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

2025

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.

Academic Program Description Form

University Name: University of Basrah

Faculty/Institute: College of Computer Science & Information Technology

Scientific Department: Department of Computer Science

Academic or Professional Program Name: Bachelor in Computer Science

Final Certificate Name: Bachelor in Computer Science

Academic System: Semesters

Description Preparation Date: 14/9/2025

File Completion Date: 14/9/2025

Signature:

Head of Department Name:

Asst. Prof. Saba A. Saddam

Date: 14/9/2025

Signature:

Scientific Associate Name:

Prof. Abbas H. Hasan

Date: 14/09/2025

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Dr. Arafat N. Jasim

Date:

Signature:

Approval of the Dean

1. Program Vision

Our vision is to be a leading computer science department recognized for its innovation, excellence, and societal impact. We strive to be at the forefront of computer science education, research, and technology development, equipping our students with the knowledge, skills, and mindset necessary to address complex challenges and make meaningful contributions in academia, industry, entrepreneurship, and public service. We aim to cultivate a culture of curiosity, collaboration, and creativity, where interdisciplinary approaches are embraced, ethical considerations are paramount, and technological advancements are leveraged to address global problems and improve the human condition.

2. Program Mission

The mission of our computer science department is to provide a comprehensive and rigorous education in computer science that prepares students for successful careers, advanced studies, and lifelong learning in the rapidly evolving field of computing. We are committed to fostering a diverse and inclusive community of learners and researchers, promoting excellence in teaching and research, and engaging in collaborations that contribute to the advancement of computer science and its applications.

3. Program Objectives

1. Prepare and qualify specialists to meet the demands of the public and private labor market in computer science and information technology by diversifying learning and teaching methods and training students to apply acquired knowledge and skills to solve real-life problems.
2. Create an appropriate environment for students, enabling them to apply their acquired knowledge and skills to identify the needs and problems of society and social issues related to computers and information technology.
3. Offer distinguished academic programs in computer science and information technology, both theoretical and applied, that comply with international standards for academic quality and meet the needs of the labor market.
4. Encourage and develop scientific research in the fields of computer science and information technology in general, and in the fields of artificial intelligence, linguistics, software, networks, and databases.
5. Creating a stimulating environment for faculty members to develop their knowledge, teaching, and research skills.
6. Building and developing partnerships with the government, private sectors, and the community, including all its various institutions.

7. Program Accreditation

8. Other external influences

None

9. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	7	14	9%	
College Requirements	7	20	14%	
Department Requirements	25	108	77%	
Summer Training	1	0		
Other				

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

10.Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First Year First Semester		Programming I	3	2
		Mathematics for computing	3	
		Computer Skills	2	2
		English Language I	2	
		Democracy Education & Human Rights	2	
		Fitness and Sport	2	
First Year Second Semester		Programming II	3	2
		Digital Logic Design	3	2
		Computer Applications	2	2
		Discrete Structures	3	
		Principles of Information technology	2	2
		English Language II	2	
Second Year First Semester		Object Oriented programming I	2	2
		Computer Graphics	2	2
		Microprocessor and assembly language	2	2

		System Analysis and Design	3	
		Probability and statistics	3	
		Arabic Language Skills	2	
Second Year Second Semester		Object Oriented programming II	2	2
		Visual Programming	2	2
		Computation theory	3	
		Database concepts and design	2	2
		Data Structures I	2	2
		Numerical methods	2	2
Third Year First Semester		Artificial Intelligence	2	2
		Software Engineering	3	
		Web Programming I	2	2
		Computer Networks I	3	
		Data Structures II	2	2
		Concepts of Programming languages	2	
Third Year Second Semester		Complier construction	3	2
		Computer Network II	2	2
		Web Programming II	2	2
		Operations Research	3	
		Computer Ethics	2	
		Computer Architecture	3	
Fourth Year First Semester		Operating Systems	2	2
		Mobile Applications Programming	2	2
		Computer vision	2	2
		Data Mining	2	
		Cloud computing	2	
		Computational Intelligence	3	
		Graduation Project		4
Fourth Year Second Semester		Computer simulation	3	
		Computer Security	3	
		Human-Computer Interaction	3	

