description lies in its role as a cornerstone for obtaining program accreditation, with its preparation shared by the teaching staff under the supervision of the scientific committees in the academic departments.

This manual, in its second edition, includes a description of the academic program after updating its courses and sections, in light of recent developments and transformations in the educational system in Iraq. It also incorporates the description of the academic program in its traditional format (annual or semester system), as well as the standardized academic program description adopted according to the directive of the Directorate of Studies dated 03/06/2023, Ref. No. 290, regarding programs that adopt the Bologna Pathway as their basis.

In this context, we emphasize the importance of writing program and course descriptions to ensure the smooth implementation of the educational process.

Concepts and Terminologies

Academic Program Description: Provides a concise summary of the program's vision, mission, and objectives, including a clear specification of the targeted learning outcomes in accordance with defined learning strategies.

Course Description: Provides a brief overview of the main characteristics of the course and the expected learning outcomes to be achieved by the student, indicating whether the student has maximized the available learning opportunities, and must be aligned with the program description.

Program Vision: An ambitious outlook for the future of the academic program, aiming to be advanced, inspiring, motivating, realistic, and applicable.

Program Mission: Outlines the objectives and the activities required to achieve them in a concise manner, while defining the pathways and directions for the program's development.

Program Objectives: Statements that describe what the academic program intends to achieve within a specified period of time, and they must be measurable and observable.

Curriculum Plan: All the courses/subjects included in the academic program according to the adopted system (semester, annual, or Bologna Pathway), whether required by the Ministry, University, College, or Department, along with the assigned credit units.

Learning Outcomes: A set of knowledge, skills, and values acquired by the student upon completion of the academic program or course, reflecting whether the course or program has achieved its intended educational objectives.

Teaching and Learning Strategies: The strategies employed by faculty members to develop student learning, which are planned approaches followed to achieve the learning objectives. They describe all in-class and extracurricular activities to ensure the achievement of the program's learning outcomes.

1. Program Vision

Graduating engineering cadres with integrated leadership personality, high professional skills and ethics, capable of meeting the needs of civil and military state institutions related to the specialization.

2. Program Mission

Conducting scientific research and studies, transferring knowledge, and localizing modern technologies in order to serve and develop society. The program also seeks to provide an academic environment that fosters creativity, supports outstanding and talented students, and invests in their potential, thereby enhancing lifelong learning skills and contributing to community development within the field of specialization. In addition, the program is committed to offering educational, academic, and career guidance, and to strengthening national identity, belonging, and loyalty to the country.

3. Program Objectives

1. Achieve distinguished professional practice in the field of civil engineering, with the ability for self-learning, developing and applying technical knowledge to solve engineering problems, and providing innovative and effective designs.
2. Enhance technical competence and personal skills necessary for career advancement, including assuming leadership, supervisory, and administrative roles in civil engineering projects.
3. Adhere to ethical conduct and high professionalism in performing engineering duties, while considering economic, social, and environmental impacts.
4. Support lifelong learning and strengthen research capabilities through pursuing postgraduate studies and engaging in advanced research within leading academic and industrial institutions in civil engineering.

4. Program Accreditation

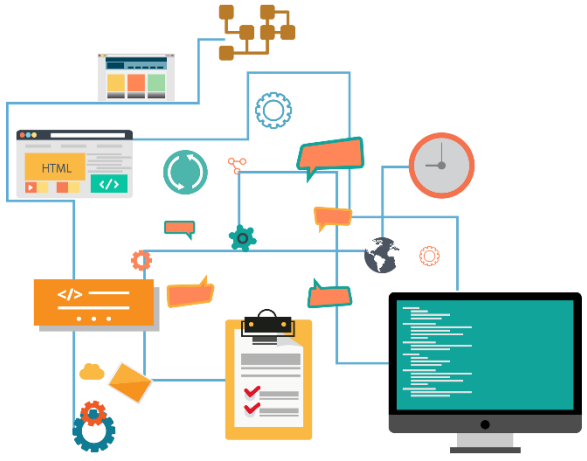
The program seeks to obtain academic accreditation in the near future, as part of its strategic plans aimed at improving the quality of academic programs and aligning them with national and international accreditation standards.

5. Other External Influences

Currently, there are no external sponsoring or supporting entities for the program. It relies entirely on the resources and capabilities available within the university, including libraries, laboratories, software, and infrastructure.

6. Program Structure

Program Component	No. of Courses	Credit Units	Percentage	Remarks*
Institutional Requirements	6	14	6.36	
College Requirements	9	53	24.09	
Department Requirements	39	153	69.55	First, Second, and Third Stages (Bologna Pathway)
Summer Training	Available	Completed		
Others	–	–		



7. Program Description

Year/Level	Course Code	Course Name	Credit Hours		ECTS
			theoretical	practical	
Fourth Stage - First Semester	WCV-41-01	Foundation Engineering I	4		
	WCV-41-02	Environmental and Sanitary Engineering I	3	1	
	WCV-41-03	Road Engineering I	2	1	
	WCV-41-04	Steel Structure Design I	3		
	WCV-41-05	Hydrology I	3		
	WCV-41-06	Reinforced Concrete III	3		
	WCV-41-07	Hydraulic Structures I	2		
	WCV-41-08	Construction Methods I	2	1	
	WCV-41-09	Engineering Project I		4	
Fourth Stage - second Semester	WCV-42-01	Foundation Engineering II	4		
	WCV-42-02	Environmental and Sanitary Engineering II	3	1	
	WCV-42-03	Road Engineering II	2	1	
	WCV-42-04	Steel Structure Design II	3		
	WCV-42-05	Hydrology II	3		
	WCV-42-06	Reinforced Concrete IV	3		
	WCV-42-07	Hydraulic Structures II	2		
	WCV-42-08	Construction Methods II	2	1	
	WCV-42-09	Engineering Project II		4	

8. Expected Program Learning Outcomes

Knowledge

1. Application of Knowledge:

- **The ability to apply fundamentals of mathematics, science, and engineering to solve complex problems in the engineering discipline.**

2. Engineering Problem Solving:

- **Skill in identifying engineering problems, systematically formulating solutions, and using innovative methods to solve them.**

3. Use of Modern Tools:

- **The ability to select and employ modern techniques, advanced engineering skills, as well as the software tools or equipment necessary for professional practice.**

4. Commitment to Professional Standards:

- **Understanding and applying engineering codes and professional specifications (such as codes and standard specifications) to ensure the safety and performance of engineering projects in a manner that meets international and local standards.**

Skills

1. Familiarity with Engineering Software and Tools:

- **Enabling the student to become acquainted with computational and mathematical software used in project design and engineering problem-solving, while understanding the theoretical foundations of their applications.**

2. Practical Problem Solving During Implementation:

- **Developing analytical thinking skills and the ability to make appropriate decisions to address problems that may arise during the execution of engineering works, reflecting an ability to adapt to practical realities.**

3. Report Writing and Drawing Interpretation:

- **Equipping the student with the ability to prepare scientific reports accurately and professionally, alongside the skill of reading and interpreting engineering drawings to facilitate communication among engineering team members.**

4. Keeping Pace with Technological Development:

- **Enhancing the student's awareness of the latest developments in engineering materials and construction methods, ensuring continuous updating of knowledge and staying at the forefront of modern engineering practices.**

Values

Outcome 1: The ability to recognize the continuous need for additional knowledge, and to identify, evaluate, integrate, and appropriately apply this knowledge.

Outcome 2: The ability to work effectively within teams that set goals, plan tasks, meet deadlines, and analyze risks and uncertainty.

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9. Teaching and Learning Strategies

- Lectures
- Laboratories
- Workshops
- Systematic training
- Scientific field visits

10. Assessment Methods

- Written examinations
- Quizzes

- Preparation of scientific reports
- Homework assignments
- Scientific seminars
- Final-year project discussion committees

Affective and Value Objectives

1. Ability to solve engineering and managerial problems using effective engineering methods.
2. Foster collaboration and teamwork between engineers and geologists to serve the public interest.
3. Develop students' ability to engage with modern technologies related to course content.
4. Enhance students' capacity for sound engineering and managerial decision-making.

11. Faculty Members

Faculty Member	Academic Rank	General Specialty	Specific Specialty	Full-time	Part-time
Asst. Prof. Dr. Hussein Hadi Hussein	Assistant Professor Dr.	Civil Engineering	Geotechnical	√	
Asst. Prof. Dr. Qasim Ali Hussein	Assistant Professor Dr.	Civil Engineering	Structures	√	
Prof. Dr. Ali Awad	Lecturer Dr.	Architecture	Project Management	√	
Asst. Prof. Dr. Israa Hassan Nayel	Assistant Professor Dr.	Civil Engineering	Structures		√
Lecturer Dr. Hadeel Jalob Dakhen	Lecturer Dr.	Civil Engineering	Structures		√
Lecturer Dr. Waleed Khalil Nayel	Assistant Professor Dr.	Civil Engineering	Roads & Transportation		√

Lecturer Dr. Azhar Ibrahim Kareem	Lecturer Dr.	Civil Engineering	Geotechnical		√
Lecturer Dr. Ali Hassan Ahmed Fatiha	Lecturer Dr.	Civil Engineering	Structures		√
Lecturer Dr. Manaf Fouad Hassan	Lecturer Dr.	Civil Engineering	Structures		√
Asst. Lect. Noor Al-Huda Kadhim Hussein	Assistant Lecturer	Civil Engineering	Infrastructure	√	
Asst. Lect. Hiba Abdul Amir Saleh	Assistant Lecturer	Civil Engineering	Infrastructure	√	
Asst. Lect. Israa Mahdi Kadhim	Assistant Lecturer	Civil Engineering	Structures	√	
Asst. Lect. Worood Hussein Ghadhban	Assistant Lecturer	Civil Engineering	Structures	√	
Asst. Lect. Thaer Taher Atshan	Assistant Lecturer	Civil Engineering	Project Management	√	
Asst. Lect. Sally Muwafaq Talib	Assistant Lecturer	Civil Engineering	Hydraulic Structures	√	
Asst. Lect. Abdul Rasoul Thamer Abdul Rasoul	Assistant Lecturer	Civil Engineering	Infrastructure	√	
Asst. Lect. Zainab Naeem Ghazi	Assistant Lecturer	Civil Engineering	Roads & Transportation	√	
Asst. Lect. Zahraa Khalil Hussein	Assistant Lecturer	Civil Engineering	Infrastructure	√	
Asst. Lect. Mohammed Khairallah Mgheer	Assistant Lecturer	Civil Engineering	Water Resources	√	
Asst. Lect. Zahraa Salah Jassim	Assistant Lecturer	Civil Engineering	Project Management	√	
Lecturer Dr. Ali Hassan Ahmed Fatiha	Assistant Lecturer	Civil Engineering	Structures		√

Asst. Lect. Nedaa Ali Shabbat	Assistant Lecturer	Civil Engineering	Roads		√
Asst. Lect. Athraa Abdul Wahid	Assistant Lecturer	Civil Engineering	Project Management	√	
Asst. Lect. Kawthar Dhiaa Yassin	Assistant Lecturer	Civil Engineering	Materials	√	
Asst. Lect. Ali Laylo Abed	Assistant Doctor	Civil Engineering	Surveying	√	

12. Admission Criteria

- Graduate of preparatory school / scientific branch.
- Admission based on the regulations of the Ministry of Higher Education and Scientific Research (Central Admission).
- Medical fitness for the chosen specialization.
- Compliance with department-specific admission requirements.
- Student's preferences ranked by priority.
- Secondary school average (admission score).
- Departmental intake capacity.

13. Main Sources of Program Information

1. Accredited sources from international universities.
2. Local trends and policies.
3. Labor market needs.
4. Surveys and studies.
5. Specialized seminars and workshops with stakeholders.

14. Program Development Plan

Objective

To improve the quality of the academic program to meet global standards, labor market requirements, and achieve academic accreditation.

Key Steps

- **Situation Analysis**:
  - Evaluate the curriculum and available resources.
  - Collect feedback from students, graduates, and employers.
- **Development Planning**:
  - Update curricula by adding new courses and enhancing practical skills.
  - Organize training workshops for faculty members.
  - Improve infrastructure (labs and technology).
- **Implementation**:
  - Gradual application of the updated plan.
  - Establish partnerships with industrial institutions.
  - Enhance student assessment mechanisms.
- **Evaluation and Follow-up**:
  - Regular performance reports.
  - Continuous improvements based on feedback.

