

**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.

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).

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: Basra Technical Institute

Scientific Department: Computer Systems Techniques

Academic or Professional Program Name: Technical Diploma

Final Certificate Name: Technical Diploma in Computer Systems Techniques

Academic System: Semester

Description Preparation Date: 15/5/2025

File Completion Date:

Signature:



Head of Department Name:

Lemya'a Ghalib Shihab

Date: 22/5/2025

Signature:



Scientific Associate Name:

Dr. AbdulWaseer AbdulJabbar

Date: 22/5/2025

The file is checked by:

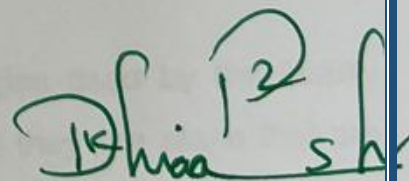
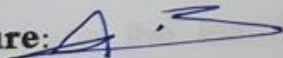
Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 21/6/2025

Anwar Abdel Khealag Aboud

Signature:



Approval of the Dean

Dr. Diyah K. Shiry

## **1. Program Vision**

Building the department on a bright plateau of modern scientific concepts to be at the forefront of the scientific departments in the institute to provide its educational and skill services to the student, which is distinguished by the quality of teaching and scientific research using advanced technologies in the field of computer software networks, and for the department to occupy a distinguished position in the field of computers, the Internet, information technology and communications networks according to international quality standards.

## **2. Program Mission**

The Computer Systems Department seeks to prepare highly professional specialized staff to deal with application software and information and work 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. Embodying the vision, mission and objectives of the Southern Technical University, and applying the best educational practices with a focus on ensuring quality and performance and enhancing them.
2. Preparing specialized cadres capable of serving the community and preparing for the preparation of future specializations.
3. The Institute seeks to conclude scientific and cultural cooperation agreements with similar institutes and departments in different universities to achieve the best practices in the fields of education, learning and translation.

4. Focusing on the educational and ethical aspect of all its members and spreading the spirit of dedication, tolerance, commitment and work to serve the homeland.

5. Focusing on intellectual and cultural construction through openness to the experiences of other countries in the fields of languages, literature and translation.

6. Focusing on the educational and ethical aspect of the student and spreading the spirit of dedication, tolerance and commitment.

#### 4. Program Accreditation

None

#### 5. Other external influences

None

#### 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	13	45		
College Requirements				
Department Requirements				
Summer Training				
Other				

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

## 7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
Second Year/ First Semester		Operating systems	2	2
Second Year/ First Semester		Information security and encryption	2	1
Second Year/ First Semester		Fundamentals of data base in SQL	2	2
Second Year/ First Semester		Programming in visual basic/1	2	2
Second Year/ First Semester		Advansed in Web Design	2	2
Second Year/ First Semester		English Language/2	2	0
Second Year/ First Semester		The crimes of the Baath regime in Iraq	2	0
Second Year/ Second Semester		Data structures	2	2
Second Year/ Second Semester		Computer Networks	2	2
Second Year/ Second Semester		Database in SQL	2	2
Second Year/ Second Semester		Programming in visual basic/2	2	2
Second Year/ Second Semester		System Analysis	2	0
Second Year		Graduation Project	0	2

## 8. Expected learning outcomes of the program

### Knowledge

- Preparing qualified technical staff
1. Using the computer, preparing and auditing data and entering it into the computer.
  2. Knowing the nature of operating systems and analyzing software systems.
  3. Designing websites on the World Wide Web.
  4. Learning modern databases.

### Skills

- 1.Participate in testing, auditing and correcting programmed systems.
- 2.Participate in preparing and designing software systems.

**Ethics**

Developing students' ability to share ideas	
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**9. Teaching and Learning Strategies**

- 1– Applying the theoretically studied topics on a practical level in computer labs.
- 2– Assigning students to write scientific reports, prepare applied research and work on the Internet.
- 3– Scientific visits to computer centers in institutions and government departments.
- 4– Summer training .

**10. Evaluation methods**

- 1– Daily assessment, oral, written and practical tests.
- 2– Surprise, midterm and final exams.
- 3– Homework.

**11. Faculty****Faculty Members**

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Lecturer	Computer Science	Artificial Intelligent			1	–
Lecturer	Computer Science	pattern recognition			1	–
Assistant Lecturer	Computer Engineering	Electrical and Telecommunications			1	–



Assistant Lecturer	Computer Science	Genetic algorithms			1	–
Assistant Lecturer	Computer Science	Databases			1	–
Assistant Lecturer	Computer Science	Computer Information Systems			1	–
Assistant Lecturer	Computer Science	Data Analysis			1	–
Assistant Lecturer	Computer Science	Computer Science			1	–
		Law			–	1
		English			–	1

### **Professional Development**

#### **Mentoring new faculty members**

Training courses..

#### **Professional development of faculty members**

Training courses.

### **12. Acceptance Criterion**

**(Setting regulations related to enrollment in the college or institute, whether central admission or others)**

### **13. The most important sources of information about the program**

#### 14. Program Development Plan

- 1– The curricula are constantly updated to keep pace with the scientific developments in the field of computers and information technology.
- 2– Submit a study to transform the department from an administrative department to a technological department, to keep pace with the requirements of the labor market.
- 3– Submit a study to transform the department to specialize in the study of networks, in order to keep pace with the requirements of the labor market.
- 4– The two studies above have been accepted and the above studies will be implemented starting from the academic year 2024–2025.

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
Second Year 2024/2025  First semester		Operating systems	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Information security and encryption	Basic												
		Fundamentals of data base in SQL	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Programming in visual basic/1	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Advansed in Web Design	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		English Language/2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Graduation Project	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		The crimes of the Baath regime in Iraq		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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
Second Year 2024/2025  Second semester		Data structures	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Computer Networks	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		data base in SQL	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Programming in visual basic/2	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		System Analysis	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Graduation Project	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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

## Course Description Form

1. Course Name: operating systems
Operating systems
2. Course Code:
3. Semester / Year:
Second Year/ Second semester
4. Description Preparation Date: 9/10/2024
1/5/2025
5. Available Attendance Forms:
In-person only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoretical + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name: Sahar Sami Fadhil Email: <a href="mailto:sahar.fadhil@stu.edu.iq">sahar.fadhil@stu.edu.iq</a>
8. Course Objectives
The aim of this course is to understand the definition of the operating system, its types and services, in addition to reviewing the definition of processor scheduling and the most important scheduling algorithms.
9. Teaching and Learning Strategies
In-person lectures, short tests, assignments and practical application in the laboratory

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 hours Theoretical + 2 hours Practical	1-Familiarity With Everything Related to operating system and the computer boot process, addition to knowing how choose the appropriate processor scheduling algorithm. 2-The student's knowledge of advantages operating systems and their specifications will enable him in the future to choose appropriate operating system according to the specifications the computer question.	An introductory introduction that includes: <ul style="list-style-type: none"> <li>• A brief history of computer operating systems</li> <li>• Definition of an operating system</li> <li>• Types of operating systems</li> </ul>	1-Explaining The scientific material 2-Asking questions related to the material	Weekly And Daily Written exams, mid-term exam and end-of-semester exam
2			Services provided by the operating system		
3			Structure of computer system		
4 & 5			Basic terms and concepts in operating systems		
6 & 7			Loading the operating system into the computer's		

			memory and starting it up		
8 & 9			File systems		
10			Copy and Backup Files		
11			Storage structure		
12			Operating system departments		
13			Operations Management		
14			Scheduling		
15			Processor Scheduling algorithms		

### 11. Course Evaluation

The distribution is as follows:

20 points for the theoretical mid-term exam

20 points = the practical = = =

10 points for student activity during the semester

Total 50 points for the annual effort

50 points for the final exam

40 points for the theoretical exam at the end of the semester

10 points for the practical exam at the end of the semester

### 12. Learning and Teaching Resources

E-books and topics found on scientific and software websites on the Internet

## Course Description Form

<b>1.Course Name:</b>	
Encryption and information security	
<b>2.Course Code:</b>	
<b>3.Semester / Year: Semester</b>	
Second Year/First semester	
<b>4.Description Preparation Date:</b>	
8/2/2025	
<b>5.Available Attendance Forms:</b>	
In-person attendance only	
<b>6.Number of Credit Hours (Total) / Number of Units (Total)</b>	
45 hours during the semester (theoretical + practical), 3 hours weekly	
<b>7.Course administrator's name (mention all, if more than one name)</b>	
Name: Zainab Mohammed Jiwar Email: <a href="mailto:zainab.m.jiwar@stu.edu.iq">zainab.m.jiwar@stu.edu.iq</a>	
<b>8.Course Objectives</b>	
<p>Cognitive objectives</p> <ol style="list-style-type: none"> <li>1) The student will study the concepts and basics of information security, including various security threats and common attack methods, and encryption concepts and methods</li> <li>2) The student will understand various security attack methods such as hacking, malware, and fraud attacks, and learn how to implement security defense to counter these attacks</li> <li>3) The student will apply the best practices and modern technologies in the field of information security to protect systems, networks, and data from security threats</li> </ol>	<p>Program Skill Objectives</p> <ol style="list-style-type: none"> <li>1)The student will acquire the skill of monitoring unwanted activities and responding to security incidents effectively to deal with security attacks and breaches.</li> <li>2) The student will apply the best globally recognized security practices and standards to ensure the security of systems, data, and networks.</li> <li>3)The student will be able to apply security defense methods to protect systems and networks from various cyber attacks such as hacking and malware.</li> </ol>
<b>9.Teaching and Learning Strategies</b>	
<b>Strategy</b>	<ol style="list-style-type: none"> <li>1) Teaching Strategy Collaborative Concept Planning.</li> <li>2) Teaching Strategy Brainstorming.</li> <li>3) Teaching Strategy Notes Series</li> </ol>



