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 (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: Southren Technical Universit

Faculty/Institute: Technical Institute of Technological – Basrah

Scientific Department: Computer Networking and Software Technologies

Academic or Professional Program Name: Technical Diploma

Final Certificate Name: Technical Diploma in Computer Networks and Software Technologies

Academic System: semesters

Description Preparation Date:15/5/2025

File Completion Date: 20/5/2025

Signature:

Head of Department Name:
Lemya'a Ghalib shihab

Date: 22/5/2025

Signature:

Scientific Associate Name:
Dr.AbdulNasser AbdulJabbar Abbood

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:
Anwar Abdel Khaleq Abbood

Date: 2/6/2025

Signature:

Approval of the Dean

Dr. Diyah Kammel Shary

3/6/2025

1. Program Vision

To form a scientific or human base in the field of computer maintenance and programming related to computer science and applications, and seeks to prepare plans to develop the staff and curricula to ensure meeting the requirements of quality standards, in addition to keeping pace with development and ready-made applications in order to contribute to achieving part of them, and for the department to be a distinguished scientific research edifice in its programs, curricula and scientific research. It also works to provide an integrated path for its students and professors to make them active and creative in serving the community in the fields of teaching and learning living languages.

2. Program Mission

Preparing computer network technicians cable to designing and establishing different types of computer networks. Teaching modern and advanced curricula related to computer networks. Providing a laboratory environment that ensures the application of all scientific experiments related to computer networks and the Internet.

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	**12**	**40**		
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
First Year/ First Semester	None	Programming in C++/1	2	2
First Year/ First Semester	None	Computer Fundamentals	0	2
First Year/ First Semester	None	Network Fundamentals	2	2
First Year/ First Semester	None	Logic Design	2	2
First Year/ First Semester	None	Mathematics and Numerical Analysis	2	2
First Year/ First Semester	None	Human rights and democracy	2	0
First Year/ Second Semester	None	Programming in C++/2	2	2
First Year/ Second Semester	None	Programming in Python	2	2
First Year/ Second Semester	None	Data Communication	2	0
First Year/ Second Semester	None	Web Design Fundamentals	2	2
First Year/ Second Semester	None	Wireless Networks	2	2
First Year/ Second Semester	None	English Language	2	0
First Year/ Second Semester	None	Arabic Language	2	0

8. Expected learning outcomes of the program

Knowledge	
Preparing and qualifying computer network technicians capable of designing and establishing different types of computer networks. Teaching modern and advanced curricula related to computer networks. Providing a laboratory environment that ensures the application of all scientific experiments related to computer networks and the Internet.	Preparing qualified technical staff to use the computer and prepare and audit data and enter it into the computer.
Skills	
1- Network design and implementation. 2-Manage and maintain basic networks.	6-Troubleshoot network problems. 7-Support the creation of virtual networks. 8-Participate in testing, auditing and debugging programmed systems.

3-Know how to use devices such as switches and routers to organize network traffic and create resilient networks. 4-Identify the advantages and disadvantages of the current network. 5-Implement network security, standards and protocols.	9-Participate in the preparation and design of software systems.
Ethics	
Developing students' ability to share ideas	
This era is characterized by our heavy reliance on information technology for communication and interaction, and given the role that computer networks play in our constant connection to the Internet, there is a need in the labor market for specialists in the field of computer networks and network security to protect these networks from hacking.	

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-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 professor	Computer Engineering	Network Engineering			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	–
Assistant Lecturer	law	law			1	–
		law			–	1
		English			–	1

Professional Development
Mentoring new faculty members
Professional development of faculty members
Training courses and teaching methods courses

12. Acceptance Criterion

The department accepts students from the scientific branch who are graduates of secondary schools

And students graduate from the Computer Maintenance and Assembly Department / Industrial Secondary School.

13. The most important sources of information about the program

14. Program Development Plan

- Following up on global scientific developments and developments in programming methods and techniques and modern programming languages.

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First Year/ First Semester		Programming in C++/1	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Computer Fundamentals	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Network Fundamentals	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Logic Design	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Mathematics and Numerical Analysis	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Human rights and democracy	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
First Year/ Second Semester		Programming in C++/2	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Programming in Python	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Data Communication	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Web Design Fundamentals	Basic	✓	✓	✓		✓	✓	✓		✓	✓	✓	
		Wireless Networks	Basic												
		English Language	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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

Course Description Form

1. Course Name:
Programming in C++ language/1
2. Course Code:
3. Semester / Year:
First year/ First Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name: Sahar Sami Fadhil Email: sahar.fadhil@stu.edu.iq

8. Course Objectives	
The aim of this course is to learn programming in C++.	1.The student's knowledge of the advantages and specifications of programming languages in general and C++ in particular. 2.The student's knowledge of the programming profes and what this profession requires in terms of applying specifications and advantages of the language use reach the desired results. **3.** The student can master the craft of programming in general and programming in C++ in particular.

9. Teaching and Learning Strategies	
Strategy	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	2TH+2P		Abstract of programming languages	1-Explaining The scientific material 2-Asking questions related to material	Weekly And Daily Written exams, mid-term exam and end-of-semester exam
2	2TH+2P		Basic essentials for C++ language/ C++ language concept		
3	2TH+2P		Basic element and tools of C++ language		
4	2TH+2P		Data types in C++, and they represent methods memory		
5	2TH+2P		Expressions types in C++ language, Howformulate expression : Arithmetic expression/deferent arithmetic operation and its priorities conversion manner arithmetic expression Arithmetic expression C++ language/ deferent examples		
6	2TH+2P		Relationalexpression/ relational operations and its prioriti formulate Relatio expression Logical expressic logical operation and priorities/ formul Logical expression Compound expression/		

			priorities table of public operations/ deferent examples		
7-8	2TH+2P		Give the primary values constants and variables Spaces and brackets Type of comments Special tools		
9	2TH+2P		Assignment statement, Arithmetic expression(equation) counters, counter types deferent images equations belong to C++ language		
10-11	2TH+2P		Formatted Input and output functions output text Output numeric values Output Arithmetic expression un Formatted Input and output functions		
12	2TH+2P		If conditional statemen If...else statement Nested conditional		
13	2TH+2P		switch conditional statement nested conditional statement		
14-15	2TH+2P		for loop, Nested for		

11. Course Evaluation

The distribution is as follows:

20 Marks for the theoretical mid-term exam.20 Marks for the practical mid-term exam. 10 points for student activity during the semester. 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

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	E-books and topics found on scientific and software websites on the Internet

Course Description Form

1. Course Name:
Network Fundamentals
2. Course Code:
3. Semester / Year:
First year/ First Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name: Hayder Mohammed Amer Email: hayder.amer@stu.edu.iq

8. Course Objectives	
1- The student knows computer networks. 2- Determines the stages of development that computer networks have gone through. 3- Determines the different applications of computer networks. 4- Classifies computer networks and distinguishes between different types of computer networks.	5- Identify the types of network cables and determine the steps for preparing the connection cables between the network components. 6- Identify the network protocols and distinguish between the different types of network protocols

9. Teaching and Learning Strategies	
Strategy	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	2TH+2P		Introduction of Computer Networks	1-Explaining The scientific material 2-Asking questions related to material	Weekly And Daily Written exams, mid-term exam and end-of-semester exam
2	2TH+2P		Computer Network types		
3	2TH+2P		Physical Network Topologies		
4-5	2TH+2P		Physical Media		
6-7	2TH+2P		Open Systems Interconnect OSI & Protocols		
8	2TH+2P		Network Devices		
9-10	2TH+2P		IP Address IPV4 and IPv6		
11-12	2TH+2P		IP Address subnetting		
13	2TH+2P		Ethernet LANs and Switches and Spanning tree protocol		
14	2TH+2P		Virtual Local Area Network (VLAN)		
15	2TH+2P		Wireless Local Area Network (WLAN)		

11. Course Evaluation

The distribution is as follows:

20 Marks for the theoretical mid-term exam.20 Marks for the practical mid-term exam. 10 points for student activity during the semester. 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

Required textbooks (curricular books, if any)	
Main references (sources)	Computer top down approach

	Data communication and networking
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	E-books and topics found on scientific and software websites on the Internet

Course Description Form

1. Course Name:
Computer Fundamentals
2. Course Code:
3. Semester / Year:
First year/ First Semester
4. Description Preparation Date:
8/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (practical) at a rate of 2 hours per week
7. Course administrator's name (mention all, if more than one name)
Name: jana madhloom mahdi . Email: Jana.M.mahadi@stu.edu.iq Name: Zahra basim saleh .

8. Course Objectives	
Computer principles that the learner will learn about in computer basics course . Training the student and developing his scient abilities to benefit from the computer . obtain knowledge and scientific facts in the field computer basics aims to enable the student write programs in word , excel, access, and pov point and control them .	**1.Providing the student with skills in dealing with office applications .** **2.create files and documents .** **3. the use of databases as well as the bas of working within the digital environment**

9. Teaching and Learning Strategies	
Strategy	• Educational strategy and planning collaborative concepts . • Brainstorming strategy . • Teaching strategy notes series .

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2P	Compare windows and learn about its advantage	Operating system functions		Quizzes Exam
2	2P	Identify the main screen components	Desktop , icons, task bar , folder , short cut , files		Quizzes Exam
3	2P	Windows window concept	Maximize , minimize , close .		Quizzes Exam
4	2P	Dealing with desktop icons	My computer documents , recycle bin		Quizzes Exam
5	2P	Files	Copy , and paste desktop icons .		Quizzes Exam
6	2P	Control panel	Use the control panel properties .		Quizzes Exam
7	2P	Mouse, add printer, regional setting , display .	Mouse, add printer, reqional setting , display		Quizzes Exam
8	2P	Programs	Add programs to the list and delete them .		Quizzes Exam
9-10	2P	Paint	Dealing with paint program .		Quizzes Exam
11-12	2P	Word	The Printing program has advantages and benefits		Quizzes Exam
13-14	2P	Documents	Create document dealing with it , and save it .		Quizzes Exam
15	2P	Power point	Its importa benefits ,		Quizzes 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)	20 Best Microsoft Word Books for Beginner BookAuthority
Main references (sources)	20 Best Microsoft Word Books of All Tim BookAuthority
Recommended books and references (scientific journals, reports…)	PowerPoint 101: The Ultimate Guide for Begin (24slides.com)
Electronic References, Websites	What is MS PowerPoint? - Introduction, Features & U (byjus.com)

Course Description Form

1. Course Name:
Logic Design
2. Course Code:
3. Semester / Year:
First year/ First Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name: Ethar Abduljabbar Hadi Email: ethar.hadi@stu.edu.iq
8. Course Objectives

1- Teaching the student the components of the computer **2- Teaching the student the types of numerical systems and how to convert between them.** **3- Teaching the student about logic gates and how to design logical circuits** **4- Teaching the student how to simplify logical circuits using the Boolean algebra method and Karnaugh map method.**	**5- Teaching the student how to design the logical circuits found in the calculator in their simple and complex types.** **6- Teaching the student how to examine and represent these logical circuits using special programs for that.**

9. Teaching and Learning Strategies	
Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	2TH+2P	Understanding Numeric systems	•Number Systems •Binary, Octal, Decimal and Hexadecimal •Conversion form Other Bases to Decimal	Lecture and lab	Weekly And Daily exams, mid-term exam and end-of-semester exam
2	2TH+2P	Understanding numerical conversion methods	•Conversion form Decimal to Other Bases •Conversion form Binary to Octal and Hexadecimal •Binary-Coded Decimal (BCD)	Lecture and lab	Exams
3	2TH+2P	Operations among binary and Representation of Negative Numbers	•Binary Arithmetic •Addition,Subtraction, Multiplication and Division •Representation of Negative Numbers •2's Complement Numbers •1's Complement Numbers	Lecture and lab	Exams
4	2TH+2P	Understanding SubtractionUsing Complement	•SubtractionUsing Complement •Subtraction with Complements •Subtraction with (r – 1)'s Complement	Lecture and lab	Exams
5	2TH+2P	Understanding logic gates	•Logic Gates •NOT •AND and NAND •OR and NOR •XOR and XNOR	Lecture and lab	Exams
6	2TH+2P	Understanding Boolean Algebra to simplify the logic equations .	•Boolean Algebra •Boolean Variables •Boolean Expression •Truth Table	Lecture and lab	Exams
7		Understanding Boolean Algebra to simplify the logic equations .	•Basic Identities of Boolean Algebra •DeMorgan's Theorem •Algebraic Manipulation	Lecture and lab	Exams

			•Complement of a Function multiply limits, multiply of sum limit Karnuf map for simplified functions: Of two variables, of three variables.		
8	2TH+2P	Understanding the forms of writing the logic functions	•Standard Forms •Sum Term and Product Term •Minterm and Maxtern •Sum of Product and Product of Sum	Lecture and lab	Exams
9	2TH+2P	Understanding Karnaugh Maps to simplify the logic equations .	•Karnaugh Maps •Two-Variable Karnaugh Maps •Three-Variable Karnaugh Maps •Four-Variable Karnaugh Maps	Lecture and lab	Exams
10	2TH+2P	Binary Adders Circuit.	•Binary Adders – Half Adder •Binary Adders – Full Adder •Binary Parallel Adder	Lecture and lab	Exams
11	2TH+2P	Binary Subtractors Circuit.	•Binary Subtractors – Half Subtractor •Binary Subtractors – Full Subtractor •Binary Adder-Subtractor	Lecture and lab	Exams
12	2TH+2P	Understanding Flip-Flops	•Flip-Flops •D Flip-Flop •S-R Flip-Flop	Lecture and lab	Exams
13	2TH+2P	Understanding Flip-Flops	•J-K Flip-Flop •T Flip-Flop	Lecture and lab	Exams
14-15	2TH+2P	Understanding Registers .	•Shift Registers •Serial In/Serial Out Shift Registers •Serial In/Parallel Out Shift Registers •Parallel In/Serial Out Shift Registers •Parallel In/Serial Out Shift Registers	Lecture and lab	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)	Digital Logic Design: Learn the Logic Circuits and Logic Design by Singh, Sonali Digital Design and Computer Architecture Book by David Harris
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Mathematics and numerical analysis
2. Course Code:
3. Semester / Year:
First year/ First Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name:Jana Madlom Mahdi. Email: Jana.M.mahdi@stu.edu.iq
8. Course Objectives

The Department of Computer Science aims to prep distinguished specialists in the field of computers a to promote scientific research.	
9. Teaching and Learning Strategies	
Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1-2	2TH+2P		The concept of matrices , their types and how to find their ranks.		Weekly And Daily exams, mid-term exam and end-of-semester exam
3-4	2TH+2P		The equality of matrices and the operations them(addition, subtractionand multiplication)		
5	2TH+2P		The determinant of matrix and its relation with their rank , sarus method to find value of determinant.		
6-7	2TH+2P		The inverse matrix and relation with rank, cofactors method to find inverse matrix, Solving system of linear equations simultaneously using inverse matrix of coefficients.		
8	2TH+2P		Differentiation rules of algebraic , trigonometric ,exponen and logarithmic functions, Derivative of composite function “chain rule ”, implicit differential and partial derivatives.		
9	2TH+2P		The approximate real root of non-linear equation in some interval applying iteration and newton-raphson method		

10-12			Integration rules algebraic ,trigonomet ,exponential and logarithmic functions, Integration by parts and integration by partial fractions.		
13-15	2TH+2P		The concept of sequence and infinite series and their types ,ratio and root tests of their convergence and divergence.		

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	Differential equations 4: Integrati factor method for Solving a linear D (youtube.com)

Course Description Form

1. Course Name:
Human rights and democracy
2. Course Code:
3. Semester / Year:
First year/ First Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (theoretical) at a rate of 2 hours per week .
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Nidaa Khader Jabr Email: ditwawopbp@gmail.com
8. Course Objectives
1-Introduction to the history of human rights and its stages of development. 2- Disseminating culture and nurturing students from an Islamic perspective. 3- How to preserve society and the homeland by fosterin love of one's country. 4- Identifying the most important rights and democratic values granted to them in accordance with international norms and laws. 5-Promoting citizenship among students.
1– Teaching and Learning Strategies

Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

2- Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	2TH		The concept of human rig -Characteristics and type human rights.		Exams
3	2TH		The historical developm of human rights.		Exams
4	2TH		- Human rights in anci times.		Exams
5-6	2TH		- Human Rights in Middle Age - Human Rights In the Modern Age		Exams
7-8	2TH		The most important human rights stipulated by religious laws (the Quran and Sunnah), governments, and organizations.		Exams
9	2TH		Human Rights in Islam		Exams
10	2TH		The Letter of the Great Prophet Muhammad (PBUH) Human Rights		Exams
11	2TH		The Concept of Citizensh Citizen Rights and Duties		Exams
12	2TH		The concept of democrac		Exams
13	2TH		Forms and characteristic democracy		Exams
14	2TH		Historical development the concept of democracy		Exams
15	2TH		Pillars of democracy		Exams

3- 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

4- 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 C++ language/2
2. Course Code:
3. Semester / Year:
First year/ Second Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name: Sahar Sami Fadhil Email: sahar.fadhil@stu.edu.iq

8. Course Objectives	
The student is able to master the craft of programming in general and programming in C++ in particular.	1- The student's knowledge of the advantages and specifications of programming languages in general and C++ in particular. 2- The student's knowledge of the programming profession and what this profession requires in terms of applying the specifications and advantages of the language used to reach the desired results

9. Teaching and Learning Strategies	
Strategy	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	2TH+2P	The student is able to master craft programming in general and programming in C++ in particular.	while statement	1-Explaining The scientific material 2-Asking questions related to material	Weekly And Daily Written exams, mid-term exam and end-of-semester exam
2	2TH+2P		do…while statement		
3	2TH+2P		control at repetition		
4	2TH+2P		One Dimensional array		
5	2TH+2P		two Dimensional array, square array		
6	2TH+2P		Symbolic array, and represent string type		
7	2TH+2P		Functions Global and local variabl		
8 - 9	2TH+2P		functions of type void User defined functions		
10	2TH+2P		Library of standards functions String functions		
11-13	2TH+2P		graphics and screen Colors functions		
14-15	2TH+2P		Build workable integral system, include arrays and above mentioned functions		

11. Course Evaluation

The distribution is as follows:
20 Marks for the theoretical mid-term exam.20 Marks for the practical mid-term exam.
10 points for student activity during the semester. 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	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	E-books and topics found on scientific and software websites on the Internet

Course Description Form

1. Course Name:

Python programming language

2. Course Code:

3. Semester / Year:

First year/ Second Semester

4. Description Preparation Date:

9/5/2025

5. Available Attendance Forms:

Attendance only

6. Number of Credit Hours (Total) / Number of Units (Total)

60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)

7. Course administrator's name (mention all, if more than one name)

Name: Dr.Hassan Fouad Abbas.
Email: hassan.f.abbas@stu.edu.iq

8. Course Objectives

1 -Teaching the student how to write a program in Python language 2- Teaching the student how to write Arithmetic Expressions. 3- How to use Conditional Statements. 4-Teaching the student concept of Objects , Lists , Tuples, Dictionaries .	

9. Teaching and Learning Strategies

Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2TH+2P	What is The Context of Software Development?	Learning Programming with Python	2theoretical 2 practical	Exams
2	2TH+2P	How to use variables	Values and Variables	2theoretical 2 practical	Exams

3	2TH+2P	How to write expression	Expressions and Arithmetic Expressions	2theoretical 2 practical	Exams
4-5	2TH+2P	How to write conditional statement	Conditional Statements	2theoretical 2 practical	Exams
6	2TH+2P	How to use Loop python	Iteration - Loops	2theoretical 2 practical	Exams
7	2TH+2P	What is functions python	Using Functions	2theoretical 2 practical	Exams
8-9		How to use objects	Using Objects - String, File Objects	2theoretical 2 practical	Exams
10	2TH+2P	How to use lists in python	- Using Lists - Building Lists	2theoretical 2 practical	Exams
11	2TH+2P	How to use tuples python	Tuples	2theoretical 2 practical	Exams
12	2TH+2P	How to use class	Class Design	2theoretical 2 practical	Exams

11.
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

1. Course Name:
Web Design Fundamentals
2. Course Code:
3. Semester / Year:
First year/ Second Semester
4. Description Preparation Date:
5/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (theoretical + practical) at a rate of 4 hours per week (2 theoreti + 2 practical)
7. Course administrator's name (mention all, if more than one name)
Name: Ethar Abduljabbar Hadi Email: ethar.hadi@stu.edu.iq
8. Course Objectives
1- Teaching the student the characteristics of the Internet and the types of applications used on it. 2- Studying the protocol for transferring electronic pages, files and e-mail on the Internet. 3- Studying the basics of HTM and programming using PHP and CSS. 4- Teaching the student to manage websites.
9. Teaching and Learning Strategies

Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	2TH+2P	Study the characteristics the Internet and the types of applications used on it	The Internet and characteristics		Exams
3-5	2TH+2P	Study the protocol transferring electronic pages, files and e-mail on Internet	Protocols		Exams
6-7	2TH+2P	Understanding how to write programming codes Using HTML	Studying the basics HTM		Exams
8-9	2TH+2P	Delete a web page	Delete a web page		Exams
10-11	2TH+2P	Understanding CSS, PHP	Programming using PHP and CSS		Exams
12-13	2TH+2P	Publish a Page on the Internet	Publish a Page on Internet		Exams
14-15	2TH+2P	Website Management	Website Management		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)	HTML & CSS: The Fifth Edition ,Book by Thomas Powe
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	https://www.w3schools.com/html/ https://www.w3schools.com/css/default.asp https://www.w3schools.com/php/default.asp

Course Description Form

1. Course Name:
English Language
2. Course Code:
3. Semester / Year:
First year/ Second Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (theoretical) at a rate of 2 hours per week .
7. Course administrator's name (mention all, if more than one name)
Name: Afrah Asad said Email: Afrahasaad8@gmail.com
8. Course Objectives
To raise the level of students in the English language to the extent that they can use it as a language of scientific, research and academic communication.
9. Teaching and Learning Strategies

Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2TH		Introduction		Exams
2-3	2TH		Verb to be Your world Personal Information		Exams
4-5	2TH		Negatives, Questions and short Answer		Exams
6-7	2TH		Family and Friends Possessive adjective		Exams
8-9	2TH		Present simple		Exams

			Its My Life		
10-11	2TH		The Time		Exams
12-13	2TH		Object pronouns Places I Like		Exams
14			Past simple We had a good time		
15			Present simple and present continuous		
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					

11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Headway (fourth edition)
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:
First year/ Second Semester
4. Description Preparation Date:
9/5/2025
5. Available Attendance Forms:
Attendance only
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (theoretical) at a rate of 2 hours per week .
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Hassan Fouad Abbas Email: hassan.f.abbas@stu.edu.iq
8. Course Objectives
1- Providing students with skillsIn the field of data communication 2-Skill expansionStudent with digital transport signals 3- Explaining the most important modern ideas in Data transmission in Networks.
9. Teaching and Learning Strategies

Strategy	1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1-3	2TH	• Basic concepts of data communication • Data communication components • - Data representation • - data stream • - Types of connections • - Protocol • - Standards	1-Providing students with skillsData communication and its components in networks. 2- Informing students about the importance ofSignals in data transmission 3- Explaining the most important modern ideas in Data transmission in Networks.		Exams
4	2TH	-Networks			Exams
5-8	2TH	• Data and signals - Analytical and digital data - Analog and digital signals - periodic analog signals - Signals in the time and frequency domains - Compound signals Show signal package			Exams
9-11	2TH	• Digital signals and transmission rate - digital signal - Definition of transfer rate - digital signal transmission - Transmission defects			Exams

		Maximum transfer rate			
12-15	2TH	• digital transfer - Basic definitions and concepts - Digital signal properties - Font encoding - Performance improvement techniques			Exams

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

11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Data Communications and Networking, Behrouz A. Forouzan (2007) Data transmission, by Dogan A. Tugal (1989)
Recommended books and references (scientific journals, reports…)	Computer Networks, Data Communications, Inter and Security by Ata Elahi, Alex Cushman, (2024 Data Communications and Networking, 4th Edit by Behrouz A. Forouzan
Electronic References, Websites	