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 & Bologna Process

Description Preparation Date: 2025/9/2

File Completion Date: 2025/9/2

Signature

Head of Department Name: Dr.Qassim Ali

Date: 1/10/2025

Signature

Scientific Associate Name: Dr. Hassan. T.Hashim

Date: 15/10/2025

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: 20 / 10 /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

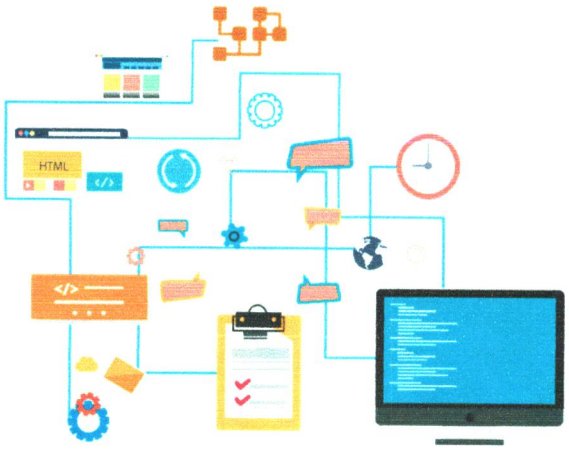
The program seeks to obtain academic accreditation in the near future, as part of its strategic plans aimed at improving the quality of academic programs and aligning them with national and international accreditation standards.

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	
First level - First Semester	UoW011	English Language I	3		3
	UoW012	Human Rights and Democracy	2		2
	ENG013	Mathematics I	5		6
	ENG014	Engineering Drawing	1	3	5
	ENG015	Physics and Workshops	4	3	7
	ENG016	Building Materials	4	2	7
First level - Second Semester	UoW021	Arabic Language	2		2
	UoW022	Computer Science	1	2	3
	ENG023	Mathematics II	5		6
	CIV024	Engineering Mechanics	6		8
	CIV025	Statistical Applications in Civil Engineering	6		7
	CIV026	Engineering Geology	4		4
Second level - First Semester	UoW031	English Language II	2		2
	ENG032	Mathematics III	5		6
	CIV033	Strength of Materials I	4		5
	CIV034	Concrete Technology I	2	2	5
	CIV035	Engineering Surveying I	3	2	5
	CIV036	Fluid Mechanics	6	2	7
Second level - second Semester	ENG041	Computer Programming	2	4	5
	CIV042	Building Construction	4	2	5
	CIV043	Strength of Materials II	4		5

	CIV044	Concrete Technology II	4	2	7
	CIV045	Engineering Surveying II	3	2	5
	CIV046	Engineering Drawing with AutoCAD	1	2	3
Third level - First Semester	ENG051	Engineering Analysis	2	2	5
	CIV052	Theory of Structure I	4		5
	CIV053	Soil Mechanics I	3	2	6
	CIV054	Design of Reinforced Concrete I	6		5
	CIV055	Traffic Engineering	4	2	5
	CIV056	Project Management & Engineering Economy	4	0	4
Third level - second Semester	ENG061	Numerical Methods and Statistics	5	1	6
	CIV062	Theory of Structure II	4		5
	CIV063	Soil Mechanics II	3	2	6
	CIV064	Design of Reinforced Concrete II	4		5
	CIV065	Water Resources Engineering	6		6
	UOK066	Engineering Ethics	2	0	2
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 fundamental principles of mathematics, science, and engineering to solve complex problems within the engineering discipline.
2. Engineering Problem Solving:
    - The skill to identify engineering problems, formulate systematic solutions, and use innovative methods to solve them.
3. Use of Modern Tools:
    - The ability to select and employ modern technologies, advanced engineering skills, as well as the necessary software tools or equipment for professional practice.

4. Adherence to Professional Standards:
    - Understanding and applying engineering codes and professional specifications (such as standards and codes of practice) to ensure the safety and performance of engineering projects in accordance with international and local standards.

Skills

1. Proficiency in Engineering Software and Tools:
    - Enabling the student to identify computer-based and mathematical software used in project design and engineering problem-solving, with an understanding of the theoretical foundations of their applications.
2. Solving Practical Problems During Implementation:
    - Developing analytical thinking and decision-making skills to address problems that may arise during the execution of engineering works, reflecting the ability to adapt to practical, real-world conditions.
3. Report Writing and Drawing Interpretation:
    - Equipping the student with the ability to prepare accurate and professional scientific reports, as well as the skill to read and interpret engineering drawings to facilitate communication among engineering team members.
4. Keeping Up with Technological Developments:
    - Enhancing the student's awareness of the latest developments in engineering materials and construction methods, ensuring continuous knowledge updating and staying at the forefront of modern engineering practices.

Values / Learning Outcomes

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

- Outcome 2:
  The ability to work effectively within teams that define objectives, plan tasks, adhere to deadlines, and analyze risks and uncertainties.

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
Assist. Prof. Dr. Hussein Hadi Hussein	Assistant Professor	Civil Engineering	Geotechnical Eng.	√	
Assist. Prof. Dr. Qassim Ali Hussein	Assistant Professor	Civil Engineering	Structural Eng.	√	
Lecturer Dr. Manaf Fouad Hassan	Lecturer (PhD)	Architecture	Project Management	√	
Assist. Prof. Dr. Wail Asim Mohammed Hussein	Assistant Professor	Civil Engineering	Structural Eng.		√
Lecturer Dr. Hadeel J. Dukhan	Lecturer (PhD)	Civil Engineering	Structural Eng.		√
Assist. Prof. Dr. Anmar Faleh Deikan	Assistant Professor	Civil Engineering	Transportation Eng.		√
Lecturer Dr. Mustafa Naeem Kareem	Lecturer (PhD)	Civil Engineering	Geotechnical Eng.		√
Lecturer Dr. Waleed Khaleel Nail	Lecturer (PhD)	Civil Engineering	Structural Eng.		√
Lecturer Dr. Israa Hassan Nail	Lecturer (PhD)	Civil Engineering	Structural Eng.		√
Asst. Lect. Abdullah Nasser Jawad	Assistant Lecturer	Civil Engineering	Infrastructure Eng.	√	
Asst. Lect. Ahmed Abbas Shareef	Assistant Lecturer	Civil Engineering	Infrastructure Eng.	√	
Asst. Lect. Noorulhuda Kadhim Hussein	Assistant Lecturer	Civil Engineering	Structural Eng.	√	
Asst. Lect. Hiba Abdulameer Saleh	Assistant Lecturer	Civil Engineering	Structural Eng.	√	

Asst. Lect. Israa Mahdi Kadhim	Assistant Lecturer	Civil Engineering	Project Management	√	
Asst. Lect. Worood Hussein Ghadhban	Assistant Lecturer	Civil Engineering	Hydraulic Structures	√	
Asst. Lect. Thaer Taher Atshan	Assistant Lecturer	Civil Engineering	Infrastructure Eng.	√	
Asst. Lect. Sally Mowafaq Talib	Assistant Lecturer	Civil Engineering	Transportation Eng.	√	
Asst. Lect. Abdur Rasool Thamer A. Rasool	Assistant Lecturer	Civil Engineering	Infrastructure Eng.	√	
Asst. Lect. Zainab Naeem Ghazi	Assistant Lecturer	Civil Engineering	Water Resources Eng.	√	
Asst. Lect. Zahraa Khaleel Hussein	Assistant Lecturer	Civil Engineering	Project Management	√	
Asst. Lect. Mohammed Ali Aziz	Assistant Lecturer	Civil Engineering	Structural Eng.		√
Asst. Lect. Ghazi Jalal Kaishish	Assistant Lecturer	Civil Engineering	Highway Eng.		√
Asst. Lect. Mohammed Khairallah Mugheer	Assistant Lecturer	Civil Engineering	Project Management	√	
Asst. Lect. Zahraa Salah Jasim	Assistant Lecturer	Civil Engineering	Materials	√	
Lecturer Dr. Ali Hassan Ahmed Fatiha	Lecturer (PhD)	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.

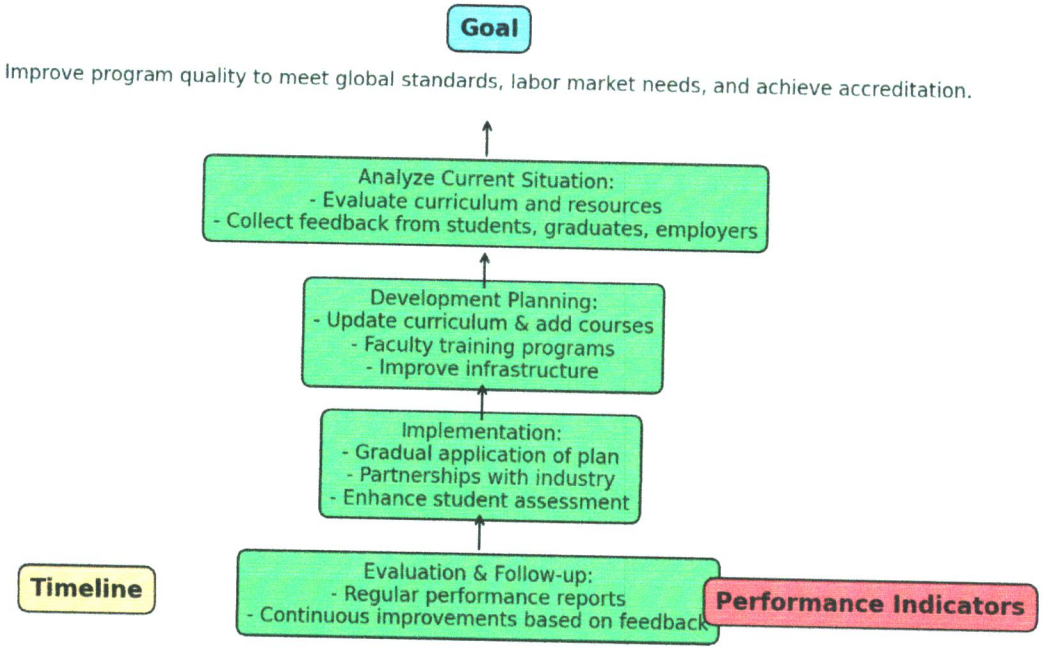
Timeline

- 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 Development Plan – Flow Structure



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	✓	✓	✓	✓			