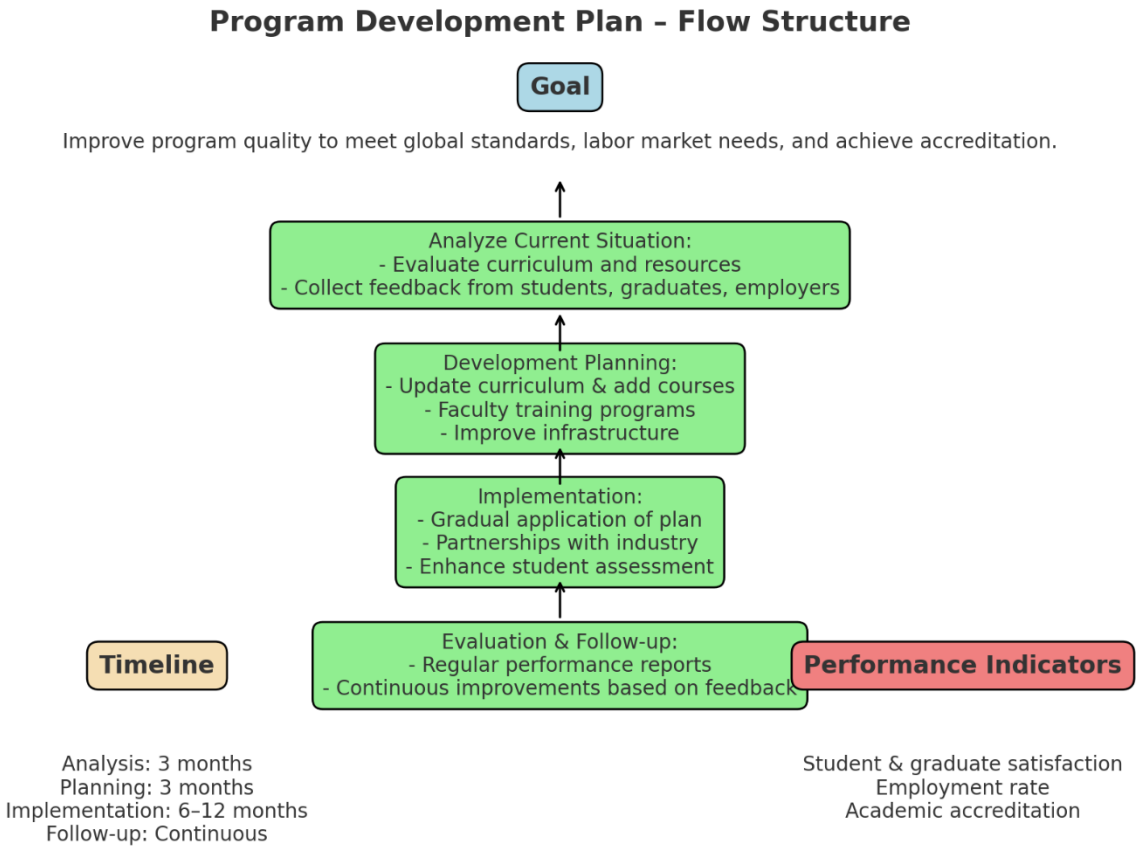
Timeline

- Situation Analysis: 3 months
- Planning: 3 months
- Implementation: 6–12 months

- Follow-up: Ongoing

Performance Indicators

- Student and graduate satisfaction.
- Employment rate.
- Achievement of academic accreditation.



Program Skills Outline

🟦 المرحلة الأولى – First Level

Year/Level	Course Code	Course Name	Basic	S1	S2	K1	K2	K3	K4	E1
1st – 1st Sem.	UOW011	English Language I	Basic		✓		✓			
1st – 1st Sem.	UOW012	Human Rights and Democracy	Basic				✓			✓
1st – 1st Sem.	ENG013	Mathematics I	Basic	✓		✓				
1st – 1st Sem.	ENG014	Engineering Drawing	Basic	✓	✓			✓		
1st – 1st Sem.	ENG015	Physics and Workshops	Basic	✓		✓			✓	
1st – 1st Sem.	ENG016	Building Materials	Basic		✓	✓			✓	✓
1st – 2nd Sem.	UOW021	Arabic Language	Basic		✓		✓			
1st – 2nd Sem.	UOW022	Computer Science	Basic	✓	✓	✓			✓	
1st – 2nd Sem.	ENG023	Mathematics II	Basic	✓		✓				
1st – 2nd Sem.	CIV024	Engineering Mechanics	Basic	✓	✓	✓		✓		
1st – 2nd Sem.	CIV025	Statistical Applications	Basic	✓		✓	✓		✓	
1st – 2nd Sem.	CIV026	Engineering Geology	Basic		✓	✓			✓	✓

🟦 المرحلة الثانية – Second Level

Year/Level	Course Code	Course Name	Basic	S1	S2	K1	K2	K3	K4	E1
2nd – 1st Sem.	UOW031	English Language II	Basic		✓		✓			
2nd – 1st Sem.	ENG032	Mathematics III	Basic	✓		✓				
2nd – 1st Sem.	CIV033	Strength of Materials I	Basic	✓	✓	✓			✓	
2nd – 1st Sem.	CIV034	Concrete Technology I	Basic	✓	✓	✓		✓	✓	✓
2nd – 1st Sem.	CIV035	Engineering Surveying I	Basic	✓	✓	✓		✓		
2nd – 1st Sem.	CIV036	Fluid Mechanics	Basic	✓	✓	✓			✓	
2nd – 2nd Sem.	ENG041	Computer Programming	Basic	✓	✓	✓			✓	
2nd – 2nd Sem.	CIV042	Building Construction	Basic	✓	✓	✓		✓		✓
2nd – 2nd Sem.	CIV043	Strength of Materials II	Basic	✓	✓	✓			✓	
2nd – 2nd Sem.	CIV044	Concrete Technology II	Basic	✓	✓	✓		✓	✓	✓
2nd – 2nd Sem.	CIV045	Engineering Surveying II	Basic	✓	✓	✓		✓		
2nd – 2nd Sem.	CIV046	Engineering Drawing AutoCAD	Basic	✓	✓			✓		

المرحلة الثالثة – Third Level

Year/Level	Course Code	Course Name	Basic	S1	S2	K1	K2	K3	K4	E1
3rd – 1st Sem.	ENG051	Engineering Analysis	Basic	✓	✓	✓			✓	
3rd – 1st Sem.	CIV052	Theory of Structures I	Basic	✓	✓	✓		✓	✓	
3rd – 1st Sem.	CIV053	Soil Mechanics I	Basic	✓	✓	✓			✓	✓
3rd – 1st Sem.	CIV054	Design of RC I	Basic	✓	✓	✓		✓	✓	✓
3rd – 1st Sem.	CIV055	Traffic Engineering	Basic	✓	✓	✓		✓		✓
3rd – 1st Sem.	CIV056	Project Mgmt & Economy	Basic	✓	✓	✓	✓	✓	✓	✓
3rd – 2nd Sem.	ENG061	Numerical Methods & Stats	Basic	✓	✓	✓			✓	
3rd – 2nd Sem.	CIV062	Theory of Structures II	Basic	✓	✓	✓		✓	✓	
3rd – 2nd Sem.	CIV063	Soil Mechanics II	Basic	✓	✓	✓			✓	✓
3rd – 2nd Sem.	CIV064	Design of RC II	Basic	✓	✓	✓		✓	✓	✓
3rd – 2nd Sem.	CIV065	Water Resources Eng.	Basic	✓	✓	✓			✓	✓
3rd – 2nd Sem.	UOK066	Engineering Ethics	Basic				✓	✓		✓

المرحلة الرابعة – Fourth Level

Year/Level	Course Code	Course Name	Basic	S1	S2	K1	K2	K3	K4	E1
4th – 1st Sem.	WCV-41-01	Foundation Eng. I	Basic	✓	✓	✓			✓	✓
4th – 1st Sem.	WCV-41-02	Env. & Sanitary Eng. I	Basic	✓	✓	✓		✓	✓	✓
4th – 1st Sem.	WCV-41-03	Road Engineering I	Basic	✓	✓	✓		✓		✓
4th – 1st Sem.	WCV-41-04	Steel Structure Design I	Basic	✓	✓	✓		✓	✓	✓
4th – 1st Sem.	WCV-41-05	Hydrology I	Basic	✓	✓	✓			✓	✓
4th – 1st Sem.	WCV-41-06	Reinforced Concrete III	Basic	✓	✓	✓		✓	✓	✓
4th – 1st Sem.	WCV-41-07	Hydraulic Structures I	Basic	✓	✓	✓			✓	✓
4th – 1st Sem.	WCV-41-08	Construction Methods I	Basic	✓	✓	✓		✓	✓	✓
4th – 1st Sem.	WCV-41-09	Engineering Project I	Basic	✓	✓	✓	✓	✓	✓	✓
4th – 2nd Sem.	WCV-42-01	Foundation Eng. II	Basic	✓	✓	✓			✓	✓
4th – 2nd Sem.	WCV-42-02	Env. & Sanitary Eng. II	Basic	✓	✓	✓		✓	✓	✓
4th – 2nd Sem.	WCV-42-03	Road Engineering II	Basic	✓	✓	✓		✓		✓
4th – 2nd Sem.	WCV-42-04	Steel Structure Design II	Basic	✓	✓	✓		✓	✓	✓
4th – 2nd Sem.	WCV-42-05	Hydrology II	Basic	✓	✓	✓			✓	✓
4th – 2nd Sem.	WCV-42-06	Reinforced Concrete IV	Basic	✓	✓	✓		✓	✓	✓
4th – 2nd Sem.	WCV-42-07	Hydraulic Structures II	Basic	✓	✓	✓			✓	✓
4th – 2nd Sem.	WCV-42-08	Construction Methods II	Basic	✓	✓	✓		✓	✓	✓
4th – 2nd Sem.	WCV-42-09	Engineering Project II	Basic	✓	✓	✓	✓			