## 10.Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Understand what security and information security , and learn about models for discussing security issues	Introduction of Information Security	Lecture and Lab	Daily Exams and Assignments
2	3	Definition of security attack, hackers, hacking, risks of security attacks (governmental, non-governmental), types of attacks and breaches related to information security (types of malware, types of cyber attacks)	Information Security Attacks	Lecture and Lab	Daily Exams and Assignments
3	3	Understand identity and authentication, and learn about authentication methods and common identification and authentication methods	Identification and Authentication	Lecture and Lab	Daily Exams and Assignments
4	3	Knowledge of access control procedures, access control lists, and access control in the network, identifying vulnerabilities in access control systems, and understanding physical access controls	Authorization and Access Controls	Lecture and Lab	Daily Exams and Assignments
5	3	Knowledge of auditing and accountability, and their security benefits	Auditing and Accountability	Lecture and Lab	Daily Exams and Assignments
6	3	Knowledge of what is social engineering and how to collect information for social engineering attacks and types of social engineering attacks and understand security awareness through security training programs	Social Engineering (Human Element Security)	Lecture and Lab	Daily Exams and Assignments
7	3	Understand antivirus programs and study the Wireshark program for network security	Information Security Tools	Lecture and Lab	Daily Exams and Assignments
8-9	6	Knowledge of the history of encryption and modern encryption tools and how to protect data	Cryptography	Lecture and Lab	Daily Exams and Assignments
10-11	6	Understand the process of operational security and operational security laws and how to apply operational security in our personal lives	Operations Security	Lecture and Lab	Daily Exams and Assignments

12	3	Understand physical threats and how to protect people, data, and equipment	Physical Security	Lecture and Lab	Daily Exams and Assignments
13	3	Understand mobile security, embedded security, and Internet of Things security	Mobile, Embedded, And Internet Of Things Security	Lecture and Lab	Daily Exams and Assignments
14-15	6	Understand Kali Linux and how currency	Kali Linux	Lecture and Lab	Daily Exams and Assignments

### 11.Course Evaluation

50 marks for mid-term exams (20 practical + 20 theoretical + 10 activity). 50 marks for final exams (10 practical + 40 theoretical)

### 12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lectures of the course material prepared by the lecturer
Main references (sources)	Information Security Management Handbook, Sixth Edition
Recommended books and references (scientific journals, reports...)	Some references available in the library. And all scientific online books and websites specialized in SQL databases.
Electronic References, Websites	

## Course Description Form

1.Course Name:	
SQL Databases Basics	
2.Course Code:	
3.Semester / Year: Semester	
Second Year/ first semester	
4.Description Preparation Date:	
8/5/2025	
5.Available Attendance Forms:	
In-person attendance only	
6.Number of Credit Hours (Total) / Number of Units (Total)	
60 ours during the semester (theoretical + practical), 4 hours weekly	
7.Course administrator's name (mention all, if more than one name)	
Name: Zainab Mohammed Jiwar Email: <a href="mailto:zainab.m.jiwar@stu.edu.iq">zainab.m.jiwar@stu.edu.iq</a>	
8.Course Objectives	
<b>Cognitive objectives</b> 1.The student will understand databases and their importance in storing and organizing data effectively 2.The student will be able to learn the SQL language and use it to create and manage databases, including creating, modifying, and querying data and understanding different types of data such as text, numeric, etc., and how to deal with them using SQL 3.The student will master how to design databases effectively, including defining tables and relationships between them, setting constraints, and writing SQL queries to retrieve data from databases.	<b>Program Skill Objectives</b> 4)The student will be able to write SQL queries to retrieve data from databases effectively and accurately 5)The student will apply exercises in designing databases using appropriate data models and defining tables and relationships between them. 6)The student will acquire skills in managing and maintaining databases, including adding, modifying and deleting data
9.Teaching and Learning Strategies	
<b>Strategy</b>	4) Teaching Strategy Collaborative Concept Planning. 5) Teaching Strategy Brainstorming. 6) Teaching Strategy Notes Series
10.Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Understand the basic concepts of what databases are, their importance in organizing and managing data, learn the basics of the SQL language and how to install it on the computer, understand the concepts of data normalization and the practical importance of applying them in database design	Introduction and installation of SQL, Data normalization	Lecture and Lab	Daily Exams and Assignments
2	4	Understand what SQL Wizards are and their role in facilitating the processes of writing SQL queries and creating databases more effectively and easily, and learn about the types of assistance available in database development environments	Using wizards, and HELP types	Lecture and Lab	Daily Exams and Assignments
3-4	8	Understand the types of data definition in SQL, create data tables, save and edit data, use different data types, and use commands and tool keys in the SQL environment in a skillful manner	Data definition types, creating data tables, saving, and editing. Input various data types using commands and keys	Lecture and Lab	Daily Exams and Assignments
5-7	12	Understand how to use the ALTER TABLE command in SQL to modify the structure of tables, including adding, modifying and deleting columns and changing data types, browsing and displaying table data in an organized and understandable manner, which enables understanding the structure of the data and existing information, and editing data in tables	More on Alter table, Browse, Edit data	Lecture and Lab	Daily Exams and Assignments
8-11	16	Understand the concept of Manipulation Language (DML) and its role in modifying and managing data in databases using commands such as REPLACE, DELETE, PACK, RECALL and ZAP.	Data Manipulation Language, Replace, Delete, Pack, Recall, Zap data	Lecture and Lab	Daily Exams and Assignments
12-15	16	Understand what indexing is in SQL and its role in improving the performance of data queries by accelerating search and	Indexing & Sorting data	Lecture and Lab	Daily Exams and Assignments

		filtering operations, and understand the process of data arrangement in SQL and its role in organizing data appropriately to improve query performance and enhance user experience.			
<b>11.Course Evaluation</b>					
50 marks for mid-term exams (20 practical + 20 theoretical + 10 activity). 50 marks for final exams (10 practical + 40 theoretical)					
<b>12.Learning and Teaching Resources</b>					
Required textbooks (curricular books, if any)		Lectures of the course material prepared by the lecturer			
Main references (sources)		SQL: the complete reference. McGraw-Hill/Osborne, 2002			
Recommended books and references (scientific journals, reports...)		Some references available in the library. And all scientific online books and websites specialized in SQL databases.			
Electronic References, Websites		<a href="https://www.w3schools.com/sql/default.asp">https://www.w3schools.com/sql/default.asp</a>			

## Course Description Form

<b>1.Course Name:</b>					
Programming in Visual Basic / 1					
<b>2.Course Code:</b>					
<b>3.Semester / Year:</b>					
Second Year/ first semester					
<b>4.Description Preparation Date:</b>					
8/5/2025					
<b>5.Available Attendance Forms:</b>					
<b>6.Number of Credit Hours (Total) / Number of Units (Total)</b>					
60 Hours , 4 hours per a weak					
<b>7.Course administrator's name (mention all, if more than one name)</b>					
Name: Awatif Salman Alkam Email: awatif.alqum@stu.edu.iq					
<b>8.Course Objectives</b>					
<b>Course Objectives</b> 1-Teaching the student how to write a program in visual basic. 2- Teaching the student how Building a Visual Basic Application. 3- Teach the student linear Types of Visual Basic Data, Managing Variables, Working with Variables 4- Teaching the student Controlling Program Flow and Array					<ul style="list-style-type: none"> <li>• .....</li> <li>• .....</li> <li>• .....</li> </ul>
<b>9.Teaching and Learning Strategies</b>					
<b>Strategy</b>		Collaborative Learning, Flipped Classroom Brainstorming Teaching Strategy Chain of notes Teaching strategy			
<b>10.Course Structure</b>					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Learn about The Visual Basic Environment	Integrated Development Environment	2th+2P	Exams
2	4	How to design	Design Forms	2th+2P	Exams

		Forms			
3	4	How to use tools like(command, text, label....)	ToolBox	2th+2P	Exams
4	4	How to use properties	Properties	2th+2P	Exams
5	4	Building a Visual Basic Application	Programming Language.	2th+2P	Exams
6	4	Types of Visual Basic Data	Variables& Constants	2th+2P	Exams
7	4	Types of Numeric Data	Logical & relational Expression.	2th+2P	Exams
8	4	Assigning Values to Variables	Inputs & Outputs.	2th+2P	Exams
9	4	Introduction to VB Functions	Mesgbox & Inputbox	2th+2P	Exams
10-12	4	Conditional Operators example on If...Then...Else Select-Case	Control the program	2th+2P	Exams
13	4	Do loop , For-Next	loop	2th+2P	Exams
14	4	Arrays types	array	2th+2P	Exams
15	4	VB applications	app	2th+2P	Exams

### 11.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

### 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

<b>1.Course Name:</b>	
Advance in Web design	
<b>2.Course Code:</b>	
<b>3.Semester / Year:</b>	
Second Year/ first semester	
<b>4.Description Preparation Date:</b>	
10/1/2025	
<b>5.Available Attendance Forms:</b>	
Presence only	
<b>6.Number of Credit Hours (Total) / Number of Units (Total)</b>	
60 hours/4 hours per a week	
<b>7.Course administrator's name (mention all, if more than one name)</b>	
Name: Assist. Prof. Dr Hayder Mohammed Amer Email: <a href="mailto:hayder.amer@stu.edu.iq">hayder.amer@stu.edu.iq</a>	
<b>8.Course Objectives</b>	
<b>Course Objectives</b> <ol style="list-style-type: none"> <li>1- Providing students with the skill of learning the PHP programming language for the purpose of designing websites in a professional manner</li> <li>2- Expanding the student's skill in designing dynamic websites</li> <li>3- Integrating the student's knowledge of programming languages with databases to create websites in various fields.</li> </ol>	
<b>9.Teaching and Learning Strategies</b>	
<b>Strategy</b>	<ol style="list-style-type: none"> <li>1- Educational strategy: planning the cooperative concept.</li> <li>2- A problem statement and confront the student in solving it.</li> <li>3- Collect the data and requirements necessary to solve the problem</li> </ol>



## 10.Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-6	2th+2P	Web pages Design	Introduction aboutt(PHP) - Historical Introduction the PHP Development Language - Comparison of PHP with Other Languages in Web Design - The Most Important Types of PHP Servers - How to Install a Web Server - Apache Webserver - PHP Components - PHP Arithmetic Operations - Combining PHP with HTML - Explanation of the Basic Requirements Website Programming Using PHP		Exams
7-12			Introduction to JavaScript - The general form of the JavaScript language - How to declare variables - Arithmetic operators - Logical operators - Control statements - Switch statements - Loop statements - Working with functions - Working with arrays - Creating effective forms		
13-15			Introduction to MySQL -MySQLSystem Requirements - Most Important MySQL Commands		

			<ul style="list-style-type: none"> <li>- How to Integrate MySQL with PHP</li> <li>- Explanation of Adding, Deleting, and Modifying MySQL Databases</li> <li>- Explanation of RWED MySQL Using PHP</li> </ul>		
<b>11.Course Evaluation</b>					
Distribution as follows: 40 marks for monthly theoretical and practical exams, 10 marks for daily exams, 50 marks for final exams.					
<b>12.Learning and Teaching Resources</b>					
Required textbooks (curricular books, if any)			Programming PHP creating dynamics web page		
Main references (sources)			Programming PHP creating dynamics web page		
Recommended books and references (scientific journals, reports...)			<p>Luke Welling fifth edition PHP and MySql Web development</p> <p>Programming PHP creating dynamics web page</p>		
Electronic References, Websites			<a href="https://www.codecademy.com/learn/paths/php-skill">https://www.codecademy.com/learn/paths/php-skill</a>		

## Course Description Form

1. Course Name:	
The Crimes of the Baath regime in Iraq	
2. Course Code:	
3. Semester / Year:	
Second Year/ First semester	
4. Description Preparation Date:	
10/5/2025	
5. Available Attendance Forms:	
Presence only	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30hours/2 hours per a week	
7. Course administrator's name (mention all, if more than one name)	
Name:	
Email:	
8. Course Objectives	
<b>Course Objectives</b>	The course aims to enable students to know the crimes of the former Baath regime, how they were committed , and the procedures taken by the Supreme Iraqi Criminal Tribunal in prosecuting criminals.
9. Teaching and Learning Strategies	
<b>Strategy</b>	1- Educational strategy: planning the cooperative concept. 2- A problem statement and confront the student in solving it. 3- Collect the data and requirements necessary to solve the problem

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	2th		The concept of crimes and their divisions	Theoretical lectures	Questions and discussion related to the subject
3-4	2th		Crimes considered by Iraqi High Criminal Court	Theoretical lectures	Questions and discussion related to the subject
5-6	2th		Mental Crimes	Theoretical lectures	Questions and discussion related to the subject
7-8	2th		Social crimes	Theoretical lectures	Questions and discussion related to the subject
9-10	2th		Violations of Iraqi laws	Theoretical lectures	Questions and discussion related to the subject
11-12	2th		Environmental crimes	Theoretical lectures	Questions and discussion related to the subject
13-15	2th		Mass graves	Theoretical lectures	Questions and discussion related to the subject

## 11. 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

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Publications of the Martyrs Foundation in Iraq, Khalidoun Books
Electronic References, Websites	

## Course Description Form

<b>1. Course Name:</b>					
English Language /2					
<b>2. Course Code:</b>					
<b>3. Semester / Year:</b>					
Second Year/ First semester					
<b>4. Description Preparation Date:</b>					
5/5/2025					
<b>5. Available Attendance Forms:</b>					
presence only					
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>					
2 hours weekly					
<b>7. Course administrator's name (mention all, if more than one name)</b>					
Name: Afrah Asaad Saeed Email: <a href="mailto:afrahasaad8@gmail.com">afrahasaad8@gmail.com</a>					
<b>8. Course Objectives</b>					
<b>Course Objectives</b>		A solid foundation that builds student's language and confidence			
<b>9. Teaching and Learning Strategies</b>					
<b>Strategy</b>		<ul style="list-style-type: none"> <li>Complete, guided practice of English grammar.</li> <li>Reading texts and listening passage showing language in use.</li> <li>Features of pronunciation highlighted and practiced .</li> <li>Revision and extension of vocabulary.</li> </ul>			
<b>10. Course Structure</b>					
<b>Week</b>	<b>Hours</b>	<b>Required Learning Outcomes</b>	<b>Unit or subject name</b>	<b>Learning method</b>	<b>Evaluation method</b>
1	2Th	Lecture for the entire programmed	-verb to be Possessive adjectives Possessive 's	theoretical	Daily and monthly quizzes Students' participation
2	2Th	Lecture for the entire programmed	Presents simple tense (he,she,it)	theoretical	Daily and monthly quizzes

3	2Th	Lecture for the entire programmed	Present simple tense (I,they,we, you) Adverbs of frequency	<b>theoretical</b>	Students' participation
4	2Th	Lecture for the entire programmed	There is , there are , how many, some/any , a lot of , this/that/those/these	<b>theoretical</b>	Daily and mon quizzes
5	2Th	Lecture for the entire programmed	Can/ can not Could / could not Was/ were	<b>theoretical</b>	Students' participation
6	2Th	Lecture for the entire programmed	Past simple (regular verbs) (irregular verbs) Time expressions	<b>theoretical</b>	Daily and mon quizzes
7	2Th	Lecture for the entire programmed	Past simple Time expression Adverbs	<b>theoretical</b>	Students' participation
8	2Th	Lecture for the entire programmed	Count and un count nouns Some/ any Would like How much/ how many	<b>theoretical</b>	Daily and mon quizzes
9	2Th	Lecture for the entire programmed	Comparative and superlative adjective Have got and have	<b>theoretical</b>	Students' participation
10	2Th	Lecture for the entire programmed	Present continuous Present simple and present continuous Something/ nothing/anything/nobody/nowhere	<b>theoretical</b>	Daily and mon quizzes
11	2Th	Lecture for the entire programmed	Going to Going to and present continuous Infinitive of purpose	<b>theoretical</b>	Students' participation
12	2Th	Lecture for the entire programmed	Present perfect Past simple and present perfect Indefinite time	<b>theoretical</b>	Daily and mon quizzes
13	2Th	Lecture for the entire programmed	-verb to be Possessive adjectives Possessive 's	<b>theoretical</b>	Daily and monthly quizzes Students' participation

## 11. Course Evaluation

The distribution is as follows: 40 points for monthly and daily exams for the semester and 60 points for final exams

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1- Fourth edition new headway element student's book. 2- Fourth edition new headway element workbook with key.
Main references (sources)	Oxford
Recommended books and references (scientific journals, reports...)	Oxford university press Great Clarendon Street Oxford New York Auckland Cap Town Dar es Salam  Hong Kong Karachi Kuala Lumpur Madrid Melbourne Mexico-City Nairobi New Delhi

	Shanghai Taipei Toronto
Electronic References, Websites	<a href="http://www.oup.com/elt/headway">www.oup.com/elt/headway</a> <a href="http://www.oup.com/elt/teacher/headway">www.oup.com/elt/teacher/headway</a>



## Course Description Form

1. Course Name:	
Data Structures	
2. Course Code:	
3. Semester / Year:	
Second Year/ Second semester	
4. Description Preparation Date:	
5/5/2025	
5. Available Attendance Forms:	
presence only	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 hours weekly	
7. Course administrator's name (mention all, if more than one name)	
Name: Dr. Lemya'a Ghalib Shihab Email: <a href="mailto:lemyaaldawood@stu.edu.iq">lemyaaldawood@stu.edu.iq</a>	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>Teaching the student how to represent data in computer memory</li> <li>Teaching the student how to deal with the matrix, write programs related to it, and reserve the matrix.</li> <li>Teach the student linear graphs such as stack and queue and operations on them.</li> <li>Teach the student linear link list data structures, types and operations.</li> <li>Teaching the student nonlinear hyperdata structures (tree ), synthesis and transformation.</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>Education strategy collaborative concept planning.</li> <li>Brainstorming education strategy.</li> <li>Education Strategy Notes Series</li> </ul>

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 – 2	2T+ 2P	Types of Simple Data structures	Primitive (simple) data structures Integer Real numbers symbols Symbolic threads Boolean variables	Theoretical +Practical	Exams
3-4	2T+ 2P	Matrices	<b>Matrix definition</b> - One-dimensional matrices - Two-dimensional matrices - Calculate item title in - One-dimensional matrices - Calculate item title in  Two-dimensional matrices	Theoretical +Practical	Exams
5-6	2T+ 2P	pointers & Processes On it	pointers Definnition Benefits Uses pointers & Matrices pointer matrix	Theoretical +Practical	Exams
7-9	2T+ 2P	Stack	<b>Stack</b> Defined Represented Operations on the stack Add items and delete items from the stack	Theoretical +Practical	Exams
10-11	2T+ 2P	Queue and its types	<b>queue</b> Definition and types It's representation and operations on it	Theoretical +Practical	Exams
13-12	2T+ 2P	Linked lists	<b>Linked lists</b> Definition and types Configure the linked list Add items to it Delete items from them	Theoretical +Practical	Exams
15-14	2T+ 2P	Trees & Plan	Definition and types And methods to convert trees	Theoretical +Practical	Exams

## 11. Course Evaluation

The distribution is as follows: 50 points for monthly and daily exams for the semester and 50 points for final exams

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	There isn't any
Main references (sources)	Data structures, Algorithms and Application in C++ by sartaj sahani.  Data Structures and Algorithms in C++ by Michael Goodrich
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	<a href="http://www.kutub.info/library/">http://www.kutub.info/library/</a>  <a href="http://www.shakwmakw.com/vb/showthread.php?p=43693">http://www.shakwmakw.com/vb/showthread.php?p=43693</a>

## Course Description Form

1. Course Name:	
Computer Networks	
2. Course Code:	
3. Semester / Year:	
Second Year/ Second semester	
4. Description Preparation Date:	
5/5/2025	
5. Available Attendance Forms:	
presence only	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 hours weekly	
7. Course administrator's name (mention all, if more than one name)	
Name: Mustafa Hamaid Email: mustafa.sabah@ <a href="mailto:mustafa.sabah@stu.edu.iq">stu.edu.iq</a>	
8. Course Objectives	
<p><b>enable the efficient sharing and use of computing resources—such as data, applications, and hardware—across a network of interconnected devices. This allows multiple users and systems to collaborate, access services, and process information in a distributed manner.</b></p>	<p><b>Program Skill Objectives</b></p> <ul style="list-style-type: none"> <li>The student will acquire the skill of monitoring unwanted activities and responding to security incidents effectively to deal with security attacks and breaches.</li> <li>The student will apply the best globally recognized security practices and standards to ensure the security of systems, data, and networks.</li> <li>The student will be able to apply security defense methods to protect systems and networks from various cyber attacks, such as hacking and malware.</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>Education strategy collaborative concept planning.</li> <li>Brainstorming education strategy.</li> <li>Education Strategy Notes Series</li> </ul>
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2T+ 2P	<b>Introduction Computer Networks</b>	<b>Introduction of Computer Networks</b>	Theoretical +Practical	Exams
2	2T+ 2P	<b>Computer Network type</b>	Information Security Attacks	Theoretical +Practical	Exams
3	2T+ 2P	<b>Physical Network Topologies</b>	<b>Computer Network types</b>	Theoretical +Practical	Exams
4	2T+ 2P	Knowledge of <b>Physical Media</b>	Knowledge of <b>Physical Media</b>	Theoretical +Practical	Exams
5	2T+ 2P	Knowledge of <b>Open System Interconnection OSI &amp; Protocol</b>	Knowledge of <b>Open System Interconnection OSI &amp; Protocol</b>	Theoretical +Practical	Exams
6	2T+ 2P	Knowledge of <b>Network Devices</b>	Knowledge of <b>Network Devices</b>	Theoretical +Practical	Exams
7-8	2T+ 2P	<b>IP Address IPV4 and IPv6</b>	<b>IP Address IPV4 and IPv6</b>	Theoretical +Practical	Exams
9	2T+ 2P	<b>IP Address subnetting</b>	<b>IP Address subnetting</b>	Theoretical +Practical	Exams
10-11	2T+ 2P	<b>Ethernet LANs and Switches and Spanning tree protocol</b>	<b>Ethernet LANs and Switches and Spanning tree protocol</b>	Theoretical +Practical	Exams
12-15	2T+ 2P	<b>Virtual Local Area Network (VLAN)</b> <b>Wireless Local Area Network (WLAN)</b>	<b>Virtual Local Area Network (VLAN)</b> <b>Wireless Local Area Network (WLAN)</b>	Theoretical +Practical	Exams

## 11. Course Evaluation

The distribution is as follows: 50 points for monthly and daily exams for the semester and 50 points for final exams

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	<a href="https://www.vssut.ac.in/lecture_notes/lecture13905560.pdf">https://www.vssut.ac.in/lecture_notes/lecture13905560.pdf</a>
Recommended books and references (scientific journals, reports...)	Some references were available in the library. And all scientific online books & websites specialized in computer network
Electronic References, Websites	

## Course Description Form

1.Course Name:	
SQL Databases	
2.Course Code:	
3.Semester / Year: Semester	
Second Year/ Second semester	
4.Description Preparation Date:	
8/5/2025	
5.Available Attendance Forms:	
In-person attendance only	
6.Number of Credit Hours (Total) / Number of Units (Total)	
60 ours during the semester (theoretical + practical), 4 hours weekly	
7.Course administrator's name (mention all, if more than one name)	
Name: Zainab Mohammed Jiwar Email: <a href="mailto:zainab.m.jiwar@stu.edu.iq">zainab.m.jiwar@stu.edu.iq</a>	
8.Course Objectives	
<b>Cognitive objectives</b> 1.The student will understand complex data and how to deal with it using SQL, such as engineering and functional queries 2.The student will be able to analyze data and use it to support decision-making processes in institutions and organizations 3.The student will master how to write complex SQL queries to retrieve data from databases in different ways and Joins queries to link different tables and retrieve information in an accurate and specific manner	<b>Program Skill Objectives</b> 4.The student will be able to organize and arrange data within databases using SQL through the use of tables, indexes and constraints. 5.The student will improve the performance of databases using performance indicators, modifying the structure of tables and improving queries. 6.The student will acquire the skill of developing his abilities in the field of managing and using databases effectively in various practical fields.
9.Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>○ Teaching Strategy Collaborative Concept Planning.</li> <li>○ Teaching Strategy Brainstorming.</li> <li>○ Teaching Strategy Notes Series</li> </ul>

## 10.Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-4	16	Focus on understanding database management programs and their importance, reviewing data normalization concepts, identifying data integrity and its importance, reviewing commands for creating, deleting, adding, and displaying table data and comparison operators (Between, In, Like, Is Null)	Introduction Database Management System (DBMS), Data Integrity, Database Normalization, (Create, Drop, Insert, Select) table, WHERE statement, Order by statement, Comparison Operators (Between, In, Like, Is Null)	Lecture and Lab	Daily Exams and Assignments
5-7	12	They understand and effectively use logical and arithmetic operations and numeric and historical expressions in SQL to execute queries and operations on data accurately and efficiently.	Logic (And, Or, Not), Arithmetic Operations Boolean, Numeric, and Date Expressions	Lecture and Lab	Daily Exams and Assignments
8	4	Understanding and implementing basic database management operations in SQL, including creating, deleting, defining databases, and applying the necessary security measures	Create, Drop, Select Database	Lecture and Lab	Daily Exams and Assignments
9-12	16	Understanding JOINS and their role in SQL queries to combine data from different tables based on their relationships and different types of JOINS such as (INNER JOIN), (OUTER JOIN), (LEFT JOIN), (RIGHT JOIN), and others.	Understand JOINS, JOINS types	Lecture and Lab	Daily Exams and Assignments
13-15	12	Understanding what subqueries are and how to use them in SQL queries to achieve specific results based on data in another	Sub-Query (One and More Tables), Sub-Query with (Select, Insert, Update, Delete) statements	Lecture and Lab	Daily Exams and Assignments



		query, using them with one or more tables, and applying them in some SQL statements.			
<b>11.Course Evaluation</b>					
50 marks for mid-term exams (20 practical + 20 theoretical + 10 activity). 50 marks for final exams (10 practical + 40 theoretical)					
<b>12.Learning and Teaching Resources</b>					
Required textbooks (curricular books, if any)			Lectures of the course material prepared by the lecturer		
Main references (sources)			SQL: the complete reference. McGraw-Hill/Osborne, 2002		
Recommended books and references (scientific journals, reports...)			Some references were available in the library. And all scientific online books and websites specialized in SQL databases.		
Electronic References, Websites			<a href="https://www.w3schools.com/sql/default.asp">https://www.w3schools.com/sql/default.asp</a>		

## Course Description Form

1.	Course Name:
	Programming in Visual Basic/ 2
2.	Course Code:
3.	Semester / Year:
	Second Year/ Second semester
4.	Description Preparation Date:
	9/5/2025
5.	Available Attendance Forms:
6.	Number of Credit Hours (Total) / Number of Units (Total)
	60 hours , 4 hours per a weak
7.	Course administrator's name (mention all, if more than one name)
	Name: Awatif Salman Alkam Email: awatif.alqum@stu.edu.iq
8.	Course Objectives

### Course Objectives

- 1-Teaching the student how to write a program in visual basic.
- 2- Teaching the student how to design a data Base.
- 3- How to use procedures and functions
- 4- Teaching the student concept of data base management systems .

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9.	Teaching and Learning Strategies	
Strategy		Collaborative Learning, Flipped Classroom Brainstorming Teaching Strategy Chain of notes Teaching strategy

10.		Course Structure			
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Learn about procedures	Procedures	2th+2P	Exam
2	4	How to use Functions	Functions	2th+2P	Exam
3	4	How to use module	Code Module	2th+2P	Exam
4	4	How to use Files	Sequential file & Random files	2th+2P	Exam
5	4	What is DBMS	Data Base Management system	2th+2P	Exam
6	4	What is data base	Data base, records, tables	2th+2P	Exam
7	4	What is Relational Data Base	Relational Data Base	2th+2P	Exam
8	4	How to use data base	ADO Data Base (ADODC)	2th+2P	Exam
9	4	Using of Data GRID	Data Grid & Text Boxes	2th+2P	Exam
10-12	4	Examples	Examples	2th+2P	Exam
13	4	Microsoft ActiveX Data Object	ADO Library	2th+2P	Exam
14	4	ADO CONNECTION	Connection, command RecordSet	2th+2P	Exam
15	4	VB applications	app	2th+2P	Exam
11.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					
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

<b>1. Course Name:</b>	
Systems Analysis	
<b>2. Course Code:</b>	
<b>3. Semester / Year:</b>	
Second Year/ Second semester	
<b>4. Description Preparation Date:</b>	
5/5/2025	
<b>5. Available Attendance Forms:</b>	
Presence only	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
30hours/2 hours per a week	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name: mazin salih kadhim Email:	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>Introducing the student to the basic concepts of systems, their analysis, characteristics, levels and types .</li> <li>Student Training on systems analysis and design using range of analysis and design tools.</li> </ul>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	1- Educational strategy: planning the cooperative concept. 2- A problem statement and confront the student in solving it. 3- Collect the data and requirements necessary to solve the problem

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2th		Basic concepts in the analysis and design of computer-based information systems	Theoretical lectures	Exams
2	2th		Computer Information Systems	Theoretical lectures	Exams
3-7	2th		Stages of analysis and design of computer-based information systems	Theoretical lectures	Exams
8-13	2th		System Design Lifecycle Stage	Theoretical lectures	Exams
14	2th		System Development Cycle Phase	Theoretical lectures	Exams
15	2th		Graduation Plans	Theoretical lectures	Exams

## 11. 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

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	There isn't any
Main references (sources)	Scientific journals and books in the specialty
Recommended books and references (scientific journals, reports...)	Scientific journals and books in the specialty
Electronic References, Websites	