		Knowledge Engineering	3	
		Communication Skills	3	
		Selected Topics	3	

8. Expected learning outcomes of the program

Knowledge

A1. The student will learn programming languages, the skills of designing various application programs using several programming languages, and finding scientific solutions to societal problems through programming.
A2. The student will be taught the basics of computer network management and the ability to use and develop wired and wireless communication and networking tools, in addition to teaching the student the skills of website design and supervision.
A3. The student will be provided with the basic rules for evaluating and building software systems, enabling them to analyze and evaluate systems before beginning to design the system. The student's knowledge of the basics of implementing software systems will increase through understanding the mechanisms of computer operation.
A4. The student's skills in building intelligent systems, which are based on analysis, inference, heuristics, and self-learning, will be developed.

Skills

B1. Design, write, and debug software using programming languages.
B2. Use appropriate computer-designed support tools.
B3. Master the skills of research, report writing, presentation, discussion, and internet research related to course topics.
B4. Master the skills of critical and analytical thinking and problem-solving.

Ethics

C1. The student develops a positive attitude toward learning computer science.
C2. The student takes pride in his practical skills when directly using the computer.
C3. The student participates and cooperates with his classmates to produce public service websites.
C4. The student senses the importance of the knowledge he receives in facilitating many of the tasks he performs.

9. Teaching and Learning Strategies

10. Evaluation methods

1. Central and monthly exams.
2. Instant exams.
3. Scientific reports.
4. Practical exams.
5. Research projects.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of the teaching staff	
	General	Special		Staff	Lecturer
Professor	Computer Science			3	
Assistant Professor	Computer Science			7	
Lecturer	Computer Science			11	2
Assistant Lecturer	Computer Science			12	2

Professional Development

Mentoring new faculty members

- E-Learning
- Attending training courses and workshops
- Attending conferences
- Cooperating with professional faculty members

Professional development of faculty members

12. Acceptance Criterion

- Central Admission
- The student's average with the student's desire to be accepted in departments.

13. The most important sources of information about the program

College website:
https://en.cit.uobasrah.edu.iq/

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
First		Programming1	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Programming2	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Logic Design	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Discrete Structures	Basic							✓	✓				✓
		Computer skills	Basic	✓	✓				✓	✓		✓	✓	✓	✓
Second		Object-Oriented Programming 1	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Object-Oriented Programming 2	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Data Structures 1	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Visual Programming	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Microprocessors	Basic	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Computation Theory	Basic			✓	✓				✓	✓	✓		✓
Third		Software Engineering	Basic	✓		✓		✓	✓			✓		✓	
		Artificial Intelligent	Basic	✓		✓	✓		✓			✓	✓	✓	✓
		Computer Networks 1	Basic	✓		✓	✓		✓			✓	✓	✓	✓
		Computer Networks 2	Basic	✓		✓	✓		✓			✓	✓	✓	✓

		Computer Architecture	Basic			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Compiler Construction	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Data Structures 2	Basic	✓		✓		✓		✓	✓	✓	✓	✓	✓
		Web Programming 1	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
		Web Programming 2	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Fourth		Operating Systems	Basic			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Computer Security	Basic	✓	✓	✓	✓	✓	✓	✓					
		Mobile Applications	Basic	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Communication Skills	Basic				✓			✓	✓				✓
		Cloud Computing	Basic	✓	✓	✓	✓	✓	✓	✓					

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. Email: Course Objectives

Course Objectives	•
9. Teaching and Learning Strategies	
Strategy	

10. Course Structure

Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**

11. Course Evaluation
12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	

Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	