Academic Program Description Form

University Name: Wasit University

Faculty/Institute: computer science and IT faculty -

Scientific Department: Computer science

Academic or Professional Program Name: Computer science

Final Certificate Name: Computer science

Academic System: Courses

Description Preparation Date: 10/3/2024

File Completion Date: 10/3/2024

Signature:

Head of Department Name:

أ.م.د. علي هاشم الياسري

رئيس قسم علوم الحاسوب

Date: 10/3/2024

Signature: Ahmad

Scientific Associate Name:

Date: 10/03/2024

Dr. Ahmad Shaker Abdalrada
Assistant of Dean for Scientific Affairs

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 10/3/2024

Signature: Ali Kereem

م. مهندس

علي كريم جبار

Approval of the Dean

2024.3.10

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

2024

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Concepts and terminology

Description of the academic program: The description of the academic program provides a brief summary of its vision, mission, and goals, including an accurate description of the targeted learning outcomes according to specific learning strategies

Course Description: Provides a necessary summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he or she has 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 an advanced inspiring, motivating, realistic and applicable programme

The program's mission: It briefly explains the goals and activities necessary to achieve them and also defines the program's development paths and directions

Program objectives: These 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/study subjects included in the academic program according to the approved learning system (semester, annual, Bologna track), whether it is a requirement (ministry, university, college, or scientific department), along with the number of study units

Learning outcomes: A consistent set of knowledge, skills, and values that the student has acquired after the successful completion of the academic program. The learning outcomes for each course must be determined in a way that achieves the program objectives

Teaching and learning strategies : They are the strategies used by the faculty member to develop the student's teaching and learning, and they are plans that are followed to reach the learning goals. That is, it describes all curricular and extracurricular activities to achieve the learning outcomes of the programme

Academic program description form

University name: University of... Wasit...

College/Institute: College of Computer Science and Information Technology...

. Department Computer.....

Name of the academic or professional program: Bachelor's degree... Computer Science

Name of final degree: Bachelor of Science in. Computer Science.....

semester :Academic system

Description preparation date: 3/10/2024

Date of filling the file: 3/10/2024

التوقيع:

اسم رئيس القسم:

التاريخ:

التوقيع:

اسم المعاون العلمي:

التاريخ:

Check the file before

Division of Quality Assurance and University Performance

Name of the Director of the Quality Assurance and University Performance Division

the date

the signature

Authentication of the Dean

1. See the program
Seeking college Computer science and information technology to prepare graduates in the field of computer science to work in government departments and benefit .from specialization in the practical and applied field

2. Program message
Working to prepare and graduate leading scientific and leadership competencies in the field of computer science and to develop the balance of knowledge in the field of scientific research in the field of computers in order to serve the local, regional and international community, as well as training and refining the minds of students scientifically and cognitively, and emphasizing social and cultural values . .and responding to the requirements of the local market

3. Goals The programme Academic
1) Preparation And qualify Specialists To meet Requirements Market Work Sectorally General And private In Science Computer and information technology through diversification in learning and teaching methods Training students to apply knowledge And skills Earned To solve Problems Realistic.
2) Initialization Climate appropriate For students And with what They can From Application Their knowledge And their skills Earned In Recognition On Needs And problems The community And things Social Self The relationship By computer And And technology Information.
3) Submission Programs Academy Distinguished In Field Science The computer And And technology Information In a bad way Theoretical And application Agree With Standards International For quality Academy And you meet A need Market Work.
4) Encouragement And development Search Scientific In Fields Science The computer And technology Information In a way General And Fields of artificial intelligence , Linguistics And software , Networks Rules Data.
5) Preparation Environment Motivating For members Authority Teaching To develop Their knowledge And their skills Educational And research.

6) Building And development Partnership With Sectors Government And eligibility And society In all His institutions different

4. Program accreditation
nothing

5. Other external influences
nothing

6. Program structure				
* comments	percentage	Study unit	Number of courses	Program structure
Basic course		90	90	Enterprise requirements
			Yes	College requirements
			Yes	Department requirements
			Yes	summer training
				Other

.Notes may include whether the course is core or elective *

. Outputs Learning required And ways 10 Education And learning And evaluation
A- Knowledge And understanding A- The student learns programming languages 1 A- Capacity On Ejaad Solutions Scientific For problems The 2 community Programmatically. A- Capacity On Use And development Means Contact And 3 networks Wireless And wireless A- The ability to analyze software systems and evaluate them 4 .before starting to design the system A- Development Skills The student In Building Systems Memory 5 Which It depends On Basis Analysis And the conclusion And realization And learning Self . A - Supply The student Some The rules Basic In Evaluate And 6 build The organization Software By accreditation On Basics Engineering Software. A - Increase Information The student On Basics Implementation 7 Systems Software From During They understand Mechanism Work The computer.
B-SkillsPrivate By topic B 1-Look B 2- My work B 3-Training Summer B4- Research Get out
Ways Education And learning

Ways Education And learning
1- Lectures Theory 2- Practical laboratories 3- Search And investigation 4- Groups Discussion Within Lessons The process
Ways Evaluation
1- Exams Oral And editorial 2- Projects Research 3- Class discussions 4- Evaluate Duties And discussions 5- Evaluate Research Individual And collective

1- The regular blackboard 2- Electronic whiteboard 3- Device Display data
Ways Evaluation
1- Exams Central And monthly. 2- Exams The moment 3- Scientific reports 4- Exams Process 5- Research projects
C- Skills Thinking C- The skill of deduction and analysis 1 C- Skill Comparison 2 C- skills Discussion 3 C- Skills Use The accountant Automatic And a network Internet 4 C5-Skill Search And investigation C - Skill Action Research And extract Results 6 C- Skill Take The decision 7

. Planning To develop Personal 11
1- Education Electronic 2- Use of Internet means 3- Use Means Contact Modern
. Standard Acceptance 12) mode Systems related By joining Totally or Institute(
1- Acceptance Central 2- Rate The student Within Lists Acceptance Central Exception Sons Teachers Where It is done Accept them According to(desire) To distribute them On Sections.
. Most important Sources Information About The programme 13

Location College The official one https://cit.uowasit.edu.iq
Page includes Information About College And the section On Location
Communication Social(facebook)
https://www.facebook.com/wasitcomp?mibextid=LQQJ4d

Plan Skills The approach																							
Outputs Learning required From The programme																							
Skills Public And Qualification movable) Skills Others related Employability and personal development(						Objectives Existentialism And value				Objectives Program-specific skills				Objectives Knowledge						Essential or optiona?l	Name of the rapporteur	year/ Chapter
6d	5d	4d	3d	2d	1d	4c	3c	2c	1c	4b	3b	2b	1b	6a	5a	4a	3a	2a	1a			
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Programming An entity	The second ,stage chapter First academic year
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	my choice	Information theory	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Structures Data (1)	
✓	✓	✓			✓	✓	✓	✓	✓			✓	✓			✓	✓	✓	✓	Basic	Database principles	
✓		✓			✓	✓		✓	✓			✓	✓			✓	✓	✓		Basic	Accountability	
✓		✓			✓	✓		✓	✓	✓		✓	✓			✓	✓	✓		Basic	Knock Numerical	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Structures Data (2)	The second ,stage chapter The second semester
✓		✓		✓	✓	✓		✓	✓				✓			✓	✓	✓	✓	my choice	Data retrieval and web search	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Computer drawing	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Architectural The computer	
✓		✓			✓	✓	✓	✓	✓			✓	✓			✓	✓	✓		Optional	Visual programming	
✓		✓			✓	✓		✓				✓	✓			✓	✓	✓		Optional	Modeling and simulation	
✓		✓			✓			✓					✓				✓	✓		my choice	English language (2)	
✓		✓			✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Engineering Software	The stage Third
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Principles of artificial	Chapter

																					intelligence	First academic year
✓		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓		my choice	Computer Networks (1)	
✓		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓		my choice	Multimedia systems	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Translations (1)	
✓		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓		Optional	Operations research	
✓		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓		Optional	+English language	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	Basic	Encryption	The third ,stage chapter The second semester
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Translators (2)	
✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	Basic	Computer Networks (2)	
✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	Optional	Rules Data Distributed	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Website programming	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Excavation Data	
✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	Basic	Website programming	The stage Chapter Four First academic year
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	Basic	Operating systems	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		my choice	Image processing Digital	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	Optional	Distributed systems	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		Optional	Algorithms	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Security Computers And networks	

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		my choice	Mobile applications	

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	**Basic**	**Computing cloud**	**The stage Chapter Four The second semester**
																					Basic	**Project Get out**	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	**Optional**	**Systems analysis and design**	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	**Optional**	**The Internet of things**	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	**Optional**	**English language**	

The stage The second

1- Entity programming
2- Information theory
3- Data Structures(1)
4- Database principles
5- Numerical methods
6- Accountability
7- Data retrieval and web searching
8- Computer drawing
9- Data Structures (2)
10- Visual programming
11- Modeling and simulation
12- Computer architecture
13- English language

Model Description
The decision

Description The decision:
Programming An entity

(Object Oriented Programming (OOP))

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science The computer	Section University/ The center	. 2
Programming An entity	Name of the rapporteur	. 3
work hours My presence(Theoretical+ Practical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage The second	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
10/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
Learn Basics Programming Objectivity Directed) Category (And the object.)	•	
Learn Basics Languages Programming used With UnderstoodOOP .	•	
Education The student The difference Between The object and The restriction.	•	
Learn the concept ContainmentEncapsulation .	•	
Programming Understood InheritanceInheritance .	•	
Programming Understood Multiple The shapesPolymorphism .	•	
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	**- a**	
. Learn the concept New In Programming 1.		
. Enable The student From 2 Knowledge Principles ofClass		
. Enable The student is from 3 Knowledge PrincipleClass		

. Enable The student From 4 Knowledge BenefitsObject	
. Enable The student From 5 Knowledge Principle Workinheritance	
. Enable The student From They understand 6De- Constrictor and Constrictor	
. Design Programs Within 7 the concept.OOP	
. Iksaab The student Knowledge necessary To build Programs Good And 8 Owning Knowledge necessary To connect Programs And Applications Some of them With Some Using Concepts Programming Entity.	
Objectives Marathi Private By decision:	**- B**
. Enable The student From Ixab Skills 1overwrite	
. Enable The student is from Ixab Skills 2overload	
. Enable The student Ixab Skills Work Within Team 3 One.	
. Iksaab The student Skills Writing Programs Using 4 Objects.	
. Iksaab The student Skills Analysis Programs And design Programs 5 Self Jobs Different.	

Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic And Connect side Theoretical By example The process In The laboratory.
. Guidance Students To Some Locations Electronic For 2 benefit From her.
. Cost The student Prepared Reports Brief For some 3 Topics.
. Cost The request With accomplishment 4 Some Programs.
. Discussion Scientific Inside The hall 5.
. Action Tests The periodical For the 6 request.
Ways Evaluation
. Implementation Duties Daily 1.
. Tests Daily And monthly And the final 2.
. Participation In Hall The lesson 3.
. Maintenance On Attendance 4.
Objectives Existentialism And value. -C
. Development Ability The student On Thinking And 1 strengthen Accuracy And organization He has.
. Encouragement The student On Solution Duties Household With enthusiasm With 2 what He has someone Impact Big On The process Educational.
. Contribution Prepared Student Able to Writing 3 Programs Complete.
. Upload spirit Cooperation And work As a 4 member In Team.
. Take out Ideas Creativity I have Some The request is from During 5 Upload spirit Competition.
Ways Education And learning
. Meeting Lectures 1.
. Discussion Inside The hall Academic 2.
. Storm Mental 3.
. Giving Examples And questions Excite 4 Thinking The student.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment The 1 student And you carry it Responsibility.
. Commitment On time specified In Submission Duties 2 And research.
. It is considered Tests Now , The quarterly And the final About Commitment And collection 3 Cognitive And the skills
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(. - Dr
. Skill Self-learning 1.
. Skills Practical The group 2.
. Skill Subtract Questions 3.
. Development Capabilities And skills For Aksab The limit Required To benefit From him In Life The process For purposes Employment 4 personal development.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Discussion/ Questions General	Theoretical + practical	Introduction About Style Programming	Introduction and definition of object-oriented programming and its characteristics Which Her distinction About Other types and methods of programming	4	The first
Discussion/ Questions General/ Real-time exam	Theoretical + practical	Introduction About Style Programming	Introduction and definition of object-oriented programming and its characteristics Which Her distinction About Other types and methods of programming The other	4	The second
Discussion/ Questions General/ Real-time exam	Theoretical + practical	Building Entities	Definition of how to build entities And its parts And What ?is it Its benefit	4	Third
Discussion/ Questions General	Theoretical + practical	Building Entities	Definition of how to build entities And its parts And What ?is it Its benefit	4	Fourth
Discussion/ Questions General/ Real-time exam	Theoretical + practical	Building Entities	Definition of how to build entities And its parts And What ?is it Its benefit	4	Fifth
Discussion/ Questions General	Theoretical + practical	Functions Private	Building Functions Private To conduct Specific operations Self Activate General	4	Sixth
Discussion/ Questions General/ Exam Annie	Theoretical + practical	Functions Private	Building Functions Private To conduct Specific operations Self Activate General	4	Seventh
Discussion/ Questions General	Theoretical + practical	Interference in Functions	Style Intervention In Functions How to work with each other and how to transfer data between them	4	Eighth

Discussion/ Questions General	Theoretical + practical	Interference in Functions	Style Intervention In Functions How to work with each other and how to transfer data between them	4	Ninth
Discussion/ Questions General	Theoretical + practical	Protection	Style Protection And Its benefits And ?What are its types The different ones	4	Tenth
Discussion/ Questions General/ Exam Annie	Theoretical + practical	Protection	Style Protection And Its benefits And ?What are its types The different ones	4	1st Ten
Discussion/ Questions General	Theoretical + practical	Heredity	Style Heredity And Inheritance The pages between Fathers And Children	4	The second Ten
Discussion/ Questions General/ Exam Annie	Theoretical + practical	Heredity	Style Heredity And Inheritance The pages between Fathers And Children	4	Third Ten
Discussion/ Questions General	Theoretical + practical	Heredity	Style Heredity And Inheritance The pages between Fathers And Children	4	Fourth Ten
Discussion/ Questions General/ Real-time exam	Theoretical + practical	Heredity	Pattern of inheritance and inheritance of traits Between Fathers And Children	4	Fifteenth

Structure Infrastructure			11
• Object-Oriented Programming in C++, Fourth Edition	**Prescribed books required**	**. 1**	
• Thinking in C++, Volume 2: Practical Programming	**References Main(Sources)**	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Scientific Sober • www.studytonight.com/cpp/cpp-and-oops-concepts	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	. 12
• **Addition or Delete items For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10** • **Keeping up Development Obtained by means And the methods Miscellaneous For the decision Addition All What He New And useful For the student To acquire Skills New And keep up Development The result.**	

Model Description The decision

Description The decision: Structures Data (1) Structure) Data (

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science The computer And technology Information	The institution Educational	. 1
Section Science The computer	Section University/ The center	. 2
Structures Data	Name of the rapporteur	. 3
work hours My presence(Theoretical+ Practical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage The second	Chapter/ year	. 5
An hour 60	Number Hours Academic (total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7

Goals The decision	. 8
• They understand Types Graphic The possible Use it When Dealing With The accountant	
• They understand Structures Graphic Which From The possible Use it For a purpose Facilitate Process Dealing With The problem	
• Show Structures Graphic In detail And clarification Method Work All One From her And how Addition And delete In it.	
• Show Algorithms Search And the arrangement Wow Programmed in the laboratory.	
• Education The student How Programming Algorithms Private With structures Graphic In laboratories Scientific Using LanguageC++	
Outputs The decision And ways Education And learning And evaluation:	. 9

Objectives Knowledge:	- a
. Recognition On 1 Structures Graphic And he understood it	
. Recognition On Algorithms In Field 2 Structures Data And he understood it.	
. Recognition On Applications Useful 3 For structures Data And he understood it	
. Recognition On Types Operations possible On 4 All Structure My statement And he understood it	

. Recognition On Algorithms Search 5 and sort And he understood it.	
Objectives Marathi Private By decision:	- B
. Development Skill The student In Writing Programs And Choose The 1 structure appropriate To solve Problems Software.	
. Iksaab The student Skill necessary To choose Algorithm appropriate To 2 work With The issue required.	
. Development Skill The student In Development Algorithmia 3 T To work With Cases different.	
. Iksaab The student Skill Writing Programs 4 Efficiency To implement Algorithms.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Use Device The computer In 2 implementation Programs.	
. Guidance Students To Some Locations 3 Electronic For benefit From her.	
. Cost The student By implementing A group From 4 Programs In Laboratories The process.	
. Cost The student Prepared Reports Brief For some Topics And 5 Implementation Duties Household.	
. Episodes Discussion To be treated The problems 6 that He faces it The student By decision.	

Ways Evaluation	
. Implementation Duties Daily 1.	
. Tests Daily And monthly And the 2 final.	
. Participation In Hall The 3 lesson.	
. Maintenance On Attendance 4.	
Objectives Existentialism And value. -C	
. Encouragement Students On Benefit From The decision From During Faith 1 Importantly The decision In The process Educational And in Field Specialization In a way General.	
. Enhancement Cooperation Between Students 2 From During Implementation Duties The process.	
. Development Energies The idea And creativity I have The 3 request From During Implement them To different Duties.	
. Encouragement The request And 4 raise spirit Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize 1 Degrees On Activities group	
. administration The lecture On A form that works 2 The student He feels Importantly Time.	
. Enable The student From Process Connecting 3 Between side Theoretical And practical.	
. Encouragement The student On Submission Work Creativity In 4 Specialization Complies with standards Quality In Service The community.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence 1 Commitment The student And you carry it Responsibility.	
. Commitment On time specified In 2 Submission Duties And research.	
. It is considered Tests Now , The quarterly And the final About 3 Commitment And collection Cognitive And the skills.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(. - Dr	
. Development Ability The student On 1 Dealing With Means Technology.	
. Development Ability The student On 2 Dealing With Internet.	
. Development Ability The student is on Learn Knock And 3 methods Development Personal Why? After The decision.	
. Development Ability The student On 4 Dialogue And discussion.	
. Development spirit Creativity And perseverance And 5 search About What's new in Field His work.	

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**

Questions General And discussion	Theoretical + practical	Concepts General	Definition Structures Graphic And its types And types Data	4	The first
Questions General And discussion or Exam I am	Theoretical + practical	Algorithms	They understand Al-Khawaramiyya And a way Account Degree Complicate it	4	The second
Questions General And discussion	Theoretical + practical	Understood Stack	Definition Stack And a way Representation and methods of adding and deleting	4	Third
Exam I am	Theoretical + practical	The concept of expressions Accounting	Identify the types of arithmetic expressions And a way Transfer Between her	4	Fourth
Questions General And discussion or Exam I am	Theoretical + practical	Applications Stack	Use Stack With Expressions Accounting	4	Fifth
Discussion	Theoretical + practical	Understood Queue	inition Queue And a way Acting process and methods	4	Sixth
Questions General	Theoretical + practical	Operations on Queue	Operations On Queue Addition And delete F	4	Seventh

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Duties group	Theoretical + practical	Understood linked list	Define it And its types	4	Eighth
Questions General	Theoretical + practical	List Single bundle	erations On List Single bundle	4	Ninth
Exam Monthly	Theoretical + practical	List Al-Marbouta Double	Operations on List Al-Marbouta Double	4	Tenth
Questions General	Theoretical + practical	List Al-Marbouta The circle	Operations on List Al-Marbouta The circle	4	Eleventh
Discussion	Theoretical + practical	Understood Arrangement	Definition Arrangement And its types	4	Twelfth
Exam I am	Theoretical + practical	Arrangement Bubble And arrange Addition	Explain a method Arrangement Bubble And addition	4	Thirteenth
Duties group	Theoretical + practical	The concept of research	Definition Search And remember Its types	4	Fourth Ten
Discussion	Theoretical + practical	Search Serial And search The binary	Recognition On Algorithm Search Serial And search The binary	4	Fifteenth

Structure Infrastructure			. 11
• Data structure and Algorithmic Thinking with Python, 2016	Prescribed books required	. 1	
• Data structures and Algorithms in python, 2013	References Main(Sources)	. 2	
• Data structures and algorithms Made Easy, 2017	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a	
Locations Scientific Sober	,References electronic Locations The Internet	- B	

Plan Development The decision Academic	. 12
• Addition or Delete Vocabulary For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision • Addition All What He New It is useful for the student To acquire skills New And keep up Development The result Languages Programming And work On Languages And publications Modern With what It fits With Importance The decision.	

Model Description The decision

Description of the course: Accounting) (Arithmetic

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science The computer And technology Information	The institution Educational	. 1
Section Science The computer	Section University/ The center	. 2
Accounting	Name of the rapporteur	. 3
Attendance time(theoretical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage The second	Chapter/ year	. 5
An hour 30	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7

. 8 Goals The decision

- The goal From This The decision Academic He Definition The request With this The field Basic For information The computer Which It is possible The request From Focus On Study Models Sports. Allow This Models Sports For the request Solution Problems different In The process of language construction. It allows students to become familiar with mathematical theories and complexity, as they are Processing mathematical data and formulating Evidence And it is done Use Expressions Accounting The regular To distinguish Patterns To represent language, Also It is possible For the student
  Knowledge Operations different Which Speak On Languages And give it to him Capacity On Thinking The logical one In Building Algorithms.

. 9 Outputs The decision And ways Education And learning And evaluation:

Objectives Knowledge:	- a
. Clarification Concepts Basic In Theory Accounting From 1 During A group From Tools.	
. Acquisition Skills In 2 Processing The problem.	
. Acquisition Skills Basic As an 3 introduction In Building Languages.	
. Acquisition Concepts Theory To work With 4) Turing Grammars, stack's, NFA's, DFA's, RE's, .(Machines	
Objectives Marathi Private By decision:	- B
FA's, NFA's, Grammars, Languages modeling, Small) Design On Capacity .(Compilers basics	. 1
The ability to Thinking In Processing The problem 2	

According to Rules Certain.
. Writing Reports Scientific 3.
. Knowledge Comparison Between 4languages) Formal and . (Natural
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For a purpose Explanation Vocabulary Curricula The equipment for the topic.
. Guidance Students To Some Locations Electronic For 2 benefit From her.
. Cost The student Prepared Reports on Some Topics And analysis 3 Organization Different.
. Episodes Discussion To be treated The problems that He 4 faces it The student By decision.
Ways Evaluation
. Implementation Duties Daily 1.
. Implementation Tests Electronic For the 2 request.

. Tests Daily And monthly And the final 3.
Objectives Existentialism And value. -C
. Encouragement The request On Benefit From The decision From During Faith Importantly 1 The decision In The process Educational And in Field Specialization.
. Enhancement Principle Cooperation Between The request From During Involve them 2 In total Work For a purpose Implementation Duties required.
. Development Energies The idea And creativity I have The request From During Cost 3 All One From them For a purpose Achievement Part From The system.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees Specific For 1 activities And work The group.
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Enable The student is on Connecting Between Topics previous And the following Be 3 Process Building The system Represent case One.
. Encouragement The student On Submission Ideas In Field Specialization Complies 4 with standards Quality In Service The community.
. Use Means Clarification Important In The lecture For ease Receipt Article And increase 5 Understanding And connectivity Between Topics.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With it 1 Duties and reports (Within Timings that Done Select it Previously.
. Action Tests Electronic To know Level General For the request In addition To Discussion 2 And Participation In Hall The lesson.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With Means 1 Technology Modern.
. Development Ability The student On Dealing 2 With Internet.
. Development Ability The student is on Learn Knock And methods 3 Development Personal Why? After The decision.
. Development Ability The student On Dialogue 4 And discussion.
. Development spirit Creativity And perseverance For the student 5 And search About New In Field His work.
. Development Estimate Work And carry 6 Responsibility And commitment.
. Development Respect Time And time In Achievement 7 And implement Business.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General	Look	Set, string, alphabets, language	Introduction to Languages	2	The first

And discussion					
Questions General A daily discussion or .exam	**Look**	Finite state automata	Introduction to FA's	**2**	**The second**
General questions And discussion	**Look**	Types of NFAs, DFAs and equivalence between NFAs and DFAs, FAs with epsilon move	Introduction to Fas	**2**	**Third**
Exam My day	**Look**	Regular Expressions	Introduction to Regular Expressions	**2**	**Fourth**
Questions General A daily discussion or .exam	**Look**	Pumping lemma on regular languages, closure properties of regular languages	Introduction to Regular Expressions	**2**	**Fifth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General And Discussion	**Look**	Finite State Automata with output(Mealy and Moore) Machine	F.A with output	**2**	**Sixth**
Questions General	**Look**	Equivalence between Moore and Mealy Machine	F.A with output	**2**	**Seventh**
Duties group	**Look**	Klein's Theorem	Represent REs, FAs, TGs	**2**	**Eighth**
Questions General	**Look**	Context Free Grammar and Languages	Introduction to CFG's	**2**	**Ninth**
Exam Monthly	**Look**	Context Free Grammar without empty string	Introduction to CFG's	**2**	**Tenth**
Questions General	**Look**	Derivation Tree (LMD,RMD), Simplification of CFGs	CFG's	**2**	**Eleventh**
cussion And Daily exam	**Look**	Chomsky and Greibach normal form	CFG's	**2**	**Twelfth**
Questions General	**Look**	The ambiguous CFGs	CFG's	**2**	**Third Ten**
Duties group	**Look**	Pushdown automata and CFL, closure properties of CFL(union, concatenation, kleen closure)	CFL's	**2**	**Fourteenth**
Discussion	**Look**	Turing Machine	TM's	**2**	**Fifth Ten**

Structure Infrastructure		**11**
• Papadimitriou, Elements of the Theory of Computation, Prentice-Hall, 1998. • John E. hopcroft, Rajeev Motwani, Jeffrey D. Ullman, "Introduction to Automata Theory, Languages, and Computation", Second Edition, Prentice- hall, 2001. • Peter Dehning, Jack B. Dennis, "Machines, Languages and Computation", Second Edition, Prentice-Hall, 1978.	**Prescribed books required**	**. 1**
•	**References Main(Sources)**	**. 2**
Libraries Electronic And books In Field Specialization	**Books And references Which Recommended With it) , Magazines Scientific ,Reports(...**	**- a**
Locations Scientific Sober	**,References electronic Locations The Internet....**	**- B**

Plan Development The decision Academic	12
• Addition Some vocabulary Curricula Within The approach The decision . • Keeping up Development Obtained by means And the methods Miscellaneous For the decision. • Addition All What He New And useful For the student To acquire skills New Use up-to-date sources For development Their capabilities.	

Model Description The decision

Description of the course: Knock Numerical Methods) (Numerical

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science The computer And technology Information	The institution Educational	. 1
Section Science The computer	Section University/ The center	. 2
Knock Numerical	Name of the rapporteur	. 3
work hours My presence(Theoretical+ Practical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage The second	Chapter/ year	. 5
An hour 60	Number Hours Academic (total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7

Goals The decision	. 8
• It is used Analysis Numerical In Solve equations Sports Which It's hard Solve it or It is required Time Long In The solution.	
• Providing Time And the effort In particular In Equities Which Need To Repeat Big From Yes Access To The result or The solution	
• Capacity On Collection And classification Data Quantity And numerical Schedule it And represent it And its interpretation	
• Generalization Attics Sports Numerical On Phrases Symbolism.	
• The ability to Building Models Sports.	
• Use Methods Thinking different And ability On Governance On Health And reasonable The solution.	
Outputs The decision And ways Education And learning And evaluation:	. 9
Objectives Knowledge: - a	
. Definition With concepts Roads Numerical different And 1 the teams Between her And characteristics All One From her.	
. Application Concepts Roads Numerical 2.	
. Realization Importance Concepts 3 Roads Numerical In Life The process.	
. Development Concepts 4 Roads Numerical For the	

student.	
. Try Access To Concepts 5 Numerical New.	
Objectives Marathi Private By decision:	- B
· Iksaab The student Skill And ability On Solution Issues Sports The 1 complex Private By share Academic.	
. Iksaab The student Skill necessary To build 2 Models Sports.	
. ?Development Skill The student On Thinking The athlete Al-Salim What 3 Reflects Positively On Solve problems Software Which Face it.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic And Connect side Theoretical By example The process In The laboratory.	
. Guidance Students To Some Locations 2 Electronic For benefit From her.	
. Cost The student Prepared Reports Brief For 3 some Topics.	
. Discussion Scientific Inside 4 The hall.	
Ways Evaluation	
. Implementation Duties Daily 1.	

. Tests Daily And monthly And the final. 2	
. Participation In Hall The lesson. 3	
Objectives Existentialism And value.	-C
· Development Ability The student On Thinking And strengthen Accuracy And organization He has. 1	
. Conviction Necessarily Take The decision Academic. 2	
. Desire In They understand The decision Academic. 3	
. Capability On reading The decision Academic. 4	
. Capability On Solution Duties Home With enthusiasm. 5	
Ways Education And learning	
. Meeting Lectures 1.	
. Discussion Inside The hall Academic. 2	
. Storm Mental 3.	
. Giving Examples And questions Excite Thinking The student. 4	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment The student And you carry it Responsibility. 1	
. Commitment On time specified In Submission Duties And research. 2	
. It is considered Tests Now , The quarterly And the final About Commitment And collection Cognitive And the skills. 3	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	- Dr
. Skills Learning Self 1.	
. Skills Work In Team 2.	
. Skills Contact 3.	
. Skills Writing Report 4.	

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Discussion/ Questions General	Theoretical + practical	Introduction to Numerical Methods	Learn the meaning of numerical analysis and knowledge With models Mathematics and ways to solve it	2	The first
Discussion/ Questions General/ Exam Annie	Theoretical + practical	Non-Linear Equation	Learn Solution Equations Others Plan In a way Analysis Numerical	2	The second

Discussion/ Questions General/ Real-time exam	**Theoretical + practical**	System of linear Equations	**earn Solution The system Linear By means of numerical analysis**	**2**	**Third**
Discussion/ Questions General	**Theoretical + practical**	Interpolation	**ognition On The possibility And matching the curves**	**2**	**Fourth**
Discussion/ Questions General/ Exam Annie	**Theoretical + practical**	Integration	**Recognition On Solution Integrations In a way Analysis Numerical**	**2**	**Fifth**
Discussion/ Questions General	**Theoretical + practical**	Differential	**Learning on Ijad Derivatives**	**2**	**Sixth**
Discussion/ Questions General/ Real-time exam	**Theoretical + practical**	Ordinary Differentia Equations	**Learn Solution Equations Differentiation by some methods of analysis Numerical**	**2**	**Seventh**
Discussion/ Questions General	**Theoretical + practical**	Least Square Curve Fitting: Linear Fitting	**Learn How Compatible Functions From a set of points**	**2**	**Eighth**
Discussion/ Questions General	**Theoretical + practical**	Introduction to Numerical Methods	**Learn the meaning of numerical analysis and knowledge With models Sports**	**2**	**Ninth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
			And knock Solve it		
Discussion/ Questions General	**Theoretical + practical**	Non-Linear Equation	**Learn Solution Equations Others Plan In a way Analysis Numerical**	**2**	**Tenth**
Discussion/ Questions General/ Real-time exam	**Theoretical + practical**	System of linear Equations	**earn Solution The system Linear By means of numerical analysis**	**2**	**Eleventh**
Discussion/ Questions General	**Theoretical + practical**	Interpolation	**ognition On The possibility And matching the curves**	**2**	**Twelfth**
Discussion/ Questions General/ Exam Annie	**Theoretical + practical**	Integration	**Recognition On Solution Integrations In a way Analysis Numerical**	**2**	**Third Ten**
Discussion/ Questions General	**Theoretical + practical**	Differential	**Learning on Ijad Derivatives**	**2**	**Fourth Ten**
Discussion/ Questions General/ Real-time exam	**Theoretical + practical**	Ordinary Differentia Equations	**Learn Solution Equations Differentiation by some methods of analysis Numerical**	**2**	**Fiftee nth**

Structure Infrastructure			11
• K, atkinson, Elementary numeral analysis, john Wiley, 1985.	**Prescribed books required**	**. 1**	
	References Main(Sources)	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Scientific Sober	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	12
• Addition or Delete Vocabulary For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10 **• Keeping up Development The result In ways and means Miscellaneous For the decision Addition Everything He New It is useful for the student To acquire Skills New And keep up Development The result.**	

Model Description The decision
Description of the course: of rules Data Principles (Database)

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science The computer And technology Information	The institution Educational	1
Section Science The computer	Section University/ The center	2.
Rules Data	Name of the rapporteur	3.
work hours My presenceMy view And practical(	Shapes Attendance available	4.
Chapter Academic The first/The stage The second	Chapter/ year	5.
An hour 60	Number Hours Academic(total)	6.
0 1/3/4 202	Date Preparation This Description	7.
Goals The decision		8.
• They understand Principles Rules Data And Knock Design it.		
• They understand What She is Organization administration A rule Data.		
• I know him The reasons Which Led To Appearance Rules Data Distributor.		

• Know what She is Architectures available And The user To build Systems Rules Data Distributor.	
Outputs The decision And ways Education And learning And evaluation:	. 9
Objectives Knowledge: - a	
. Definition According to the principles of Basics Rules 1 Data Distributor And Its systems And Its types.	
. Application Concepts Rules 2 Data Distributor.	
. Realization Importance 3 Organization Rules Data Distributor .	
. Select The difference Between Systems Rules Data 4 And Systems Rules Data Distributor.	
. Capability On Description Systems 5 Rules Data Distributor.	
Objectives Marathi Private By decision: - B	
. Capability On Meeting Lecturer Related Regularly Rules 1 Distributed data.	
. Capability On design System Database 2 Distributed.	
. Capability On Learning And Training On Different Systems Rules Data Traditional 3 And Distributor.	
. Capability On administration Dialogues And Discussions related By organization Databases And rules Data 4 Distributor.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Use Device The computer In implementation 2 Programs.	
. Guidance Students To Some Locations Electronic For 3 benefit From her.	
. Cost The student By implementing A group From Programs In 4 Laboratories The process.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 5 Household.	
. Episodes Discussion To be treated The problems that He 6 faces it The student By decision.	
Ways Evaluation	
. Implementation Duties Daily 1.	

. Tests Daily And monthly And the final 2.
. Participation In Hall The lesson 3.
. Maintenance On Attendance 4.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.
. Enhancement Cooperation Between Students From During 2 Implementation Duties The process.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment The student And 1 you carry it Responsibility.
. Commitment On time specified In Submission Duties 2 And research.
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Skill administration Data And Knowledge And 1 Technology Information.
. Development Ability The student is on Learn Knock And methods Development 2 Personal Why? After The decision.
. Development Ability The student On Dialogue 3 And discussion.
. Development spirit Creativity And perseverance And search 4 About What's new in Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
[Assessment]		Approaches to and evolution of database systems	Explain the characteristics that distinguish the database approach from the approach of programming with data. data files. [Understanding]	8	The first and second

[Familiarity]		Components of database systems	Diagram the components of a database system and give examples of their use. [Applying]	8	The third and fourth
[Assessment]		Database architecture and data independence	Explain the concept of data independence and its importance in a database system. [Understanding]	8	The fifth and sixth
[Familiarity]		Design of core DBMS functions (eg, query mechanisms, transaction	Formulate queries in SQL or a similar query	14	Seventh Eighth

Structure The decision:					. 10
Method Evaluation	**Meth od Educ ation**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
		management, buffer management, access methods)	language to elicit information from a database. [Creating] .		And the ninth and tenth
[Assessment]		Use of a declarative query language		8	The eleve nth and The secon d Ten
Familiarity]		Systems supporting structured and/or stream content	Investigate vulnerabilities and failure scenarios in database systems. [Applying]	8	thirt eent h four teen th

Structure Infrastructure			11
• Database system concept, 5\E, Abraham silberschatz and Merry F. Koth, 2006	**Prescribed books required**	**. 1**	
Database Systems: The Complete Book ey Ullman, Molina, Jeffr-Book by Hector García and Jennifer Widom	**References Main(Sources)**	**. 2**	
Fundamentals of Database Systems Book by Ramez Elmasri	**Books And references Which Recommended With it) , Magazines Scientific ,Reports(...**	**- a**	
Locations Scientific Sober	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	. 12
• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development Obtained by means And the methods Miscellaneous For the decision**	

Model Description The decision

Course description: Structures Data (2) Structures) (Data

يركز هذا المقرر الدراسي على خوارزميات الفرز والبحث ، والاستخدام الفعال للوقت والذاكرة ، والقوائم المرتبطة وهياكل البيانات الشجرية ، وجداول التجزئة ، والمكدس وقوائم الانتظار.الهدف من هذا المقرر ان يتعلم الطالب كيفية بناء خوارزميات ذات كفاءة عالية من حيث الذاكرة والسرعة.

of Wasit University/ College Science The computer And technology Information	The institution Educational	1
Section Science The computer	Section University/ The center	2
Structures Data	Name of the rapporteur	3
work hours My presenceMy view And practical(	Shapes Attendance available	4
Chapter Academic The second/The stage The second	Chapter/ year	5
An hour 60	Number Hours Academic(total)	6
0 1/3/4 202	Date Preparation This Description	7
Goals The decision		8
• Introduction About a concept Rules And technologies Structures Data.		
• Developing skills In Writing Algorithms Effective.		
Outputs The decision And ways Education And learning And evaluation:		9
Objectives Knowledge:	- a	
. Knowledge With a substance Structures Data 1.		
. Knowledge How Account 2 Efficiency Algorithms.		
Objectives Marathi Private By decision:	- B	
· Knowledge How Choose Structures Data appropriate To solve The 1 problem In a way Efficient.		
. Writing Algorithms How 2 efficient..		
. Recognition On Algorithms In Field Structures Data And 3 he understood it.		
Recognition On Applications Useful For structures Data 4 And he understood it.		
Ways Education And learning		

. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.
. Guidance Students To Some Locations Electronic For 2 benefit From her.
. Cost The student Prepared Reports Brief For some Topics and carry out duties Household 3.
. Episodes Discussion To be treated The problems that He 4 faces it The student By decision.
Ways Evaluation
. Implementation Duties Daily 5.
. Tests Daily And monthly And the final 6.
. Participation In Hall The lesson 7.

. Maintenance On Attendance 8.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From The decision From During Faith Importantly The decision In The process Educational And in Field 5 Specialization in a way General.
. Enhancement Cooperation Between Students From During 6 Implementation Duties The process.
. Development Energies The idea And creativity I have The request From During Implement 7 them To different Duties.
. Encouragement The request And raise spirit 8 Competition Among them.
Ways Education And learning
. Giving Activities group The importance of During Customize Degrees On Activities The 4 group.
. administration The lecture On Shape It works The student 5 He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization Keep 6 up Standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With it 4 Duties and reports (Within Timings Specific .
. Discussion And participation Effective In Hall 5 The lesson.
. Method Interrogation And that About A way Show Questions Related With the material 6 Scientific In The hall Academic.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Skill Development Humanity 4.
. Skill Planning Scientific 5.
. Skill Manufacture The 6 decision.

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	The hour T	The week
[Assessment]	Theoretical+ practical	Introduction	General concepts	2	The first
[Familiarity]	Theoretical+ practical	Array,queue, stack,link list	Add, delete elements to array, how to deal with stack and queue	6	The secon ,d third and fourt h
[Assessment]	Theoretical+ practical	Linear search	Understanding Linear search	4	Fifth And the sixth
[Familiarity]	Theoretical+ practical	Binary search	Understanding Binary search	2	Seventh

[Assessment]	**Theoretical+ practical**	**Interpolation search**	**Understanding Interpolation search**	**4**	**Eighth And the ninth**
[Assessment]	**Theoretical+ practical**	**Hash table. table**	**Understanding Hash table. table**	**4**	**Tenth And the first Ten**
[Familiarity]	**Theoretical+ practical**	**Bubble sort**	**Understanding Bubble sort**	**4**	**the twelfth and the third Ten**
[Familiarity]	**Theoretical+ practical**	**Insertion sort**	**Understanding Insertion sort**	**2**	**Fourth Ten**

Structure Infrastructure			11,
•	Prescribed books required	. 1	
1-Data structure and algorithm with object. object - oriented design patterns in c++ by: Bruno R. Preiss ,BASC.,MASC.PH.D.,P.ENG.Associate Professor,Department 2- Data Structure and algorithm analysis in C, By :Mark Allen Weiss.	References Main(Sources)	. 2	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a	
Locations Electronic Specialized	,References electronic Locations The Internet	- B	

Plan Development The decision Academic	12,
• Addition or Delete items For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10 • Keeping up Development Achieved through methods and means Miscellaneous For the decision Addition All What He New And useful For the student To acquire Skills New And keep up Development The result.	

Model Description The decision

Description of the course: Theory Information theory) (Information

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science The computer And technology Information	The institution Educational	. 1
Section Science The computer	Section University/ The center	. 2
Theory Information	Name of the rapporteur	. 3
Attendance time(theoretical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage The second	Chapter/ year	. 5
An hour 30	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Aims Curriculum Article His view Information To Definition The student Basics And principles Theory Information.		
• They understand Basic elements For a system Communications. Addition Therefore Enter Concepts The important thing In Theory Information For example Measure Information.		
• Explanation Technologies Encryption Source And press Data And also They understand Technologies Control With mistakes During Encryption.		
• And I know him Technologies Private By discovery And correct The error Using Theory Correction.		
Outputs The decision And ways Education And learning And evaluation:		. 9
- a Objectives Knowledge:		
1 . He learns The student During Chapter Academic Basics Article His view Information.		
2 . He learns Student Select Amount Information For each Symbol And rate Information To the source Separate Without Memory And design Codes Source Without Memory To the source Separate Without Memory To improve Efficiency Transfer Information.		
3 . He learns The student Select Technology Appropriate To press Data With Loss Data For a case Certain.		
4 . He learns The student They understand And application Principles Theory Information And ability On discovery And correct The error Using Theory Correction.		
- B Objectives Marathi Private By decision:		

. Familiarity With relationships Sports Private With 1 knowledge Statistics.
. Familiarity With concepts And principles Process Convert The 2 signal Analogue To Digital.
. Familiarity With concepts Basic For an operation 4 Discovery And correct The error.
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For a purpose Statement Ideas Main for the topic.
. Collection Data And preparation 2 Reports.
. Guidance Students To Some Locations Electronic For 3 benefit From her.
. Cost The request Solution A group From Questions Statistics About A way Discussions 4 between The request
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 5 Household.
. Episodes Discussion To be treated Problems Which He faces 6 it The student By decision.
Ways Evaluation

. Implementation Duties Daily 1.
. Tests Daily And monthly And the final 2.
C- Objectives Existentialism And value.
. Encouraging students On Benefiting from the decision Through belief in the importance of 1 the decision In The educational process And in Field Specialization In a way General.
. Enhancement Cooperation Between Students From 2 During Implementation Duties The process.
. Development Energies The idea And creativity I have The request From During Implement 3 them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities The 1 group.
. administration Lecture on A form that works The student 2 He feels Importantly Time.
. Enable The student From Process Connecting Between side 3 Theoretical And practical.
. Encouragement The student On Submission Work Creativity In Specialization Keep 4 up Standards Quality In Service The community.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment 4 The student And you carry it Responsibility.
. Commitment On time specified In Submission Duties 5 And research.
. It is considered Tests Now , The quarterly And the final About Commitment And collection 6 Cognitive And the skills.
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.
. Development Ability The student On Dealing With 6 Means Technology.
. Development Ability The student On Dealing 7 With Internet.
. Development Ability The student is on Learn Knock And methods 8 Development Personal Why? After The decision.
. Development Ability The student On Dialogue 9 And discussion.
. Development spirit Creativity And perseverance And search 10 About New In Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Exams Daily+ exams Monthly	PDF Lectures power point video	Fundamentals and principles of information theory Review of probability and random variables.	He learns Founded And principles Information theory . Review the	2	The first

			possibilities And variables Randomness		
Exams Daily+ exams Monthly	PDF Lectures power point	Introduction to Information measurement, the types of entropies and channel	He learns How? Measure Information And types Entropy And Ability Channel.	**10**	The second- the sixth

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**The hour T**	**The week**
	Video	capacity: Source of information; uncertainly; information & entropy; joint and conditional entropies; mutual information; discrete memory-less channels; channel model BSC; channel capacity.			
Exams Daily+ exams Monthly	PDF Lectures power point video	The techniques of source coding and data. data compression: Mathematical Model of Information Source; Huffman Coding; Shannon-Fano Codes	Learn the techniques for encrypting their messages By the channel	**6**	**Seventh-ninth**
Exams Daily+ exams Monthly	PDF Lectures power point video	Types of Errors. Error control coding (channel coding): Source of Errors; Information Rate; Galois Field Modem Algebra; Taxonomy of Codes; Linear Block Codes; Minimum Distance & Correction; Hamming Code BCH Codes; Cyclic Code; Reed-Solomon Code; Convolution Encoder; (Connection of Convolution, Representation, Code Tree, Trellis Diagram, State Diagram); Maximum Likelihood Decoding; Viterbi Algorithm	Learn Technologies Reveal And Correct the error In Receiving	**12**	**Tenth-Fifteenth**

Structure Infrastructure		. 11
• **"FUNDAMENTALS of INFORMATION THEORY and CODING DESIGN" by: Roberto Togneri and Christopher JS deSilva .** • **"Information coding techniques" second edition, by: R Avudaiammal.** • **· "ESSENTIALS OF ERROR-CONTROL "CODING" by: Jorge Castineira Moreira and Patrick Guy Farrell.**	**Prescribed books required**	**. 1**
• **Principles Statistics Application For non-specialists / Written by Ghazi Attiya Zarak**	**References Main(Sources)**	**. 2**
•	**Books And references Which Recommended With it**	**- a**

	) , Magazines Scientific ,Reports(...		

Locations Scientific Sober	**,References electronic Locations The Internet ....**	**- B**	

Plan Development The decision Academic	**12**
• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development The result In ways and means Miscellaneous For the decision**	

Model Description The decision

Description The decision: English 2 II) (English

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

١.	المؤسسة التعليمية	جامعة واسط / كلية علوم الحاسوب وتكنولوجيا المعلومات
٢.	القسم الجامعي / المركز	قسم علوم الحاسوب
٣.	اسم المقرر	إنكليزي ٢
٤.	أشكال الحضور المتاحة	دوام حضوري (نظري)
٥.	الفصل / السنة	الفصل الدراسي الثاني / المرحلة الثانية
٦.	عدد الساعات الدراسية (الكلي)	٣٠ ساعة
٧.	تاريخ إعداد هذا الوصف	٢٠٢٤/3/١٠
٨.	اهداف المقرر	
	• تعلم المهارات الأساسية للغة الإنكليزية	
	• تعلم اساسيات مهارة القراءة	
	• تعلم اساسيات مهارة الكتابة	
	• القدرة على الأصغاء	
	• فهم المعاني واضافة مفردات جديدة	
	• تعلم التكلم والمناقشة باستخدام مفردات اللغة	
٩.	مخرجات المقرر وطرائق التعليم والتعلم والتقييم:	
	أ-	الأهداف المعرفية:
		١. القدرة على قراءة نصوص اللغة بشكل صحيح
		٢. القدرة على كتابة فقرات بشكل مترابط
		٣. القدرة على وصف مكونات اي موضوع
		٤. القدرة على وصف مخططات بشكل فقرات مترابطة
	ب-	الأهداف المهاراتية الخاصة بالمقرر:
		١. اكتساب المهارة على المناقشة باستخدام مفردات اللغة
		٢. تنمية مهارات الطالب للعمل ضمن فريق وفهم الواجبات الخاصة وانجازها ضمن مدة
	طرائق التعليم والتعلم	
		١. إدارة المحاضرة على نحو يشعر بأهمية الوقت.
		٢. تكليف الطالب ببعض الأنشطة والواجبات الجماعية.
		٣. تخصيص نسبة من الدرجة للأنشطة الجماعية.
	طرائق التقييم	
		١. المشاركة الفاعلة في قاعة الدرس دليل التزام الطالب وتحمله المسؤولية.
		٢. الالتزام بالموعد المحدد في تقديم الواجبات والبحوث.
		٣. تعبر الاختبارات الفصلية والنهائية عن الالتزام والتحصيل المعرفي والمهاري.
	ج-	الأهداف الوجدانية والقيمية.
		١. تطوير قدرة الطالب للعمل على أداء الواجبات وتسليمها في الموعد المقرر.

Development Ability The student On Dialogue And discussion.	**. 2**
Ways Education And learning	
Giving activities group Importance From During Customize Degrees On Activities The group.	**. 1**
administration The lecture On Shape It works The student He feels Importantly Time.	**. 2**
Encouraging the student On Submission Work Creativity In Specialization Keep up Standards Quality In Service The community.	**. 3**
Ways Evaluation	
Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings Specific .	**. 1**
Discussion And participation Effective In Hall The lesson.	**. 2**
Method of interrogation And that About A way Show Questions Related With the material Scientific In The hall Academic.	**. 3**
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	
This Article I will Build In The student Capacity On Thinking And communication Between him And between His colleagues others In Same The subject and other materials, and this is very important to improve the students' relationship with each other. The student will also develop his ability to think and Use Language English In Communication With others Whether It was That Inside His surroundings or In Various End The world.	**. 1**

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General And discussion	**Look**	Getting to Know you		**2**	**The first**
Questions General And discussion Or an exam I am	**Look**	The way. way we live		**2**	**The second**
Questions General And discussion	**Look**	It all went wrong		**2**	**Third**
Exam I am	**Look**	Let's go. go shopping. shopping		**2**	**Fourth**
Questions General and discussion	**Look**	What do. do you want to do?		**2**	**Fifth**

Questions General And Discussion	**Look**	Tell me! What's it like?		**2**	**Sixth**
Questions General	**Look**	Case studies or exercises: test, revision, more examples		**2**	**Seventh**
Group assign ments	**Look**	Present Perfect, Fame		**2**	**Eighth**
Questions General	**Look**	Do's and don'ts		**2**	**Ninth**
Questions General	**Look**	Going Places(Time clauses)		**2**	**Tenth**
Questions General	**Look**	Scared to death (Verb Patterns)		**2**	**1st Ten**
Discuss ion and examin ation I am	**Look**	Things that Changed the world		**2**	**Twe lfth**
Questions General	**Look**	Earning a living		**2**	**Third Ten**
Duties group	**Look**	Family ties		**2**	**Fourt h Ten**
Discussion	**Look**	Case studies or exercises: Test, exercises, revision.		**2**	**Fiftee nth**

Structure Infrastructure			11
• Soars & John, (2006). New Headway plus (Pre-Intermediate)Oxford University Press.	**Prescribed books required**	**. 1**	
	References Main(Sources)	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Electronic Specialized	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	12
• **Addition or Delete Vocabulary For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10** • **Keeping up Development The result In ways and means Miscellaneous For the decision Addition Everything He New It is useful for the student To acquire Skills New And keep up Development The result.**	

Model Description The decision

Description of the course: Architectural Computer Architecture) (Computer

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Architectural Computer	Name of the rapporteur	. 3
work hours My presence Look	Shapes Attendance available	. 4
Chapter Academic The second/The stage The second	Chapter/ year	. 5
An hour 30	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
Recognition On Principles Basic In Architectural The computer.	•	
Knowing the components The computer.	•	
Knowledge Knock Transfer Information Between parts The computer.	•	
Recognition	•	
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	
. Definition The student 7 Parts Computer		
. Definition The student In 8 the field of transportation Data.		
	. 9	
	. 10	
	. 11	
	. 12	
Objectives Marathi Private By decision:	- B	
. Familiarity With ingredients 5 Computer		
. Knowledge Knock And Algorithms Transfer Data Between 6 Parts Computer		
	. 7	

. 8
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 6show) (Data For the purpose of a statement Ideas Main for the topic.
. Guidance Students To Some Locations Electronic For 7 benefit From her.
. Cost The student By implementing A group From Programs 8 In Laboratories The process.
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 9 Household.
. 10
Ways Evaluation
. Implementation Duties Daily 5.

. Tests Daily And monthly And the final 6.
. Participation In Hall The lesson 7.
. Maintenance On Attendance 8.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From The decision From During Faith Importantly The 5 decision In The process Educational And in Field Specialization In a way General.
. Enhancement Cooperation Between Students From During 6 Execution of duties The process.
. Development Energies The idea And creativity I have The request From During Implement 7 them To different Duties.
. Encouragement The request And raise spirit 8 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities group 3
. Enable The student From Process Connecting Between 4 side Theoretical And practical.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment 4 The student And you carry it Responsibility.
. Commitment On time specified In Submission Duties 5 And research.
. It is considered Tests Now , The quarterly And the final About Commitment And collection 6 Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Skill Education Self And Contact 5.
. Skill administration Time And Data 6.
. Skill administration Individuals And 7 Motivate them.
. Skill Work Within A group 8.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Discussion/ Questions General	Look	Computer Organization	Computer organization	2	The first
Discussion/ Questions General/ Real-time exam	Look	Memory Types	Types Memory	2	The second
Discussion/ Questions General	Look	The Memory Hierarchy	Hierarchical Memory	2	Third
Discussion/ Questions General	Look	Cache Organization	Organize Memory Cash	2	Fourth
Discussion/ Questions General	Look	Memory Mapping Organization 1	Organize Map Memory	2	Fifth

Discussion/ Questions General	**Look**	Memory Mapping Organization 2	**Organizing a map Memory**	2	**Sixth**
Discussion/ Questions General	**Look**	Replacement Algorithms	**Algorithms Replacement**	2	**Seventh**
Discussion/ Questions General	**Look**	The Instruction Cycle	**turn Instructions**	2	**Eighth**
Discussion/ Questions General	**Look**	Instruction Pipelining	**Convert Instructions**	2	**Ninth**
Discussion/ Questions General	**Look**	Pipeline Hazards	**Dangerous Transfer**	2	**Tenth**
Discussion/ Questions General	**Look**	RISCs and CISCs		2	**Elev enth**
Discussion/ Questions General	**Look**	RISC Architectures		2	**The secon d Ten**
Discussion/ Questions General	**Look**	CISC Architectures		2	**Third Ten**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Discussion/ Questions General	**Look**	Parallel Architectures	**Architectural Parallel**	2	**Fourth Ten**
Exam	**Comprehensive exam**	**Exam Comprehensive**	**Exam Comprehensive**	**2**	**Fifteenth**

Structure Infrastructure			. 11
M. Morris Mano, " Computer System Architecture ", 2002, Printest Hell.	**Prescribed books required**	**. 1**	
•			
•	**Books And references Which Recommended With it) , Magazines Scientific ,Reports(...**	**- a**	
Locations Scientific Sober	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	. 12
• **Addition or Delete items For the curricula Within Development Scientific The result In Every decision And in proportion No Exceeds 10%** • **Keeping up Development Obtained through methods and means Miscellaneous For the decision**	

Model Description The decision

Description The decision: Data retrieval and web searching) and data recovery (Web Search

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Data retrieval and web searching	Name of the rapporteur	. 3
Attendance time(theoretical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage Third	Chapter/ year	. 5
An hour 45	Number Hours Academic (total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
Aims The decision To Education The student Basics Recover Information.	•	
Aims The decision To Definition The student Basics Treatment Primary.	•	
Giving The student Look About Components System Recover Information.	•	
Aims The decision To Definition The student In a way Work Engines Search.	•	
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	

. Definition The student Basics Search the web 1 And Recover Information.	
. Iksaab The student Knowledge necessary To design 2 System Simple To retrieve information.	
. Learn Some Algorithms 3 Recover Information.	
Objectives Marathi Private By decision:	- B
. Iksaab The student Skill Design Programs Search And Recover 1 Information.	
. Iksaab The student Skill Work The group To achieve Projects 2 Research Scientific.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic 1.	
. Discussion About A way Guidance Questions And it opened Chapter Dialogue And 2 interaction With The request.	
. Cost The student Prepared System Recover 3 Simple.	
. Cost The student Prepared Reports Brief For some 4 Topics.	
. Cost The request Prepared Projects Organization 5 Recover Certain.	
. Cost The request With work Lectures Optional For topics Related Recover Information 6.	
Ways Evaluation	
. Implementation Duties Daily 1.	
. Tests Daily And monthly And the final 2.	
Objectives Existentialism And value.	-C
. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in	

Field Specialization In a way General.
. Enhancement Cooperation Between Students From During 2 Implementation Duties The process.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings 1 Specific.
. Discussion And participation Effective In Hall 2 The lesson.
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With 1 Means Technology.
. Development Ability The student On Dealing 2 With Internet.
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.
. Development Ability The student On Dialogue 4 And discussion.
. Development Ability The student is on Search Scientific And 5 Writing Search Scientific Sober.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
iscussion/ General questions	Theoretical + practical	Introduction to Information Retrieval		3	The first
iscussion/ General questions	Theoretical + practical	Introduction to Information Retrieval		3	The second
Discussion/ Questions General	Theoretical + practical	Preprocessing		3	Third
Discussion/ Questions General	Theoretical + practical	Preprocessing		3	Fourth
iscussion/ General	Theoretical + practical	write. write program. program functions to implement information		3	Fifth

questions		retrieval system.			
iscussion/ General questions	**Theoretical + practical**	write. write program. program functions to implement information recovery system.		**3**	**Sixth**
iscussion/ General questions	**Theoretical + practical**	Information Retrieval Algorithms		**3**	**Seventh**
iscussion/ General questions	**Theoretical + practical**	Information Retrieval Algorithms		**3**	**Eighth**
iscussion/ General questions	**Theoretical + practical**	Information Retrieval Algorithms		**3**	**Ninth**
Discussion/ Questions General	**Theoretical + practical**	DNA Databases		**3**	**Tenth**
Discussion/ Questions	**Theoretical + practical**	DNA Databases		**3**	**1st**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
General					**Ten**
iscussion/ General questions	**Theoretical + practical**	Genomic Information Retrieval		**3**	**Twe lfth**
iscussion/ General questions	**Theoretical + practical**	Genomic Information Retrieval		**3**	**Thi rtee nth**
iscussion/ General questions	**Theoretical + practical**	Genomic Information Retrieval		**3**	**Fou rtee nth**
Discussion/ Questions General	**Theoretical + practical**		**Review Comprehensive**	**3**	**Fifth Ten**

Structure Infrastructure			11
• An Introduction to Information Retrieval, Christopher D. Manning Prabhakar Raghavan Hinrich Schütze	**Prescribed books required**	**. 1**	
	References Main(Sources)	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Scientific Sober	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	12
• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development Obtained by means And the methods Miscellaneous For the decision**	

Model Description The decision
Description The decision: Drawing Computer graphic) (computer

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	1
Section Science Computer	Section University/ The center	2
Drawing Computer	Name of the rapporteur	3
work hours My presenceMy view And practical(	Shapes Attendance available	4
Chapter Academic The first/The stage The second	Chapter/ year	5
An hour 60	Number Hours Academic(total)	6
0 1/3/4 202	Date Preparation This Description	7
Goals The decision		8
• Obtain On Knowledge And the facts related In all kinds Software And technologies Drawing Calculately.		
• Acquisition The student Skills Process Use Programs Drawing Calculately.		
• I know him The reasons Which Led To Use Drawing.		
• Knowledge What She is Knock Drawing And The user To build To draw The binary And the third Dimensions .		
Outputs The decision And ways Education And learning And evaluation:		9
- a Objectives Knowledge:		
. Definition According to the principles of Basics Drawing 6		

Computer.	
. Application Concepts Drawing Computer 7.	
. Realization 8 Importance Drawing By computer.	
. Select The difference Between Systems 9 Software And the algorithm The drawing.	
. Capability On Description 10 Knock The drawing And types.	
Objectives Marathi Private By decision:	- B
. Capability On Meeting Lecturer Related By drawing 5 The computer.	
. Capability On design Shapes Bilateral And three 6 Dimensions.	
. Capability On Learning And Training On Different Systems 7 Drawing By computer.	
. Capability On Managing dialogues And Discussions related By 8 organization The drawing.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 7show) (Data For the purpose of a statement Ideas Main for the topic.	
. Use Device Computer In implementation 8 Programs.	
. Guidance Students To Some Locations Electronic For 9 benefit From her.	
. Cost The student By implementing A group From Programs In 10 Laboratories The process.	
. Cost The student Prepared Reports Brief For some Topics And Execution of duties 11 Household.	
. Episodes Discussion To be treated Problems Which He faces 12 it The student By decision.	
Ways Evaluation	
. Implementation Duties Daily 5.	
. Tests Daily And monthly And the final 6.	

. Participation In Hall The lesson 7.	
. Maintenance On Attendance 8.	
Objectives Existentialism And value.	-C
. Encouragement Students On Benefit From The decision From During Faith 5 Importantly The decision In The process Educational And in Field Specialization In a way General.	
. Enhancement Cooperation Between Students From During 6 Implementation Duties The process.	
. Development Energies The idea And creativity I have The request From During 7 Implement them To different Duties.	
. Encouragement The request And raise spirit 8 Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities 4 group	
. administration Lecture on A form that works The student 5 He feels Importantly Time.	
. Encouragement The student On Submission Work Creativity In Specialization Keep 6 up Standards Quality In Service The community.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment The student And you 4 carry it Responsibility.	
. Commitment On time specified In Submission Duties 5 And research.	
. It is considered Tests Now , The quarterly And the final About Commitment 6 And collection Cognitive And the skills.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	- Dr
Skill administration Data And Knowledge And 61 Technology Information.	
Development Ability The student is on Learn Knock And methods Development Personal 62 Why? After The decision.	
Development Ability The student On Dialogue 63 And discussion.	
Development spirit Creativity And perseverance And search 64 About New In Field His work.	

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Tests Theory and process	Theoretical lectures and practical applica	Introduction to computer graphics: -What is computer graphics? -Elements of pictures. -Graphics display devices. -Graphics inputprimitives and devices.	Introduction General About Computer drawing	8	The first and second

	tions				
Tests Theory and process	**Theoretical lectures and practical applications**	**Getting stated drawing figures: -Getting started making pictures. -Drawing based graphics primitives. -Making lines drawings. -Simple Interaction with the mouse and keyboard.**	**Education Methods Primary To draw pictures**	**12**	**The ,third ,fourth and fifth**
Tests Theory and process	**Theoretical lectures And applications**	**More drawing tools: -World windows and viewports. -Clipping**	Learn tools Drawing Additional	12	Sixth The seventh and eighth

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
	Process	lines. -Figures based on regular polygon. - Drawing circles and arcs			
Tests Theory and process	Theoretical lectures and practical applications	Introduction to transformation. - Transforming point and objects, the affine transformation, -3D affine transformation. - Changing coordinate systems. -Drawing 3D scenes with openGL.	Education Transfers	12	The ,ninth ,tenth and eleventh
Tests Theory and process	Theoretical lectures and practical applications	Three Dimentional viewing: -The camera revised. -Building a camera in a program. program. -Perspective Projections of 3D objects.	The trigram Dimensions	12	The twelf , th thirteenth and fourteenth
Exam	Attendance and work		theoretical exam And practical	4	Fifteenth

Structure Infrastructure		.11
• rank. rank Klawonn (2012). Introduction to Computer Graphics: Using Java 2D and 3D. Second Edition. Springer-Verlag London.	Prescribed books required	. 1
	References Main(Sources)	. 2
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet	- B

Plan Development The decision Academic	.12

• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development The result In ways and means Miscellaneous For the decision**	

third level

1-Software engineering
2-Principles of artificial intelligence
3-English language
4-Translators (1)
5-Computer Networks(1)
6-Multimedia systems
7-Operations research
8-encryption
9-Translators (2)
10- Computer Networks (2)
11- Distributed databases
12- Website programming
13- Data mining

Model Description The decision

Description of the course: Engineering Software Engineering) (Software

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Engineering Programs	Name of the rapporteur	. 3
Attendance time) Theoretical and practical(	Shapes Attendance available	. 4
Chapter Academic The first/The stage Third	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Providing students With an introduction Comprehensive For engineering Software.		
• Supply Students In all kinds Activities necessary To produce The system.		
• Study The stages Important To develop Software.		
• Building System Programmatic High Quality.		
• Explanation turn Life Building The system.		
• Acquiring knowledge In All stage From Stages Building The system.		
• They understand Application Principles Engineering Software On The project.		
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	
1 . Clarification Concepts Basic For principles Engineering Software And recognition On A group From Tools.		
2 . Acquisition Skills In Building The system And treatment Problems.		
3 . Study Technologies Abstract Requirements The system		

. Study Stages Building The system 4 And the cost And the time Required.	
Objectives Marathi Private By decision:	- B
. Capacity On building The organization In a way A minute Using Principles Engineering 1 Software.	
. Capacity On Thinking In Processing The problem 2 According to Standards Quality.	
. Writing Reports Scientific 3.	
. Use Models Construction developed To get On Programs 4 Efficient.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Guidance The request To Some Locations Electronic 2 For benefit From her.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 3 Household.	
. A contract Research sessions It is done From During it Explanation And analysis Some 4 Problems A state Ijad Solutions For him.	
Ways Evaluation	
. Action Tests Theory In The hall Academic 1) daily, monthly, (final)	

. Subtract Questions And inquiries Oral On The request For a statement Extent Their response.	2
Organize The request In a way Totals And their cost Completely Building requirements System Certain And evaluation Percentage Their achievement For that Work.	3
Objectives Existentialism And value.	-C
. Encouragement Students On Benefit From decided by During Faith Importantly The decision In The process Educational And in Field Specialization In a way General.	1
. Ability The student To work On performance Duties And deliver it In The appointment The decision.	2
. Development Energies The idea And creativity I have The request From During Implement them To different Duties.	3
. Encouragement The request And raise spirit Competition Among them.	4
. Thinking The logical one In Study Sides The problem And find Solutions appropriate For her.	5
. Development Ability The student On Dialogue and discussion.	6
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities group	1
. administration The lecture On A form that works The student He feels Importantly Time.	2
. Encouragement The student On Submission Work Creativity In Specialization Complies with standards Quality In Service The community.	3
Ways Evaluation	
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings Specific.	1
. Discussion And participation Effective In Hall The lesson.	2
. It is considered Tests Now , The quarterly And the final About Commitment And collection Cognitive And the skills.	3
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	- Dr
. Development Ability The student On Dealing With Means Technology.	1
. Development Ability The student On Dealing With Internet.	2
. Development Ability The student is on Learn Knock And methods Development Personal Why? After The decision.	3
. Development Ability The student On Dialogue And discussion.	4
. Development spirit Creativity And perseverance And search About What's new in Field His work.	5

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week

Questions General And discussion	**Look**	Basic Concepts: software product, Software crisis, software engineering	Fundamental of Software Engineering	**3**	**The first**
Questions General A daily discussion or .exam	**Look**	software process, software process model, methodologies, methods, tools, artifacts	Fundamental of Software Engineering	**3**	**The second**
Questions General And discussion	**Look**	Software Process (I): process models, iterative process	Software process	**3**	**Third**
Exam My day	**Look**	Software Process (II): software process activities. activities (specification, design and	Software process	**3**	**Fourth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
		implementation, validation/verification, evolution); Software Requirement Engineering (I)			
Questions General A daily discussion or .exam	**Look**	Functional/Non Functional requirements, User requirements, System requirement, Requirement document. document	Software requirements	**3**	**Fifth**
Questions General And Discussion	**Look**	Software Requirement Engineering(II): Software requirement, elicitation and analysis, basics on Use case	Software requirements elicitation	**3**	**Sixth**
Questions General	**Look**	System Models (I): Context models, Behavioral Models ; System Models (II): Data Models, Objects Models	System Model	**3**	**Seventh**
Duties group	**Look**	Architectural Design: system structuring, control models, modular decomposition; Object Oriented Design, UML notation; User interface design: user interface design principles, user interaction	Uniform Modeling Language	**3**	**Eighth**
Questions General	**Look**	Risk analysis concept and principles	Risk Analysis	**3**	**Ninth**
Exam Monthly	**Look**	Risk analysis concept and principles	Risk Analysis	**3**	**Tenth**
Questions General	**Look**	software Quality Assurance, Quality control	Software Quality Assurance	**3**	**Eleventh**
cussion And Daily exam	**Look**	Software Quality Assurance, Quality control	Software Quality Assurance	**3**	**Twelfth**
Questions General	**Look**	Software Quality Assurance, Quality control	Software Quality Assurance	**3**	**Thirteenth**
Duties group	**Look**	Software Testing ,Verification and Validation: planning,	Software Testing	**3**	**Fourteenth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
		software Inspections			
Discussion	**Look**	defect testing, integration testing	Software Testing	**3**	**Fifteenth**

Structure Infrastructure			. 11
• Software engineering, Roger S.Pressman,2014. • Introduction to Software Engineering, Ian Sommerrivle, 2007.	**Prescribed books required**	**. 1**	
•	**References Main (Sources)**	**. 2**	
	Books And references Recommended scientific) journals) , ,Reports(...	**- a**	
Locations Scientific Sober	**References ,electronic Internet sites ....**	**- B**	

Plan Development The decision Academic	. 12
• Addition or Delete Vocabulary For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% **• Keeping up Development The result In ways and means Miscellaneous For the decision**	

Model Description The decision

Description of the course: Research Operations Researches) (Operation

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Research Operations	Name of the rapporteur	. 3
Attendance time(theoretical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage The third	Chapter/ year	. 5
An hour 45	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Recognition On Understood Research Operations.		
• It is possible The student Knowledge Field Use Research Operations In Applications Many In Location And its development.		
• Capacity On Formulation Issues Programming The plan Simple.		
• Acquisition Method Thinking Al-Salim In How Survey Problems Systems And who Then Its formulation According to Model Scientific (mathematical) .		
Outputs The decision And ways Education And learning And evaluation:		. 9
- a Objectives Knowledge:		
1 . Enable The student From Knowledge Knock Solutions Issues different.		
2 . Enable The student From Ijad Values The bone or The smallest For problems Profit And the cost.		

. Enable The student From Knowledge Jobs Basic 3 For many From Knock The solution.	
. Enable The student On Solution Programming issues The plan In the way 4 Graphic And analysis Sensitivity The solution Example Statement.	
Objectives Marathi Private By decision:	**- B**
. Knowledge How Solution Problems Transfer The goods The producer From The factor 1 To Stores or To the consumer Less Time And cost.	
. Knowledge How Take The decision In proportion For 2 issues The decision The follower.	
. Knowledge How Access For production Example Using 3 Programming The plan.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic And Connect side Theoretical By example The process In The laboratory.	
. Guidance Students To Some Locations Electronic For 2 benefit From her.	
. Cost The student Prepared Reports Brief For some 3 Topics.	
. Discussion Scientific Inside The hall 4.	
Ways Evaluation	
. Implementation Duties Daily 1.	
. Tests Daily And monthly And the final 2.	
. Participation In Hall The lesson 3.	
. Maintenance On Attendance 4.	

Objectives Existentialism And value.	**-C**
. planting Values And principles I have The request From During Confirm Independence 1 Team Research Operations When Start His opinion.	
. Enhancement Cooperation Between Students From 2 During Implementation Duties.	
. Development Energies The idea And creativity I have The request From During Implement 3 them To different Duties.	
. Encouragement The request And raise spirit 4 Competition Among them.	
Ways Education And learning	
. Accreditation Style Meeting Lectures And connect All Example 1 topic Explanation.	
. Giving The request Some Exercises The process 2 Simple.	
. Discussion Exercises With The request And solve it During The lecture With participation All The request To give Article Type From 3 Interaction.	
Ways Evaluation	
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With it 1 Duties and reports (Within Timings Specific .	
. Discussion And participation Effective In Hall 2 The lesson.	
. Test The request For information Article 3 previous.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	**- Dr**
. Development Ability The student On Dealing With 1 Means Technology.	
. Development Ability The student On Dealing 2 With Internet.	
. Development Ability The student is on Learn Knock And methods 3 Development Personal Why? After The decision.	
. Development Ability The student On Dialogue 4 And discussion.	
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.	

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
General questions/ Discussion	**Look**	**Explanation General About Beginning Process Manufacture The decision**	**What She is Research ?Operations**	**2**	**The first**
Questions General/ Discussion/ My exam	**Look**	**Entrance to Basics Programming The plan And Its importance and how to formulate it**	**Programming The plan**	**2**	**The second**

General questions/ Discussion	Look	How The solution Using One Public roads/ solution The statement	Knock Solution Programming The plan	2	Third
Exam I am	Look	xplanation Cases Give examples .for each case	es Especially For solutions Linear programming	2	Fourth
Questions General/ Discussion/ Exam I am	Look	How The solution In My condition Maximization And reduction	simple way	2	Fifth
General questions/ Discussion	Look	Examples And solutions	Analysis Sensitivity	2	Sixth
Questions General	Look	Solution steps And giving Examples	Dual mathod	2	Seventh
Duties group	Look	Formulation Model The athlete For a problem Transportation	Model Transportation	2	Eighth
Questions General	Look	Business networking methods and steps necessary To represent Project With a network Business	Model Networks Business	2	Ninth
Exam Monthly	Look	Knock Account The times	Time method Surplus	2	Tenth
Questions General	Look	How Use Method nloading And a way Determine to find the solution	Setup programming The correct health	2	Elev enth

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Discussion/ Exam I am	Look	Knock Solution Issues The decision The follower	Programming Dynamics	2	The second Ten
Questions General	Look	Laws used In the waiting lines	Model Waiting	2	Thirteenth
Duties group	Look	Programming Traditional Not restricted matters The limit	Non- programming Plan	2	Fourth Ten
Discussion	Look	Examples And solutions	Formulation Issues Programming Others Plan	2	Fifth Ten

Structure Infrastructure			. 11
• .Research Operations To Dr Hamed Al-Shamrati. • Operations Research An Introduction ,HamdyA . taha .	Prescribed books required	. 1	
	References Main (Sources)	. 2	
	Books And references Which is recommended With it) Magazines , Scientific ,Reports(...	- a	
Locations Scientific Sober	References ,electronic Internet sites	- B	

Plan Development The decision Academic	. 12
• Addition or Delete Vocabulary For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10 • Keeping up Development The result In ways and means Miscellaneous For the decision Addition Everything He New It is useful for the student To acquire Skills New And keep up Development The result.	

Model Description The decision

Description The decision : Translations (1)Compilers) (

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

١.	المؤسسة التعليمية	جامعة واسط / كلية علوم الحاسوب وتكنولوجيا المعلومات
٢.	القسم الجامعي / المركز	قسم علوم الحاسوب
٣.	اسم المقرر	مترجمات
٤.	أشكال الحضور المتاحة	دوام حضوري (نظري وعملي)
٥.	الفصل / السنة	الفصل الدراسي الأول / المرحلة الثالثة
٦.	عدد الساعات الدراسية (الكلي)	٦٠ ساعة
٧.	تاريخ إعداد هذا الوصف	٢٠٢4/3/١0
٨.	اهداف المقرر	
	• يهدف المقرر الى تعريف الطالب على المستويات الخاصة بلغات البرمجة.	
	• يهدف هذا المقرر الى تمكين الطالب من استيعاب المراحل التي يمر بها كل برنامج مكتوب باي لغة برمجية من لحظة ضغط زر التنفيذ وصولا الى ظهور النتائج على شاشة التنفيذ.	
	• التعرف على المراحل الستة لهذا المقرر والخوارزميات المستخدمة في كل مرحلة.	
	• التعرف على الاخطاء التي من الممكن ان يرتكبها المبرمج.	
٩.	مخرجات المقرر وطرائق التعليم والتعلم والتقييم:	
	أ-	الأهداف المعرفية:
		١. التعرف على الفرق بين المفسرات والمترجمات.
		٢. التعرف على مراحل المترجمات لكل لغة برمجية.
		٣. معرفة وفهم اسس عمل سياقات كل مرحلة بصورة مستقلة.
		٤. معرفة وفهم تنوع البيانات المدخله والذي عليه يحدث تنوع في طرق تمثيلها.
		٥. معرفة وفهم كيفية التعامل مع اي قيمه مدخله والتحقق من صحتها.
		٦. فهم انواع الهياكل البيانيه المستخدمه وتسخيرها للتاكد من مدى صحة اي تمثيل لغوي.
	ب-	الأهداف المهاراتية الخاصة بالمقرر:
		١. اكساب الطالب القدرة على كيفية بناء المترجم الخاص بلغة معينه او تطويره او التعديل علية.
		٢. اكساب الطالب الخبرة في اكتشاف الخطأ وعدم الوقوع فيه.
	طرائق التعليم والتعلم	
		١. القاء المحاضرات العلمية في القاعات الدراسية.
		٢. ارشاد الطلاب الى بعض المواقع الالكترونية للإفادة منها.
		٣. تكليف الطالب بإعداد تقارير مختصرة لبعض المواضيع و تنفيذ الواجبات المنزلية.
		٤. حلقات نقاشية لمعالجة المشاكل التي يواجهها الطالب بالمقرر.
	طرائق التقييم	
		١. تنفيذ الواجبات اليومية.
		٢. الاختبارات اليومية والشهرية والنهائية.
	ج-	الأهداف الوجدانية والقيمية.
		١. تشجيع الطلاب على الاستفادة من المقرر من خلال الايمان بأهمية المقرر في العملية التعليمية وفي

Field Specialization In a way General.
. Enhancement Cooperation Between Students From During 2 Implementation Duties The process.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings 1 Specific.
. Discussion And participation Effective In Hall 2 The lesson.
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With 1 Means Technology.
. Development Ability The student On Dealing 2 With Internet.
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.
. Development Ability The student On Dialogue 4 And discussion.
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General And discussion	Look	Concepts General	Introduction to Translations And the interpretations And carriers And the teams Between her	4	The first
Questions General A discussion or an exam that I	Look	Concepts General	How Building Table For variables And store Information about them.	4	The second
Questions General And discussion	Look	Stages of the translator	Explanation Short About Phases The translator The six.	4	Third

Exam I am	Look	Phase The first From The translator	Develop Analysis Vocabulary.	4	Fourth
General questions And discussion or Exam I am	Look	Regular expressions	Definition of expressions System	4	Fifth
Discussion	Look	Terms used With Stages of the translator	The difference between ,pattern, token lexmes	4	Sixth
Exam Monthly	Look		The exam The first	4	Seventh
Duties group	Look	Phase The second In The translator	Clarification Mechanism Work Develop Analysis The rules	4	Eighth
Questions General	Look	Algorithms used in the basal phase	Explaining a summary of the most important algorithms used In Phase The rules	4	Ninth
Duties	Look	Algorithmand first follow	Clarification Mechanism Work Algorithm In detail With Example	4	Tenth
Questions General	Look	Algorithms The parsing From top to bottom	Analysis From Down To Above: Identify one of the analysis algorithms from Down To Above Which Principle Her work	4	Elev enth

Structure The decision:					. 10
Method Evaluation	Metho d Educat ion	Name Unit/or Topic	Outputs Learning required	Hours	The week
			Yes Check The phrase input From Right To Left. LL(1)		
Discussion	Look	The rules Alhurra For context and transportatio n planning	Explain how to work with free rules For context And build Plan Its own transportation	4	Twe lfth
Exam I am	Look	ase Third And the fourth From the translator	Develop Analysis Grammar And generation The code	4	Thi rtee nth
Duties group	Look	Phase Fifth And the sixth From the translator	Make sure Example The code And generate the final program In language God.	4	Fourt h Ten
Exam Monthly	Look		Exam A month Second	4	Fifth Ten

Structure Infrastructure		11
• Basics of compiler design Torben Egidius Mogensen(2002). • Compilers : principles, techniques, and tools. tools Alfred V.A Jeffrey D. Ullman(1998).	Prescribed books required	. 1
	References Main(Sources)	. 2
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet....	- B

Plan Development The decision Academic	. 12
• Addition or Delete Vocabulary For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision	

١.	المؤسسة التعليمية	جامعة واسط / كلية علوم الحاسوب وتكنولوجيا المعلومات
٢.	القسم الجامعي / المركز	قسم علوم الحاسوب
٣.	اسم المقرر	إنكليزي 3
٤.	أشكال الحضور المتاحة	دوام حضوري (نظري)
٥.	الفصل / السنة	الفصل الدراسي الاول / المرحلة الثالثة
٦.	عدد الساعات الدراسية (الكلي)	٣٠ ساعة
٧.	تاريخ إعداد هذا الوصف	4/3/2019
٨.	اهداف المقرر يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج. • تعلم المهارات الأساسية للغة الإنكليزية • تعلم اساسيات مهارة القراءة • تعلم اساسيات مهارة الكتابة • القدرة على الأصغاء • فهم المعاني واضافة مفردات جديدة • تعلم التكلم والمناقشة باستخدام مفردات اللغة	
٩.	مخرجات المقرر وطرائق التعليم والتعلم والتقييم:	
	أ-	الأهداف المعرفية:
		١. القدرة على قراءة نصوص اللغة بشكل صحيح
		٢. القدرة على كتابة فقرات بشكل مترابط
		٣. القدرة على وصف مكونات اي موضوع
		٤. القدرة على وصف مخططات بشكل فقرات مترابطة
	ب-	الأهداف المهاراتية الخاصة بالمقرر:
		١. اكتساب المهارة على المناقشة باستخدام مفردات اللغة
		٢. تنمية مهارات الطالب للعمل ضمن فريق وفهم الواجبات الخاصة وانجازها ضمن مدة
	طرائق التعليم والتعلم	
		١. إدارة المحاضرة على نحو يشعر بأهمية الوقت.
		٢. تكليف الطالب ببعض الأنشطة والواجبات الجماعية.
		٣. تخصيص نسبة من الدرجة للأنشطة الجماعية.
	طرائق التقييم	
		١. المشاركة الفاعلة في قاعة الدرس دليل التزام الطالب وتحمله المسؤولية.
		٢. الالتزام بالموعد المحدد في تقديم الواجبات والبحوث.
		٣. تعبر الاختبارات الفصلية والنهائية عن الالتزام والتحصيل المعرفي والمهاري.
	ج-	الأهداف الوجدانية والقيمية.
		١. تطوير قدرة الطالب للعمل على أداء الواجبات وتسليمها في الموعد المقرر.

Model Description The decision

Description The decision: English 3 3) (English

Development Ability The student On Dialogue And discussion.	**. 2**
Ways Education And learning	
Giving activities group Importance From During Customize Degrees On Activities The group.	**. 1**
administration The lecture On Shape It works The student He feels Importantly Time.	**. 2**
Encouraging the student On Submission Work Creativity In Specialization Keep up Standards Quality In Service The community.	**. 3**
Ways Evaluation	
Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings Specific .	**. 1**
Discussion And participation Effective In Hall The lesson.	**. 2**
Method of interrogation And that About A way Show Questions Related With the material Scientific In The hall Academic.	**. 3**
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	
This Article I will Build In The student Capacity On Thinking And communication Between him And between His colleagues others In Same The subject and other materials, and this is very important to improve the students' relationship with each other. The student will also develop his ability to think and Use Language English In Communication With others Whether It was That Inside His surroundings or In Various End The world.	**. 1**

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General And discussion	**Look**	Getting to Know you		**2**	**The first**
Questions General And discussion Or an exam I am	**Look**	The way. way we live		**2**	**The second**
Questions General And discussion	**Look**	It all went wrong		**2**	**Third**
Exam I am	**Look**	Let's go. go shopping. shopping		**2**	**Fourth**
Questions General and discussion	**Look**	What do. do you want to do?		**2**	**Fifth**

Questions General And Discussion	**Look**	Tell me! What's it like?		**2**	**Sixth**
Questions General	**Look**	Case studies or exercises: test, revision, more examples		**2**	**Seventh**
Group assign ments	**Look**	Present Perfect, Fame		**2**	**Eighth**
Questions General	**Look**	Do's and don'ts		**2**	**Ninth**
Questions General	**Look**	Going Places(Time clauses)		**2**	**Tenth**
Questions General	**Look**	Scared to death (Verb Patterns)		**2**	**1st Ten**
Discuss ion and examin ation I am	**Look**	Things that Changed the world		**2**	**Twe lfth**
Questions General	**Look**	Earning a living		**2**	**Third Ten**
Duties group	**Look**	Family ties		**2**	**Fourt h Ten**
Discussion	**Look**	Case studies or exercises: Test, exercises, revision.		**2**	**Fiftee nth**

Structure Infrastructure			11
• Soars & John, (2006). New Headway plus (Pre-Intermediate)Oxford University Press.	**Prescribed books required**	**. 1**	
	References Main(Sources)	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Electronic Specialized	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	12
• **Addition or Delete Vocabulary For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10** • **Keeping up Development The result In ways and means Miscellaneous For the decision Addition Everything He New It is useful for the student To acquire Skills New And keep up Development The result.**	

Model Description The decision

Description of the course: of intelligence Artificial Principles Intelligence) (Principle of Artificial

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
of intelligence Artificial Principles	Name of the rapporteur	. 3
work hours My presenceMy view And practical(	Shapes Attendance available	. 4
Chapter Academic the first/The stage Third	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
Aims This The decision To Definition Students Really Intelligence Artificial And his relationship Knowingly Accounts And in a way Regional And Process	•	
Definition The student With algorithms Intelligence Artificial.	•	
Explanation And clarification Challenges Which Confront us When building Systems Smart.	•	
It gives Models And an example About The organization Memory And What is it? Technologies Basic used In This The organization.	•	
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	
. Recognition On Understood intelligence, How? We distinguish 1 Behavior Smart And its value, And what is it? Intelligence Artificial.		
. ?Recognition On date Intelligence Artificial And what is it 2 Rights Knowledge The other associated With it.		
. Recognition On Understood A rule knowledge, Its 3 importance, Its types, Knock Build it And represent it.		

. Recognition On Field Solution The 4 problemspace. space .state	
. Recognition On the road Search 5strategies search And especially All Knock And when? It is done Use it.	
Objectives Marathi Private By decision:	- B
. Iksaab The student Skill Choose The way appropriate To represent 1 Knowledge Private By applying Certain And According to Size This Knowledge(Information) And Its nature And its components And a way The connection Between her.	
. Development Skills The student In Choose The way Example To represent 2graph. graph space. space stateAccording to Standards Certain Related Naturally The issue Or the problem What is meant? Solve it.	
. Iksaab The student Skill Choose The way Example To search 3search And According to Standards Certain.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Guidance Students To Some Locations Electronic For 2 benefit From her.	
. Cost The student By implementing A group From Programs In 3 Laboratories The process.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 4 Household.	
Ways Evaluation	
. Implementation Duties Daily 1.	
. Tests Daily And monthly And the final 2.	

Objectives Existentialism And value.		**-C**
Enhancement Learning About The student is from During Subtract a group Solutions For the same The problem And Discuss it Nope On Only one And Select Method The appropriate solution for the problem proposed With Stop On Disadvantages Really Roads.	**. 1**	
Encouragement The request On Choose Correct from During Subtract Solutions It contains Errors And Select This Errors After Discussion And Treating it.	**. 2**	
Enhancement Possibilities The request From During Subtract Questions Oral Exceptional You need To Answers Exceptional Where you are Self Heavy Specific On the one hand Evaluation And Grades What? Be Hoof Strong To participate The request And Competition And Competition On Solve it.	**. 3**	
Ways Education And learning		
Giving activities group Importance From During Customize Degrees On Activities The group.	**. 1**	
administration The lecture On Shape It works The student He feels Importantly Time.	**. 2**	
Encouraging the student On Submission Work Creativity In Specialization Keep up Standards Quality In Service The community.	**. 3**	
Ways Evaluation		
Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings Specific.	**. 1**	
Discussion And participation Effective In Hall The lesson.	**. 2**	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.		**- Dr**
Skill Education Self And Contact.	**. 1**	
Skill administration Time And Data.	**. 2**	
Management skill Individuals And Motivate them.	**. 3**	
Skill Work Within A group.	**. 4**	

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General and discussion	**Look**	Introduction of AI	**Definition Intelligence Industrial and application fields**	**4**	**The first**
General questions and discussion or Exam I am	**Look**	Acknowledgment representation	**Review of methods Acting Knowledge**	**4**	**The second**
Questions General and	**Look**	Logical representation	**fication Method Acting logical to know**	**4**	**Third**

discuss ion					
Exam I am	**Look**	Resolution proof procedure	**Prosager Verify From the accuracy of the solution**	**4**	**Fourth**
General questions and discussion or Exam I am	**Look**	Examples of Acknowledg ment !	**Explaining examples of each type From Types Acting Knowledge**	**4**	**Fifth**
Discussion	**Look**	Statespace	**Get to know Field Solution The problem**	**4**	**Sixth**
Questions General	**Look**	Search algorithm	**Reviewing search algorithms to solve the problem and clarifyingsearch algorithms blind first bridth first, (depth search)**	**4**	**Seventh**
Duties group	**Look**	Heuristic search	**Explanation of inherited search algorithms In detail With Examplesbest , climbing (hill search) first**	**4**	**Eighth**

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Exam Monthly	Look		Exam Monthly	4	Ninth
Duties	Look	A_ search algorithm	Explanation Algorithm Search With Example	4	Tenth
Questions General	Look	A* _algorithm	Explanation Algorithm With Examples And the characteristics Private With it	4	1st Ten
Discussion	Look	Expert system	Definition Systems The expert And its applications And its components	4	The second Ten
Exam I am	Look	Acknowledgment acquisition	Clarification Knock Obtain Knowledge Using (data driven , goal driven)	4	Thirteenth
Duties group	Look	Introduction of neural network	Definition of neural networks and their components And its importance And its types	4	Fourteenth
obligatory solution	Look	Design of neural network	arification How Design A neural network	4	Fifteenth

Structure Infrastructure		. 11
• Elin Rich, "Artificial "Intelligence", 1991	Prescribed books required	. 1
• George F. Luger, "Artificial Intelligence Structures and Strategies for Complex Problem Solving", Pearson Eduction Asia (Singapore), 6/E, 2009	References Main(Sources)	. 2
• Amit Konar, "Artificial Intelligence and Soft Computing, Behavior and Cognitive Modeling of the Human "Brain", CRC Press, 2000	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet	- B

Plan Development The decision Academic	. 12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development Achieved through methods and means Miscellaneous For the decision	

Model Description The decision

Description The decision: Networks Computer (1)) Computer(1) (Networks

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Networks Computer (1)	Name of the rapporteur	. 3
(Theoretical and practical) Attendance time	Shapes Attendance available	. 4
Chapter Academic The first/The stage The third	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Aims This Course To Supply Students At a glance General About Concepts And basics Communications Data And networks Computer.		
• Aims The decision To Definition The student In layers Network.		
• Aims The decision To Definition Differently Types Networks Wireless And Wireless And Its protocols.		
• Aims The decision To Definition The student With concepts And Technologies Private With networks.		
Outputs The decision And ways Education And learning And evaluation:		. 9

Objectives Knowledge:		**- a**
Enable The student From Knowledge Basics Networks The computer.	**. 1**	
Enable The student From Knowledge Basics And requirements Building Network Computer.	**. 2**	
Enable The student From Knowledge Jobs Basic Which Availability Networks The computer.	**. 3**	
Provide the student With concepts About Programming Distributors.	**. 4**	
Building Networks Wired And wireless.	**. 5**	
Objectives Marathi Private By decision:		**- B**
Earning the student Skills Private Build And Development Networks And How Its maintenance.	**. 1**	
Development Skill The student In Thinking and Analysis and Solution Problems And Cash.	**. 2**	
Ways Education And learning		
Giving lectures Scientific In Halls Academic And use theshow) (Data For the purpose of a statement Ideas Main for the topic.	**. 1**	
Guidance Students To Some Locations Electronic For benefit From her.	**. 2**	
Student cost Prepared Reports Brief For some Topics And Execution of duties Household.	**. 3**	
Discussion sessions To be treated Problems Which He faces it The student By decision.	**. 4**	
Ways Evaluation		
Implementation Duties Daily.	**. 1**	
Tests Daily And monthly And the final.	**. 2**	
Participation In Hall The lesson.	**. 3**	

. Maintenance On Attendance 4.	
Objectives Existentialism And value.	-C
. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.	
. Enhancement Possibilities The student In 2 Thinking The logical one.	
. Development Energies The idea And creativity From During Enhancement Ability 3 Search and Survey And Analysis And Deduction.	
. Encouragement The request And raise spirit 4 Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities 1 The group.	
. administration Lecture on Like Make it happen The 2 student He feels Importantly Time.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment The student And 1 you carry it Responsibility.	
. Commitment On time specified In Submission Duties 2 And research.	
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	- Dr
. Development Ability The student On Dealing With 1 Means Technology.	
. Development Ability The student On Dealing 2 With Internet.	
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.	
. Development Ability The student On Dialogue 4 And discussion.	
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.	

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/ or Topic	Outputs Learning required	Hours	The week
iscussion/ General questions	Look	Introduction in Components Communications ata , Acting Data data flow	General concepts About Communications , Data	2	The first
Discussion/ Questions General	Look	Processing , Distributed Standards Network	General concepts About Processing Distributed Standards Network ,	2	The second

iscussion/ General questions	Look	Installation Material physical structure) , the sender , The future , The carrier hierarchy(	Introduction in Installation Material Physical structure(, (sender, receiver , The carrier hierarchy(	2	Third
Exam I am	Look	physical layer media Directed And the destination: Waves Wireless radios, ovens Microwave , Cable infrared twisted ,double red coaxial cable Cable Fibers Visually	layer Material Directed and directed media: waves Radio Wireless , Microwave ovens, duplex cable Scheduled X-rays Under Red , coaxial cable, fiber optic cable	2	Fourth
iscussion/ General questions	Look	Types Networks) LAN , ,WAN , MAN (VAN	Types Networks) LAN , MAN VAN). ,WAN ,	2	Fifth
Discussion/ Questions General	Look	Topology Networks) , Bus , ?star , Ring Why (...	Network topology) , Bus A star , ?Ring , Why ,(...	2	Sixth

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
iscussion/ General questions	Look	Network models: - Layers Networks) TC model/ TCP 4 , layers(- Layers NetworksModel OSI Layers 7 ,(	Models Network: - Layers Networks Model TCP TC / Layers 4 ,(-Layers NetworksModel OSI layers 7 ,(	2	Seventh
Duties group	Look	Layers Networks: Protocols: ARP) , ,TELNET ,FTP (DNS	Network layers: Protocols: ,TELNET ,FTP ,ARP) (DNS	2	Eighth
iscussion/ General questions	Look	Layers Networks: Protocols: UDP , , RPC ,NFS	Network layers: Protocols: , RPC ,NFS ,UDP	2	Ninth
Exam Monthly	Look	Layers Network: Protocols: SMTP , ,HTTP , TFTP WAIS	Layers Network: Protocols: ,HTTP ,TFTP , SMTP WAIS	2	Tenth
iscussion/ General questions	Look	AddressesIPV4 , Addresses IP6 - Types Addresses InIP4 network	AddressesIPV4 , IP6 addresses - Types Addresses In NetworkIP4	2	Elev enth
iscussion/ General questions	Look	Devices Networks) , Routers Keys , Bridges , Axis repeated(	Network devices(, (routers, switches Bridges , Axis , duplicate (	2	Twe lfth
iscussion/ General questions	Look	- Multiple Sending FDM) , Reveal - (WDM , TDM Errors And correct it	- Multiple Sending FDM) , Reveal - (WDM ,TDM Errors And correct it	2	Thi rtee nth
Duties group	Look	- Addressing The region) Space ddress , Address IPV4 Addressing (IPV6 - Address Dynamic Capable , For guidance And other than that Capable For guidance	-Logical) addressing address space) , AddressIPV4 , Addressing(IPV6 - , Address Dynamic Capable For guidance And other than that Capable For guidance	2	Fou rtee nth
Discussion/ Questions General	Look	Means of transportation	Means of transportation	2	Fifth Ten

Structure Infrastructure			. 11
• “Computer Networks", Behrouz A. Forouzan, 7th . • “Data Communications, Computer Networks and OSI”, 4th Edition, A. Tannenbaum, Prentice-Hall, 2010.th • “ Computer Communications and Networks", J. R. Freer, USL Press, 2008 .	**Prescribed books required**	**. 1**	
	References Main(Sources)	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Scientific Sober	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	. 12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development Achieved through methods and means Miscellaneous For the decision	

Model Description The decision

Description of the course: Encryption (cryptography)

كز هذا المقرر الدراسي على انواع خوارزميات التشفير ووظائف التشفير.يشرح هذا المقرر تشفير المفتاح الكلاسيكي والمتماثل واعطاء امثلة لكل هذه الانواع ، بالاضافة الى الصيغ الرياضية ومميزات هذه الخوارزميات. ، وكيفية اختيار طرق التشفير التي تلائم هذه الخوارزميات.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Encryption	Name of the rapporteur	. 3
Attendance time) Theoretical and practical(	Shapes Attendance available	. 4
Chapter Academic The second/The stage Third	Chapter/ year	. 5
An hour 60	Number Hours Academic (total)	. 6
10/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Introduction For the student In Rules Understood Algorithms Encryption.		
• Developing skills The student In Algorithms Encryption.		
• Giving The student Look About Encryption And types.		
• Aims The decision To Definition The student In a way Work Algorithms Encryption.		
Outputs The decision And ways Education And learning And evaluation:		. 9
- a Objectives Knowledge:		
1. Study Algorithms Encryption In a way Good .		
2. Knowledge Features This Algorithms .		
3. Learn Some Algorithms Encryption .		
- B Objectives Marathi Private By decision:		
3 Iksaab The student Skill Design Algorithms .		

Encryption.
. Iksaab The student Skill Work The group To achieve Projects 4 Research Scientific.
Ways Education And learning
· Meeting Lectures Scientific In Halls Academic 7.
. Discussion About Directing way Questions And it opened Chapter Dialogue And 8 interaction With The request.
. Cost The student Prepared System Recover 9 Simple.
. Cost The student Prepared Reports Brief For some 10 Topics.
. Cost The request Prepared Projects Organization 11 Recover Certain.
. Cost The request With work Lectures Optional For topics Related Recover Information 12.
Ways Evaluation
. Implementation Duties Daily 3.
. Tests Daily And monthly And the final 4.

C- Objectives Existentialism And value.
. Encouragement Students On Benefit From The decision From During Faith 5 Importantly The decision In The process Educational And in Field Specialization In a way General.
. Enhancement Cooperation Between Students From 6 During Implementation Duties The process.
. Development Energies The idea And creativity I have The request From During 7 Implement them To different Duties.
. Encouragement The request And raise spirit 8 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 4 group
. administration Lecture on A form that works The student 5 He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization Keep 6 up Standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer 4 With itDuties and reports (Within Timings Specific.
. Discussion And participation Effective In Hall 5 The lesson.
. It is considered Tests Now , The quarterly And the final About Commitment 6 And collection Cognitive And the skills.
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.
. Development Ability The student On Dealing With 6 Means Technology.
. Development Ability The student On Dealing 7 With Internet.
. Development Ability The student is on Learn Knock And methods Development 8 Personal Why? After The decision.
. Development Ability The student On Dialogue 9 And discussion.
. Development Ability The student is on Search Scientific And 10 Writing Search Scientific Sober.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
[Assessment]	Look	introduction	Historical notes. notes	3	The first
	Look	Classic encryption techniques	Substitution cipher	3	The second
[Familiarity]	Look	Classic encryption techniques	Transposition cipher	3	Third
[Assessment]	Look	Products techniques	Substituton and transposition cipher	3	The fourth and fifth

[Familiarity]	**Look**	**Block cipher**	**Block cipher concepts**	**3**	**Sixth And Seventh**
[Assessment]	**Look**	**Data encryption standard**	**Data encryption standard concepts & characteristics**	**3**	**The eighth and ninth**
[Assessment]	**Look**	**Group, ring, field Modular operation**	**Group, ring. ring , fieldModular operation concepts**	**3**	**Tenth And the eleventh**
[Familiarity]	**Look**	**Advanced Encryption standard**	**Advanced Encryption standard concepts & characteristics**	**3**	**Twelfth And the thirteenth**

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
[Familiarity]	Look	Block cipher and stream cipher characteristics	Block cipher and stream cipher , thedifference between them	3	fourte en and fifteen

Structure Infrastructure			. 11
William Stallings, Cryptography and Network Security: Principles and practice, 6/E, Pearson Education, Inc., 2014.	Prescribed books required	. 1	
Mark Stamp, Information Security Principles and practice, John Wiley & Sons, 2006	References Main(Sources)	. 2	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a	
Locations Scientific Sober	,References electronic Locations The Internet....	- B	

Plan Development The decision Academic	. 12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision	

Model Description The decision

Description of the course: Translations (2) (Compilers)

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	1
Section Science Computer	Section University/ The center	2
Translations	Name of the rapporteur	3
work hours My presenceMy view And practical(	Shapes Attendance available	4
Chapter Academic The second/The stage Third	Chapter/ year	5
An hour 60	Number Hours Academic(total)	6
0 1/3/4 202	Date Preparation This Description	7
Goals The decision		8
Aims The decision To Definition The student On Levels Private Languages Programming. •		
Aims This The decision To Enable The student From Accommodation The stages Which It passes With it Every programme Written Bye Language Software From Just a moment Press button Implementation Arriving To Appearance Results On Execution screen. •		
Recognition On The stages The six That's why The decision And algorithms used In All Stage. •		
Recognition On Errors Which From The possible that He commits it The program. •		
Outputs The decision And ways Education And learning And evaluation:		9
Objectives Knowledge:	- a	
. Recognition On The difference 7 Between Interpretations And translators.		
. Recognition On Stages 8 Translations for each Language Software.		
. Knowledge And they understood He 9 founded Work The contexts of each stage In a way Independent.		
. Knowledge And they understood Diversity Data Entry 10 Which On him It happens Diversity In Knock Represent it.		

. Knowledge And they understood How Dealing 11 With any Value it His entrance And verification From Her health.	
. They understand Types Structures The statement The user And 12 use it To be sure From Extent Health any Acting Linguistic.	
Objectives Marathi Private By decision:	**- B**
. Iksaab The student Capacity On How Building The translator Private In language 3 Certain or Develop it or Amendment Aliyah.	
. Iksaab The student Experience In Discovery The error 4 And not Occurrence In it.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic 5.	
. Guidance Students To Some Locations Electronic For 6 benefit From her.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 7 Household.	
. Episodes Discussion To be treated The problems that He 8 faces it The student By decision.	
Ways Evaluation	
. Implementation Duties Daily 3.	
. Tests Daily And monthly And the final 4.	

Objectives Existentialism And value.	**-C**
. Encouragement Students On Benefit From decided by During Faith Importantly The decision In The process Educational And in Field Specialization In a way General. 5	
. Enhancement Cooperation Between Students From During Implementation Duties The process. 6	
. Development Energies The idea And creativity I have The request From During Implement them To different Duties. 7	
. Encouragement The request And raise spirit Competition Among them. 8	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities group 4	
. administration The lecture On A form that works The student He feels Importantly Time. 5	
. Encouragement The student On Submission Work Creativity In Specialization Complies with standards Quality In Service The community. 6	
Ways Evaluation	
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings Specific. 4	
. Discussion And participation Effective In Hall The lesson. 5	
. It is considered Tests Now , The quarterly And the final About Commitment And collection Cognitive And the skills. 6	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	**- Dr**
Development Ability The student On Dealing With Means Technology. 61	
Development Ability The student On Dealing With Internet. 62	
Development Ability The student is on Learn Knock And methods Development Personal Why? After The decision. 63	
Development Ability The student On Dialogue And discussion. 64	
Development spirit Creativity And perseverance And search About New In Field His work. 65	

Structure The decision:					**.10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General And discussion	**Look**	Introduction to compiler	**Translations**	**4**	**The first**
Questions General A discussion or an exam that I	**Look**	Lexical analysis and parser analysis	**Translations**	**4**	**The second**

Questions General And discussion	**Look**	Bottom up and shift reduce	**Translations**	**4**	**Third**
Exam I am	**Look**	Operator precedence method	**Translations**	**4**	**Fourth**
General questions And discussion or Exam I am	**Look**	LR parser method	**Translations**	**4**	**Fifth**
Discussion	**Look**	SLR, Conical , lookahead	**Translations**	**4**	**Sixth**
Exam Monthly	**Look**	Semantic analysis and	**Translations**	**4**	**Seventh**
Duties group	**Look**	Methods of semantic analysis	**Translations**	**4**	**Eighth**

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General	Look	Intermediate code generation	Translations	4	Ninth
Duties	Look	Intermediate code generation	Translations	4	Tenth
Questions General	Look	Code optimization	Translations	4	1st Ten
Discussion	Look	Example of code optimization	Translations	4	Twelfth
Exam I am	Look	Code generation	Translations	4	Third Ten
Duties group	Look	Build simple. simple -part1 compiler	Translations	4	Fourteenth
Exam Monthly	Look	Build simple. simple compiler - part2	Translations	4	Fifteenth

Structure Infrastructure			.11
• Basics of compiler design Torben Egidius Mogensen(2002). • Compilers : principles, techniques, and tools. tools Alfred V. A Jeffrey D. Ullman(1998).	Prescribed books required	. 1	
Principles of Compiler Design **By** Alfred Aho **and** Jeffrey Ullman	References Main(Sources)	. 2	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a	
Locations Scientific Sober	,References electronic Locations The Internet	- B	

Plan Development The decision Academic	.12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision	

Model Description The decision

Description of the course: Programming Locations Electronic programming) (Website

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Programming Locations Electronic	Name of the rapporteur	. 3
work hours My presenceMy view And practical(	Shapes Attendance available	. 4
Chapter Academic the second/The stage Third	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Aims This The decision To Supply The student With a look General About Programming Locations Electronic.		
• It is possible The student From Design Pages Web Developed From During A group Complete From Languages Programming.		
• It is possible The student From Program it Pages The web From During A group From Languages Programming.		
• It is possible The student From Design Pages Web You work With Rules Data relational stored On The Internet.		
• It is possible The student From Knock Building Rules Data Effective For applications The web And update it Through The Internet.		
• It is possible The student From Dealing With EnvironmentClient-Server		
Outputs The decision And ways Education And learning And		. 9

evaluation:
Objectives Knowledge: - a
. Enable The student From Knowledge Types And Basics Design And 1 Programming Locations Through Internet And the web.
. Enable The student From Knowledge Languages necessary To design And 2 programming Different Types Locations Through The Internet.
. Enable The student From Knowledge Jobs Basic Which Availability Different 3 Languages Design And Programming Private On the web.
. Enable The student From Building Locations It works 4 Effectively Through The Internet.
Objectives Marathi Private - B By decision:
. Iksaab The student Skills Software Especially Programming 1 Locations On The Internet.
. