

**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 — 2024

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: Southern Technical University

Faculty/Institute: Technical Institute of Architecture

Scientific Department: Electronic and communications technologies

Academic or Professional Program Name: Diploma in computer systems techniques

Final Certificate Name: Diploma in in computer systems techniques technologies

Academic System: quarterly

Description Preparation Date: 12/6/2025

File Completion Date: 12/6/2025

Signature:

Head of Department Name:

Abbas J. Khayyir Kadhim

Date: 7-7-2025

Signature:

Scientific Associate Name:

Jehad Kadhum Mohammed

Date: 9-7-2025

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance

Department:

Ah. Kam. Khader

Date: 9-7-2025/

Signature:

Approval of the Dean Mol

Prof. Dr. Mohammed Salih Abed Ali

1. Program Vision

The Computer Systems Technology Department seeks to form a scientific or human base in the field of computer maintenance and programming related to computer science and applications. It seeks to prepare plans to develop staff and curricula to ensure that the requirements of quality standards are met, in addition to keeping pace with development and ready-made applications in order to contribute to achieving part of it, and for the department to be a scientific edifice. Distinguished research in its programmes, curricula and scientific research.

2. Program Mission

Working to prepare specialized staff with a high level of professionalism to deal with applied and information software and working to provide appropriate opportunities to develop the community's capabilities in investing in the developments in technology and meeting their needs in the field of computers, and providing training consulting services.

3. Program Objectives

1. Preparing technical staff qualified to use computers
2. Preparing and verifying data and entering it into the computer
3. Participate in testing, auditing and debugging programmed systems
4. Participate in preparing and designing software systems
5. Implementing software systems
6. Focusing on the educational and moral aspect of the student and instilling a spirit of dedication, tolerance and commitment.

4. Program Accreditation

None

5. Other external influences

1. External influences contribute to solving many of the dilemmas related to approved studies.
2. Labor market needs, quality of graduates, and support of students' skills.

6. Program Structure				
Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	14 The first stage	46 units	50%	Specialization + assistant
	13 The second stage	45 units	50%	
Summer Training	For one month for the first stage			
Other				

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

7. Program Description
The academic system in the Department of Computer Systems Technologies was transformed to the semester system according to University Order No. 7725/19 on 9/14/2021, and the curricula were updated and approved for the academic year 2023-2024 according to University Order No. 4894/19 on 7/13/2023.

مفردات المواد الدراسية حسب النظام الفصلي

ابتداءً من العام الدراسي ٢٠٢٤-٢٠٢٥

❖ الصف الأول – الفصل الأول

ت	المادة الدراسية	عدد الساعات			عدد الوحدات	نوع المادة	الملاحظات
		ن	ع	م			
1	C++ البرمجة بلغة I	2	٢	٤	٤	تخصصي	
٢	Computer Fundamentals اساسيات الحاسوب	٠	٢	٢	٢	تخصصي	
٣	Network Fundamentals اساسيات شبكات الحاسوب	2	٢	٤	٤	تخصصي	
٤	التصميم المنطقي	2	٢	٤	٤	تخصصي	
٥	الرياضيات و التحليل العددي	2	2	4	٤	مساعدة	
٦	حقوق الإنسان والديمقراطية	2	0	2	2	عامة	
	المجموع	١٠	١٠	٢٠	2٠		

❖ الصف الأول – الفصل الثاني

ت	المادة الدراسية	عدد الساعات			عدد الوحدات	نوع المادة	الملاحظات
		ن	ع	م			
1	C++ البرمجة بلغة II	2	٢	٤	٤	تخصصي	
٢	برمجة بلغة البايثون	2	٢	4	٤	تخصصي	

	تخصصي	٢	٢	٠	2	Data Communication تواصل البيانات	٣
	تخصصي	٤	٤	٢	2	أساسيات تصميم المواقع	٤
	مساعدة	٤	4	2	2	Wireless Networks الشبكات اللاسلكية	٥
	عامة	2	2	0	2	اللغة الإنجليزية	٦
	عامة	١	١	٠	١	جرائم حزب البعث البائد	٧
		2١	٢١	٨	١٣	المجموع	

الخططة الدراسية لقسم تقنيات أنظمة الحاسوب حسب النظام الفصلي للعام الدراسي ٢٠٢٣/٢٠٢٤						
السنة الثانية - الفصل الأول						
ن	المادة الدراسية	عدد الساعات	عدد	نوع المادة	الملاحظات	
		نظري	عملي	مجموع	الوحدات	
1	أنظمة التشغيل Operating systems	2	2	4	4	تخصصية
2	تشفير وأمنية المعلومات Information security and encryption	2	1	3	3	تخصصية
3	اساسيات قواعد البيانات SQL Fundamentals of database in SQL	2	2	4	4	تخصصية
4	البرمجة بلغة الفيجوال بيسك/١ Programming in Visual Basic/1	2	2	4	4	تخصصية
5	تصميم المواقع الالكترونية متقدم Advanced in Web Design	2	2	4	4	مساعدة
6	لغة انكليزية ٢/ English Language/2	2	-	2	2	عامة
7	مشروع تخرج Graduation Project	—	2	2	—	تخصصي سنوي
	المجموع	12	11	23	21	

الخططة الدراسية لقسم تقنيات أنظمة الحاسوب حسب النظام الفصلي للعام الدراسي ٢٠٢٣/٢٠٢٤						
السنة الثانية - الفصل الثاني						
ن	المادة الدراسية	عدد الساعات	عدد	نوع المادة	الملاحظات	
		نظري	عملي	مجموع	الوحدات	
1	هياكل البيانات Data Structures	2	2	4	4	تخصصية
2	شبكات الحاسوب Computer Networks	2	2	4	4	تخصصية
3	قواعد البيانات SQL Database in SQL	2	2	4	4	تخصصية
4	البرمجة بلغة الفيجوال بيسك/٢ Programming in Visual Basic/2	2	2	4	4	تخصصية
5	تحليل نظم System Analysis	2	-	2	2	تخصصية
6	مشروع تخرج Graduation Project	—	2	2	4	تخصصي سنوي
7	جرائم نظام البعث في العراق The Crimes of the Baath regime in Iraq	2	-	2	2	مساعدة
	المجموع	12	10	22	24	

8. Expected learning outcomes of the program

Knowledge

1. Preparing and verifying data, entering it into the computer, and analyzing and designing database systems. 2. Ability to maintain and set up various operating systems with the ability to install service programs. 3. Participate in preparing and designing software systems and operating and using various ready-made applications. 4. The student's knowledge of the labor market and changes in computer fields. 5. The student's knowledge of how to conduct laboratory experiments and how to analyze and apply the results.	
Skills	
1. Ability to design and conduct experiments. 2. The ability to implement programming work and configure databases while connecting and distributing them through the network. 3. Designing and managing websites, operating network operating systems, and using various Internet applications. 4. The ability to use modern technological applications and tools to accomplish the necessary tasks. 5. Ability to maintain and install software and hardware.	
Ethics	
1. Developing students' abilities to share ideas 2. Communication skills and developing the ability to organize and present information effectively, whether orally, in writing, or using video and audio communication methods. 3. Ability to work within a team. 4. Ability to communicate effectively. 5. Put the graduate into the labor market and spread the spirit of fair competition. 6. Preparing the graduate to be successful in completing his academic career by obtaining certificates after the technical diploma and providing broad attention to the problems that arise in professional practice, including teamwork, leadership, occupational safety, ethics, service and economics.	

9. Teaching and Learning Strategies

- Education strategies:

- 1- Lecture or delivery: In which the professor presents information, facts, and other ideas to the students related to the topic at hand.
- 2- Discussion: In this type of teaching strategy, the professor determines the topic that will be

discussed in the lecture

3- Problem solving: In this strategy, the cognitive environment of students is activated through problem-solving activities, through most positive processes and activities that stimulate thinking and raise motivation to learn.

4- Project-based learning: This strategy relies on design work that requires applied work. Students are assigned an applied project for the activity, and they are forced to research, read, and use books and all cognitive sources in order to accomplish what is required.

5- Self-learning through research and use of electronic platforms.

10. Evaluation methods

Daily, mid-term, and semester exams, theoretical and practical. As well as attendance, participation and reports

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assistant Professor	Computer Science	Networks			staff	
Lecturer	Science	Physics			staff	
Lecturer	Engineering	Computer			staff	
Assistant Lecturer	Science	Computer			staff	
Assistant Lecturer	Science	Computer				Lecturer

Professional Development

Mentoring new faculty members

1-Holding workshops, seminars and seminars on developments in the field of computer and information technology.

2- Put them in courses to develop administrative skills, time management, and smart skills.

3- Keeping up with and following up on the implementation of the government program and

entering the classifications.

Professional development of faculty members

The focus in the Computer Systems Technology Department in general is on continuous improvement. The department always seeks to improve the scientific and administrative process and overcome all the difficulties and obstacles that hinder the educational program by developing human resources for personal and professional development.

The following procedures explain the steps implemented or in the process of implementation in this area:

D1. Continuous improvement and development of faculty members through training programs and workshops inside and outside the department and university.

D2. Increasing extracurricular activities, such as volunteering, scientific seminars, and personal and sports creativity, locally and regionally.

D3. Encouraging faculty members to obtain the highest academic and administrative ranks through promotions.

D4. Providing modern scientific sources and books for the department's library to keep pace with continuous progress.

12. Acceptance Criterion

1. Average for graduates of preparatory school/biological and applied science branch.
2. Examining the student's fitness and mental ability.
3. Central admission issued by the Ministry of Higher Education.

13. The most important sources of information about the program

- The curriculum approved by the Ministry of Higher Education and Scientific Research and its guidelines.
- Internet research for similar experiences.
- Personal experiences.
- Labor market needs.
- Methodical books.
- General and specialized computer programs.
- Technical Institute YouTube channel.

14. Program Development Plan

1. Adding materials that keep pace with the change and development taking place in the field of computers and artificial intelligence.
2. Deleting and creating old materials while preserving the basics and their continuity.
3. Use and development of comprehensive virtual laboratories.

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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
2023-2024 First year		Programming in c++/1	Specialized		√	√		√	√		√	√	√	√	
		Logical design	Specialized	√	√			√	√		√		√	√	
		Computer fundamentals/1	Specialized	√		√		√	√				√	√	
		Mathematics and numerical analysis	assist	√						√		√			√
		Fundamentals of computer networks	Specialized	√	√	√		√		√				√	
		Human rights and democracy	General				√						√	√	√
		English language/1	General				√						√	√	√
		Fundamentals in web design	Specialized			√	√	√			√	√	√		
		Programming in Python	Specialized		√	√		√	√		√	√	√	√	
		Programming in c++/2	Specialized		√	√		√	√		√	√	√	√	
		Computer fundamentals/2	Specialized	√	√			√		√	√		√	√	
		Statistics	assist	√			√	√			√	√		√	√
2023-2024 Second year		Data structure	Specialized	√	√			√		√	√		√	√	
		Fundamentals of database SQL	Specialized	√		√	√			√	√	√	√		
		Operating systems	Specialized	√		√	√	√	√			√		√	

		System analysis	Specialized	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Programming in visual basic	Specialized		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Computer networks	Specialized	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Advanced in web design	assist			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		English language/2	General			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Graduation project	Specialized	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	
		The crimes of the Baath regime in Iraq	General				✓							✓	✓	✓	✓	
		Information security and encryption	Specialized	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

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

Course Description Form

1. Course Name:					
Programming in c++/1					
2. Course Code:					
3. Semester / Year:					
First and second semester / year 1					
4. Description Preparation Date:					
15/10/2023					
5. Available Attendance Forms:					
In person					
6. Number of Credit Hours (Total) / Number of Units (Total)					
120 yearly / 4 hours a week - 120 units					
7. Course administrator's name (mention all, if more than one name)					
Abbas Chekhair Kadum					
8. Course Objectives					
Introducing the student to programming languages and their types, the C++ language, the general structure of the program and its sections, the types of data used in this language, writing the code code for programs, countries, procedures and data files, and using the possibility of drawing in them.					
9. Teaching and Learning Strategies					
Strategy		10. Lecture or diction strategy. 11. Problem solving strategy. 12. Project-based learning strategy.			
13. Course Structure					
Week	Hours	Required	Unit or subject name	Learning	Evaluation method

		Learning Outcomes		method	
1	4	Providing	1. Abstract of	Lecture and	Daily
2	4	students	programming	lab	Exams, mid-
3	4	with the	languages		term exam
4	4	skill of	What's a		and final
5	4	preparing	program		exam
6	4	programs,	language		
7	4	writing	2. The date and		
8	4	code,	development		
9	4	analyzing	of		
10	4	and solving	programming		
11	4	programmi	languages		
12	4	ng	Levels of		
13	4	problems	programming		
14	4		languages		
15	4		3. Basic		
			essentials for		
			C++ language/		
			C++ language		
			concepts		
			What's C++		
			program		
			contains?		
			4. What are the		
			basic files?		
			Simple		
			explanation		
			for basic files,		
			that C++		
			program		
			include		
			5. C++ language :		
			beginning,		
			development,		
			its location		
			within Levels		
			of		
			programming		
			languages		

			Basic element and tools of C++ language Language symbols 6. Definitions name keywords Constant represent Variables represent Data types in C++, and the represent methods in memory char type integer type real type Boolean (logical) type 7. Converting between deferent data types 8. Expressions types in C++ language, how formulate expression: 9. Arithmetic expression /deferent arithmetic operation and its priorities / conversion manner of arithmetic expression to		
--	--	--	--	--	--

			Arithmetic expression in C++ language/different examples Relational expression/ relational operations and its priorities/ formulate Relational expression Logical expression/ logical operation and its priorities/ formulate Logical expression 10. Compound expression/ priorities table of public operations/ different examples Give the primary values of constants and variables 11. Spaces and brackets Type of comments Special tools, minim tools 12. Assignment statement, its types/ with		
--	--	--	---	--	--

			explanation examples Arithmetic expression (equation), counters, counter types, different images for equations belong to C++ language Formatted Input and output functions output text Output numeric values Output Arithmetic expression 13. unForma tted Input and output functions Control, conditional, and loop statements 14. cond. Statement 15. Cond. Tools 16. If conditional statement 17. If...else statement 18. Nested		
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			conditional 19. switch conditional statement 20. nested conditional statement 21. repetitio n statements for loop ,Nested for		
14. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
15. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

1. Course Name:
Programming in Python
2. Course Code:
3. Semester / Year:
Two / year one
4. Description Preparation Date:

15/10/2023					
5. Available Attendance Forms:					
In person					
6. Number of Credit Hours (Total) / Number of Units (Total)					
60 hours. 4 hours per week / 10 units					
7. Course administrator's name (mention all, if more than one name)					
Assist. Prof. Dr. Nadia Ali Qassim					
8. Course Objectives					
Introducing the student to programming languages and their types, the Python language, the general structure of the program and its sections, the types of data used in this language, and writing the code code for programs, functions, procedures and data files.					
9. Teaching and Learning Strategies					
Strategy		1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Providing students with the skill of preparing programs, writing code, analyzing	The Context of Software Development	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4		Software		
3	4		Software		
4	4		Learning		
5	4		Programming with		
6	4		Python		
7	4		Values and Variables		
8	4				
9	4				

10	4	and solving			
11	4	programmi	Integer and String		
12	4	ng	Values		
13	4	problems	Identifiers		
14	4		User Input		
15	4		String Formatting		
			Expressions and		
			Arithmetic		
			- Expressions		
			- Arithmetic		
			Examples		
			Conditional		
			Statements		
			- Boolean		
			expressions		
			- If/Else statement		
			- Other Conditional		
			Expressions		
			Iteration		
			- Loops		
			Using Functions		
			- Introduction to		
			Using Functions		
			- Functions and		
			Modules		
			Writing Functions -1		
			- Function Basics		
			- Parameter Passing		
			- Custom Functions		
			vs Standard		
			Functions		
			- Refactoring		
			Writing Functions -2		
			- Global Variables		
			- Making Functions		

			Reusable - Functions as Data Objects - Using Objects - String, File Objects Lists - Using Lists - Building Lists - List Traversal Tuples, Dictionaries, and Sets - Storing Aggregate Data - Enumerating the Elements of a Data Structure Class Design - Composition and Inheritance		
11. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			Severance, Charles. Python for everybody: Exploring Data using python 3. Charles Severance, 2016.		
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites			https://www.py4e.com/		

Course Description Form

Course Name:
Design
Course Code:
Semester / Year:
year one
Description Preparation Date:
/2023
Available Attendance Forms:
In person
Number of Credit Hours (Total) / Number of Units (Total)
urs / 4 hours a week - 8 units
Course administrator's name (mention all, if more than one name)
م. اسامة

Course Objectives					
educing the student to the types of computers, numerical systems, and conversion between them, ddressing the representation of numbers in a digital calculator, Boolean algebra, the physical onents of an electronic computer, machine languages, and data representation.					
Teaching and Learning Strategies					
ogy	1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.				
b). Course Structure					
	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
	4 4 4 4 4 4 4 4 4 4 4 4 4 4	1- The student gets to know numerical systems and conversion between these systems. 2- Identify logical gates. 3- Study the physical components of the computer.	Essential information technical. Introduction, computer and software system, computer types. Numeric methods, Gates: Boolean algebra Formula rules and karnuf map. Characters and functions of box and power supply Study characters, functions and parts of the motherboard. Study functions and types memory: ROM AND ROM Study technical of secondary storage units: H.D ,F.D,C.D ,DVD Study characters and functions of slots cards(net, sound, video)	Lectures and lab	Daily Exams, mid-term exam and final exam

Course Evaluation	
Distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores	
Learning and Teaching Resources	
Used textbooks (curricular books, if	
References (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

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ption Form

1. Course Name:	
Mathematics and numerical analysis	
2. Course Code:	
3. Semester / Year:	
One / year one	
4. Description Preparation Date:	
15/10/2023	
5. Available Attendance Forms:	
In person	
6. Number of Credit Hours (Total) / Number of Units (Total)	
45 hours a week, 45 hour per class	
7. Course administrator's name (mention all, if more than one name)	
Name: sarah fawzi ghafel Email: sara4math1996@gmail.com	
8. Course Objectives	
The objective of the general and specific Subject is to develop the student's ability to use mathematics in practical applications and Benefit from it in engineering lessons	
9. Teaching and Learning Strategies	
Strategy	Discussion strategy Teamwork strategy

0. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Objectives of the	The concept of	Explain the	Daily Exams, mid-term exam and final exam
2	2	Course: to	matrices their	Scientific	
3	2	Introduce the	types and how to	material	
4	2	Student to the	find their ranks	first then	
5	2	Mathematical	The equality of	give	
6	2	Methods used to	matrices and the	examples to	
7	2	Solve	operations on	the	
8	2	Mathematical	them(addition ,	students	
9	2	Methods used to	subtraction, and	and discuss	
10	2	Solve	multiplication)	them with	
11	2	Mathematical	The determinant	the	
12	2	Questions in a	of matrix and its	students	
13	2	Logical manner,	relation with their	find the	
14	2	Including defining	rank, sarus	results of	
15	2	Functions	method to find	the value of	
		Derivatives,	determinant	solving	
		Calculus, finding	The inverse	these	
		The root,	matrix and its	examples	
		Differentiation,	relation with	using	
		and	rank, cofactors	math	
		Numerical metho	method to find	equations	
		In solving	the inverse		
		Questions	matrix, solving		
		Mathematics	the system of		
		Compared to	linear equations		
		Mathematical	simul taneously		
		Methods, using	using the inverse		
		Computer	matrix of the		
		Applications ,	coefficients		
		Including MATLA	Differentiation		
			rules of the		
			algebraic ,		
			trigonometric ,		
			exponential and		
			logarithmic		
			function,		
			derivative of a		
			composite		

			function chain rule implicit differential and partial derivatives The approximate real root of non- linear equation in some interval applying the iteration and newton-raphson methods Integration rules of algebraic, trigonometric, exponential and logarithmic functions Integration by parts and integration by partial fractions the concept of sequence and infinite series and their, ratio and root tests of their convergence and divergence		
1. Course Evaluation					
distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc					
2. Learning and Teaching Resources					
required textbooks (curricular books, if any)					
main references (sources)					
recommended books and references (scientific journals, reports...)			1-CALCULUS , George B, Thomas 2- TRIGONOMETRY, P .ABBOTT,B.A 3- كتاب الرياضيات التطبيقية تأليف يعقوب		

	صبغة
Electronic References, Websites	

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Course Description Form

1. Course Name:	
Statistics	
2. Course Code:	
3. Semester / Year:	
1st / year 1	
4. Description Preparation Date:	
15/10/2023	
5. Available Attendance Forms:	
6. Number of Credit Hours (Total) / Number of Units (Total)	
3 hours a week, 45 hour per class	
7. Course administrator's name (mention all, if more than one name)	
Name: sarah fawzi ghafel Email: sara4math1996@gmail.com	
8. Course Objectives	
Course Objectives	The objective of the general and specific Subject is to develop the student's ability to Use mathematics in practical applications and Benefit from it in engineering lessons
9. Teaching and Learning Strategies	
Strategy	Discussion strategy Teamwork strategy

0. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The objective of the course is to introduce the student to the use of statistical measures, data processing methods, and the application of research methods in studying phenomena. As well as introducing the student to statistical methods and methods in presenting and explaining the uses of measures of central tendency, dispersion, correlation, regression, and future forecasting, as well as applications of linear programming in formulating linear models and analyzing	Definition of statistics - the importance of statistics and its relationship with other sciences.	Learning method	Daily Exams, mid-term exam and final exam
2	2			Explain the Scientific material first then	
3	2			give examples to the	
4	2		the second	students and discuss them with the	
5	2			the students to find the results of solving these examples using math equations	
6	2				
7	2		the third		
8	2				
9	2				
10	2		Ascending and descending clustered repetition		
11	2				
12	2				
13	2		the fourth		
14	2				
15	2				
			Measures of central tendency for ungrouped data (arithmetic mean, mode median		
			Fifth-sixth standards		
			Central tendency for classified data, and the relationship		

		them according to scientific and practical methods using their applications in the electronic calculator through SPSS applications	between means. Measures of dispersion (range, variance, standard deviation for unclassified data) Seventh Eighth - ninth The tenth Measures of dispersion (range, variance, standard deviation for classified data) Coefficient of variation and standard score for classified and unclassified data Simple correlation (Pearson method for unclassified data) Spearman, Kendall rank correlation coefficient Correlation coefficient of traits, pairing, compatibility) Simple regression Time series, measuring the general trend, finding the equation of the general trend line		
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1. Course Evaluation					
distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc					
2. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)			كتاب الرياضيات التطبيقية تأليف يعقوب صباغة		
Recommended books and references (scientific journals, reports...)			– TRIGONOMETRY, P .ABBOTT,B.A كتاب الرياضيات التطبيقية تأليف يعقوب صباغة		
Electronic References, Websites			websites related to the subject		

Course Description Form

Course Description Form

1. Course Name:					
Computer fundamentals / 1					
2. Course Code:					
3. Semester / Year:					
First , year one					
4. Description Preparation Date:					
15/10/2023					
5. Available Attendance Forms:					
In person					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30 hours / 2 hours per week / 30 units					
7. Course administrator's name (mention all, if more than one name)					
Suham Hasan Mohammed Hamza AbdulRidha Rasheed					
8. Course Objectives					
The student acquires the skills of dealing with basic office applications and creating office files and documents. The use of the operating system as well as the basics of working within the digital environment. Specific objective: To provide the student with knowledge in managing and using various computer applications					
9. Teaching and Learning Strategies					
Strategy		10. Lecture or diction strategy. 11. Problem solving strategy. 12. Project-based learning strategy.			
13. Course Structure					
Week	Hours	Required	Unit or subject name	Learning	Evaluation method

		Learning Outcomes		method	
1	2	1- The student learns about computer generations and operating systems	Introduction to the Windows operating system and learning about its advantages. Windows operating system functionality comparison between version types - Identifying the basic screen components, including the desktop icons (Folder, shortcut, files) and their types, the Task bar and its contents, its menu, and how to turn off the calculator Shut down. - The concept of the window, its components, and performing the operations of maximizing, minimizing, closing, etc.	Lecture and lab	Daily Exams, mid-term exam and final exam
2	2				
3	2				
4	2				
5	2				
6	2				
7	2				
8	2				
9	2				
10	2				
11	2				
12	2	2- The student learns about the Windows operating system and how to deal with it			
13	2				
14	2				
15	2				
		3- The student becomes familiar with the Microsoft Word system	the Task bar and its contents, its menu, and how to turn off the calculator Shut down. - The concept of the window, its components, and performing the operations of maximizing, minimizing, closing, etc. - Dealing with the main desktop icons such as My computer, documents, recycle bin and the importance of each of them. - Perform copy, cut, and paste operations		
		4- The student becomes familiar with Microsoft			

		PowerPoint and prepares a presentation	for components of folder icons, files, etc. - Use the Control panel properties - Mouse-Add printer- - Regional Setting- - - Display and change the wallpaper. - Screen saver, display, setting, appearance. - Add and delete programs to the Programs list. - Working with the Paint program to draw, display and store drawings and images. - Word printing program: its features, benefits and operation. - The toolbar and its contents, document creation, how to deal with it, store it, and modify it. - Search and replace, page preparation, formatting and numbering, use of the dictionary - The spell checker prepares tables, deals with them, and performs pre-preview printing. - Power Point slide		
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			preparation program: its importance, advantages and operation Home screen and toolbar components and how to set up the slide Making and saving presentations and dealing with various multimedia (images, sounds, movies).		
14. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
15. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			اساسيات الحاسوب وتطبيقاته المكتبية ١		
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

1. Course Name:
Computer fundamentals / 2
2. Course Code:

3. Semester / Year:					
Second , year one					
4. Description Preparation Date:					
15/10/2023					
5. Available Attendance Forms:					
In person					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30 hours / 2 hours per week / 30 units					
7. Course administrator's name (mention all, if more than one name)					
Nasaem Hani Abbas					
8. Course Objectives					
The student acquires the skills of dealing with basic office applications and creating office files and documents. The use of the operating system as well as the basics of working within the digital environment. Specific objective: To provide the student with knowledge in managing and using various computer applications					
9. Teaching and Learning Strategies					
Strategy		1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Familiarizi	- Excel spreadsheet	Lecture and	Daily
2	2	ng the	system, its	lab	Exams, mid-
3	2	student	importance,		term exam
4	2	with tables	advantages and		and final
5	2	and	operation.		exam

6	2	databases	- Toolbar and its contents.		
7	2		- Prepare a sheet (table), enter data and save it.		
8	2		- Dealing with table cells and performing operations to insert a row or column, delete cells, rows or columns, and modify the cell width or length.		
9	2		- File menu - Edit menu - Format menu		
10	2		- Sorting menu - Fill and sort cells.		
11	2		- How to write important mathematical and statistical equations such as: Sqrt, Stdev, Sum, Average, If, Count, Max, Sin Cos		
12	2		- Dealing with different graphs.		
13	2		- Drawing charts (lines, columns) and deriving the trend line and equation		
14	2		- How to read data from different worksheets		
15	2		Explaining the method of analyzing the situation of organizing payroll records - student absences, based on the EXCEL application		

			- How to run the XEXCEL program and add it from the Internet to the EXCEL service menus - Access database management system - Designing tables - sub-tables - main tables - the normalization process - types of relationships. - Design the main form - Design the subform - - Link the main form with subforms on multiple pages (Pages) - Queries, selection query - deletion query - Table Creation Query – Append Query Macros (Design and Run) - Conducting some exercises and treatment - applying a specific system (examination committee) - Simple reports - professional reports. * The Internet - the concept of the Internet - the idea of the emergence of the Internet - the		
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			method of obtaining an Internet subscription (wireless and wireless systems) Search engine - concept - types of engines (Yahoo, Google,...) A method of obtaining information in specific locations using keywords - storing data on CD-Flash RAM *E-mail service - the method of accessing the service - the functions provided by the e-mail service - the method of sending or receiving attachments (files) with the message.		
11. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			2 أساسيات الحاسوب وتطبيقاته المكتبية		
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

13.	Course Name:
Fundamentals in web design	
14.	Course Code:
15.	Semester / Year:
Second , year one	
16.	Description Preparation Date:
15/10/2023	
17.	Available Attendance Forms:
In person	
18.	Number of Credit Hours (Total) / Number of Units (Total)
60 hours / 4 hours per week / 60 units	

19. Course administrator's name (mention all, if more than one name)					
Haneen Abbas Chekhair Muna Alwan Jaber					
20. Course Objectives					
The goal is to introduce the student to the characteristics of the Internet, the types of applications used, the basics of website design, and to become familiar with the basic design languages (html, css,).					
21. Teaching and Learning Strategies					
Strategy		1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.			
4. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	-The student	Study the characteristics of the	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4	learns	Internet and the		
3	4	about the	types of applications		
4	4	languages	used on it		
5	4	used on	Study the protocol		
6	4	Internet	for transferring		
7	4	sites	electronic pages,		
8	4		files and e-mail on		
9	4		Internet		
10	4		Study the basics of		
11	4	2-The student	HTM		
12	4	learns how	-Delete a web page		
13	4	to create a	Programming using		
14	4	website	PHP and CSS		
15	4		Publish a page on the Internet		
				- Website management	
5. Course Evaluation					

The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores	
6. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Data structures
2. Course Code:
3. Semester / Year:
Second, year 2
4. Description Preparation Date:
15/10/2023
5. Available Attendance Forms:
In person
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours. 4 hours per week / 60 units
7. Course administrator's name (mention all, if more than one name)

Usama Kareem Mohammed					
8. Course Objectives					
Introducing the student to the meaning of graphical structure, types of graphical structures, their importance, characteristics and available applications, while explaining the advantages of structured programming and its efficiency compared to traditional programming.					
9. Teaching and Learning Strategies					
Strategy		1. Lecture or dictation strategy. 2. Problem solving strategy. 3. Project-based learning strategy.			
4. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	1-	Definition of data	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4	Familiarize	structures.		
3	4	the student	basic concept of data		
4	4	with the	structures.		
5	4	types of	data structure types.		
6	4	data	data structures		
7	4	structures.	selecting.		
8	4	2-	Primitive data		
9	4	Introducing	structures		
10	4	the student	representation,		
11	4	to how to	Compound Data		
12	4	choose the	Structures,		
13	4	appropriate	Pointers,		
14	4	graphic	Linked list,		
15	4	structure.	Stack, Queue,		
		3- Teaching the student how to deal with indicators	Graphs, trees, searching algorithms.		

5. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
6. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

7. Course Name:	
Advanced in web design	
8. Course Code:	
9. Semester / Year:	
First, year 2	
10. Description Preparation Date:	
15/10/2023	
11. Available Attendance Forms:	
In person	
12. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours / 4 hours per week / 60 units	
13. Course administrator's name (mention all, if more than one name)	
Haneen Abbas Chekhair Muna Alwan Jabir	
14. Course Objectives	

The goal is to familiarize the student with dealing with websites on the Internet and how to manage them, and to enable the student to design websites, download, and deal with the different servers and languages used on the Internet.

15. Teaching and Learning Strategies

Strategy	1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.
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4. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4		Introduction to the	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4		PHP Hypertext		
3	4		Preprocessor		
4	4		language		
5	4		- Historical		
6	4		introduction to the		
7	4		PHP development		
8	4		language		
9	4		- Comparison of the		
10	4		PHP language with		
11	4		other languages in		
12	4		website design		
13	4		- The most		
14	4		important types of		
15	4		PHP servers		
			- How to install the		
			Apache Webserver		
			- PHP language		
			components		
			- Arithmetic		
			operations in PHP		
			- Integrating PHP		
			with HTML		
			- Explaining the		
			basic requirements		
			for programming a		
			website using PHP		

			Introduction to JavaScript The general form of the JavaScript language How to declare variables Arithmetic transactions Logical operators Control statements Switch statement Repetition phrases Dealing with functions Working with arrays - Creating effective models Introduction to MySQL Mysql operating requirements - The most important instructions of MySql - How to connect MySql with Php - Explaining the operations of adding, deleting, and modifying MySQL databases - RWED explained on MySql by		
5. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
6. Learning and Teaching Resources					

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

7. Course Name:
Fundamentals of database in SQL
8. Course Code:
9. Semester / Year:
First, year 2
10. Description Preparation Date:
15/10/2023
11. Available Attendance Forms:
In person
12. Number of Credit Hours (Total) / Number of Units (Total)
60 hours annually. 4 hours per week / 60 units
13. Course administrator's name (mention all, if more than one name)
Muqdad Hanoon Dawood
14. Course Objectives

Introducing the student to the importance of SQL databases, what are their basic principles, how to install SQL, how to normalize a lot of data, creating a rule and naming it, and through it creating its own tables, and how to modify, add, delete, and index.

15. Teaching and Learning Strategies

- | | |
|-----------------|--|
| Strategy | <ol style="list-style-type: none"> 1. Lecture or dictation strategy. 2. Problem solving strategy. 3. Project-based learning strategy. |
|-----------------|--|

4. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Teaching students how to deal with SQL databases and how to add, modify, delete, and index	Introduction and installation of sql ,	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4		Data normalization		
3	4		Using wizards, and		
4	4		HELP types		
5	4		Data definition		
6	4		types, Create data		
7	4		tables, saving and		
8	4		editing. Input		
9	4		various data type		
10	4		using commands and		
11	4		keys		
12	4		More on Alter table,		
13	4		Brows , Edit data		
14	4		Data Manipulation		
15	4		language, Replace, Delete , Pack, Recall, Zap data Indexing & Sorting data		

5. Course Evaluation	
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores	
6. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

7. Course Name:
Database in SQL
8. Course Code:
9. Semester / Year:
Second, year 2
10. Description Preparation Date:
15/10/2023
11. Available Attendance Forms:
In person
12. Number of Credit Hours (Total) / Number of Units (Total)
60 hours annually. 4 hours per week / 60 units
13. Course administrator's name (mention all, if more than one name)
Muqdad Hanoon Dawood
14. Course Objectives

Introducing the student to SQL databases and how to manage them through commands, after they learned in the first chapter about creating the database and its tables through the wizard, managing data, how to enter and call it in ascending or descending order, and also deleting, modifying, and adding to the database or tables.

15. Teaching and Learning Strategies

Strategy	1. Lecture or dictation strategy. 2. Problem solving strategy. 3. Project-based learning strategy.
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4. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Providing students with the skill of preparing databases and how to add and delete using SQL commands	Introduction Database Management System (DBMS)	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4		Data Integrity		
3	4		Database Normalization		
4	4		Create, Drop, Insert, Select table		
5	4		Understand (WHERE) statement		
6	4		(Condition Statement)		
7	4		Understand (Order by) statement		
8	4		Comparison Operators (Between, In, Like, Is Null)		
9	4		Logic Operations		
10	4				
11	4				
12	4				
13	4				
14	4				
15	4				

			(And, Or, Not) Arithmetic Operators Boolean Expression Numeric Expressions Date Expressions Create Database Drop Database Select Database Understand JOINS Inner join Left join Right join Full join Self join Sub-Query (One and More Tables) Sub-Query with (Select, Insert, Update, Delete) statements SQL Injection		
5. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
6. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

7. Course Name:	
8. Course Code:	
9. Semester / Year:	
10. Description Preparation Date:	
15/10/2023	
11. Available Attendance Forms:	
In person	
12. Number of Credit Hours (Total) / Number of Units (Total)	
13. Course administrator's name (mention all, if more than one name)	
14. Course Objectives	
15. Teaching and Learning Strategies	
Strategy	1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.

4. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	The student	Introduction of	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4	understands	Information Security		
3	4	the importance	- Defining		
4	4	of information	Security,		
5	4	security	Information Security		
6	4	learn	Protection tools		
7	4	Skills	- History of		
8	4	encrypt	Information Security		
9	4	important	- Models for		
10	4	information	Discussing Security		
11	4	and development	Issues		
12	4	decent			
13	4	software	Information Security		
14	4	protect device	Attacks		
15	4	from malicious attacks	- Defining Security Attack - Hackers and Hacking - The Risks of the Security Attacks (Government, nongovernment) - Types of Information Security Attacks and Breaches (Types of Malware, Types of Cyber Attack) Identification and Authentication - Defining Identification and Authentication - Approaches to Authentication		

			- Common Identification and Authentication Methods - Authorization and Access Controls - Access Controls Actions - Access Control Lists - Access Control in Network - Weaknesses of Access Control Systems - Physical Access Controls Auditing and Accountability - Accountability - Security Benefits of Accountability - Auditing Social Engineering (Human Element Security) - What is a Social Engineering? - Gathering Information for Social Engineering Attacks - Types of Social		
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			Engineering Attacks - Building Security Awareness with Security Training Programs Information Security Tools - Antivirus software - Wireshark) Network Security (Cryptography - The History of Cryptography - Modern Cryptographic Tools - Protecting Data at Rest, in Motion, and in Use Operations Security - The Operations Security Process - Laws of Operations Security - Operations Security in Our Personal Lives Physical Security - Identifying Physical Threats - Protecting People, Data, Equipment Mobile, Embedded, And Internet Of Things Security - Mobile Security		
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			- Embedded Security - Internet of Things Security - Kali Linux - What is Kali Linux?		
5. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
6. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

1. Course Name:					
Programming in Visual Basic					
2. Course Code:					
3. Semester / Year:					
First and second, year 2					
4. Description Preparation Date:					
15/10/2023					
5. Available Attendance Forms:					
In person					
6. Number of Credit Hours (Total) / Number of Units (Total)					
120 hours annually. 4 hours per week / 120 units					
7. Course administrator's name (mention all, if more than one name)					
Abbas Chekhair Kadum					
8. Course Objectives					
Introducing the student to advanced technologies and integrated programs in the VB language through database programming and delving into the details of some spreadsheet tools and creating reports.					
9. Teaching and Learning Strategies					
Strategy		1. Lecture or diction strategy. 2. Problem solving strategy. 3. Project-based learning strategy.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4		* Integrated development environment (IDE). (Integrated Development	Lecture and lab	Daily Exams, mid-term exam and final exam
2	4				
3	4				
4	4				
5	4				

6	4		Environment)		
7	4		- Integrated		
8	4		development		
9	4		environment		
10	4		windows		
11	4		Integrated Windows		
12	4		Development		
13	4		Environment		
14	4		- Integrated		
15	4		development		
			environment lists.		
			Integrated Menus		
			Development		
			Environment		
			- Tool Bars		
			* Writing the first		
			program		
			- The idea of the		
			program		
			- Creating the		
			project.		
			- Interface design		
			Design Forms		
			- Writing Codes		
			- Runs & Updates		
			- Compiling		
			translation.		
			* Forms and tools.		
			- Common		
			properties		
			Properties - Name		
			property.		
			- Size & Location		
			property.		
			- Font & Color		
			feature.		
			- Tab feature - Mouse		
			pointer feature.		
			* Common Events -		
			Mouse Events.		
			- Keyboard Events.		

			* Form Window. - Properties form. - Event Form Events - Menus. * Internal Toolbox. - Label tool - Textbox tool. - Command button - Checkbox tool. -Option button -List box tool. -Combo box menu tool - Picture box tool. - Image box tool - Scrollbar. - File ToolsFileslistbox. * Programming Language. - Variables and Constants. -Variables. - Constants. - Mathematical expressions and effects - OperationsExpressio n - TransactionsOperato rs. - Logical & relational expressions. * Inputs & Outputs. - Message and input boxes. -Print sentence. * Control and control statement.Control - If-Then conditional		
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			transition statement - Compound transition expression using (And, Or, Not). Nested -If transition statement - Multiple optionsSelect-Case. * Loops. -For-Next loops. - Do-While-Loop. Do-Until-Loop. - Do-Loop. * Arrays - One-dimensional arrays. - Two-dimensional arrays * Subroutines & Procedures. Subroutines. -Procedures & Functions - Ready-made functionsLibrary Functions. -Procedures. - Functions * Standard Modules - RestrictionsRecords. * Files.Files - Sequential Files. Random Files. * Database Programming. - Basic concepts in databases.		
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			- Data access techniques Access Database. * Objects in databases (ADO). - objectConnection - objectRecord set - objectCommand. * Tools and reports - Data Grid tool - Flex Grid tool - Data Combo tool. - Data List tool - Crystal Reports design. * Object-oriented programming (OOP). (Object Oriented Programming). - Introduction to OOP - Characteristics of OOP. - Building classes.		
11. Course Evaluation					
The distribution is as follows: 50 points for daily exams and mid-term. 50 Semester Exam Scores					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

1. Course Name:
Baath regime crimes
2. Course Code:
3. Semester / Year:
Chapter One/ year2
4. Description Preparation Date:
2025/6/12
5. Available Attendance Forms:
In person
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours / 2 hours per week / 60 units
7. Course administrator's name (mention all, if more than one name)
Asst. Lecturer Elaf Abdulrasool Sabri
8. Course Objectives

1. Introducing students to the concept of crime, both linguistically and terminologically. 2. Preparing students of the department to be well-versed in both the theoretical and practical aspects of crimes committed by the Ba'ath regime. 3. Working to shape a distinguished student personality by developing human, cultural, and social awareness, enabling them after graduation to actively contribute to serving their society, while upholding human rights and citizenship, and rejecting crime and the dictatorial Ba'ath government. 4. Introducing students to the Ba'athist violations through its breaches of international laws and conventions concerning human rights—an area that requires further in-depth academic research. 5. Highlighting the developmental projects and economic progress that were damaged or hindered during the Ba'ath regime's rule.	
9. Teaching and Learning Strategies	
Strategy	Lecture strategy or lecture-based approach Problem-solving strategy Report-based learning strategy or learning strategy based on preparing reports
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Definition of crime and its types.		Daily
2	2				Exams, mid-
3	2				term exam
4	2		- Crimes of the Ba'ath regime as documented by the Iraqi High Criminal Court Law of 2005, and types of international crimes.		and final exam
5	2				
6	2	Providing students with historical information about the emergence of the Ba'ath regime in Iraq, as well as information about the Iraqi constitution, the stages of dictatorship and its collapse leading to the current constitution of the Republic of Iraq.		Lecture	
7	2				
8	2				
9	2				
10	2				
11	2				
12	2		- Decisions issued by the High Criminal Court.		
13	2				
14	2		- Psychological and social crimes and their effects.		
15	2		- Prominent violations of the Ba'ath regime in Iraq.		
			- The Ba'ath regime's position on religion.		
			- Violations of Iraqi laws.		
			- Examples of human rights violations and crimes of power		
			- Some decisions on political and military violations by the Ba'ath regime.		
		Let me know if you'd like			

		it rephrase more formally or simplify further	- Prisons and detention facilities of the Ba'ath regime. - Environmental crimes of the Ba'ath regime in Iraq. -Draining the marshes. -Mass grave crimes. -Genocide graves incidents committed by the Ba'ath regime in Iraq. -Chronological classification of genocide graves in Iraq for the period 1963-2003		
11. Course Evaluation					
The distribution is as follows: 60points for daily exams and mid-term. 40Semester Exam Scores					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			Methodological material on the crimes of the Ba'ath regime in Iraq		
Main references (sources)			1- Iraqi Constitutions 2- International Conventions		

	3- The Universal Declaration of Human Rights.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	https://euaa.europa.eu/country-guidance-iraq-2021/crimes-committed-during-regime-saddam-hussein

Course Description Form

1. Course Name:
Arabic
2. Course Code:
3. Semester / Year:
Second semester/ first grade
4. Description Preparation Date:
2025/6/12
5. Available Attendance Forms:
In person only
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours annually , 2 hours weekly
7. Course administrator's name (mention all, if more than one name)
m.m. Zahraa Saad Hussein
8. Course Objectives

1. Develop oral and written expression skills in standard Arabic.
 2. Develop the ability to write research papers, reports, and academic articles.
- Enhance the ability to use Arabic in modern contexts (digital media, technical writing, formal communication).

9. Teaching and Learning Strategies

Strategy	1. Lecture or presentation strategy. 2. Problem-solving strategy. 3. Report-based learning strategy.
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	1-Presentation Oral	Hamza Writing Rules	A lecture	Daily, monthly and final exams
2	2	Academic	Nominative and		
3	2	Proficient	Accusative Cases of		
4	2	Arabic.	Nouns		
5	2	2 - Participative	Solar and Lunar		
		Active	Letters		
6	2	Discussions	Declension and		
7	2	and University Seminars	Syntax of Nouns, Verbs, and Letters		
8	2	3- Writing reports, article and research	About the Styles of Exclamation and Comparatives		
9	2	Proficient academic	Repeating Nouns		
10	2		Conjunctions		
11	2				

12	2		Interrogative Words		
13	2		Punctuation Marks and Their Uses		
14	2		Exceptional Words		
15	2		Number and Counted		
			Of the Five Objects (Maful al-Mutlaq)		
11. Course Evaluation					
The distribution is as follows: 40 marks for daily and monthly exams. 60 marks for final exams.					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

1. Course Name:					
Data Communication					
2. Course Code:					
3. Semester / Year:					
semester					
4. Description Preparation Date:					
12/06/2025					
5. Available Attendance Forms:					
In person					
6. Number of Credit Hours (Total) / Number of Units (Total)					
۳۰ yearly / ۲ hours a week - ۳۰ units					
7. Course administrator's name (mention all, if more than one name)					
Haider Jabbar Swadi					
8. Course Objectives					
The purpose of Data Communication is to provide students with the knowledge and practical understanding of how data is transferred and exchanged between computers across different networks.					
9. Teaching and Learning Strategies					
Strategy		1. Lecture or dictation strategy. 2. Problem solving strategy. 3. Project-based learning strategy.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		A. 1. Basic Concepts of Data	Lectur	Daily
2	2		Communication	e and	Exams, m
3	2		2. Components of Data Communicat.	lab	term exam
			3. Data Representation		and final
			4. Data Stream		exam

4	2		5. Types of Connections 6. Protocols 7. Standards 8. Networks B.		
5	2		1. Data and Signals		
6	2		2. Analog and Digital Data		
7	2		3. Analog and Digital Signals		
8	2		4. Analog Periodic Signals 5. Signals in the Time and Frequency Domains 6. Composite Signals 7. Signal Bandwidth.		
			C.		
9	2		1. Digital Signals and Transfer Rate		
10	2		2. Digital Signal		
11	2		3. Definition of Transfer Rate 4. Transmission of Digital Signals 5. Transmission Disadvantages 6. Maximum Transfer Rate		
			D.		
12	2		1. Digital Transmission		
13	2		2. Definitions and Basic Concepts		
14	2		3. Digital Signal Properties 4. Line Coding		
15	2		5. Performance Improvement Techniques 6. Analog Switching 7. Transmission Modes		
11. Course Evaluation					
The distribution is as follows: 40 points for daily exams and mid-term. 60 Semester Exam Scores					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

1. Course Name:	
Human rights and democracy	
2. Course Code:	
3. Semester / Year:	
First semester/ first grade	
4. Description Preparation Date:	
2025/6/16	
5. Available Attendance Forms:	
In person only	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours annually , 2 hours weekly	
7. Course administrator's name (mention all, if more than one name)	
m.m. Zahraa Saad Hussein	
8. Course Objectives	
1. Introduce the student to human rights and democracy, their implications, and the classification of public freedoms. 2. Enabling the student to understand the concept of human rights and their guarantees at the national, regional, and international levels. 3. Explain the most important modern ideas in the field of human rights legislation.	
9. Teaching and Learning Strategies	
Strategy	1. Lecture or presentation strategy. 2. Problem-solving strategy. 3. Report-based learning strategy.

10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	1- Providing students with sufficient knowledge of the stages and eras through which the concept of human rights has passed from ancient times to the modern era.	1 - The Concept of Human Rights	A lecture	Daily, monthly and final exams
2	2		2 - The Eras of Human Rights		
3	2		3 - International and Regional Human Rights Conventions		
4	2		4 - Human Rights in the 2005 Constitution of the Republic of Iraq		
5	2				
6	2				
7	2	2- Informing students of the most important rights and freedoms stipulated in the current Constitution of the Republic of Iraq (2005)			
8	2				
9	2	3- Explaining the most important international conventions			
10	2				
11	2				
12	2				
13	2				
14	2				
15	2				
11. Course Evaluation					
The distribution is as follows: 40 marks for daily and monthly exams. 60 marks for final exams.					

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	Dr. Hamid Hanoun, Human Rights, Al-Sanhouri Library, Iraq, 2015
Recommended books and references (scientific journals, reports...)	Borzik Kheira, Mechanisms for the Protection of Human Rights In the International and Regional System, published research, Dr. Moulay Taher University of Algiers, Algeria, 2017 Hussein Omar, Haji, The Role of International Organizations in Promoting Human Rights, Master's Thesis, University of Mosul, Iraq, 2008
Electronic References, Websites	https://www.ohchr.org/ar/what-are-human-rights https://www.un.org/ar/global-issues/human-rights

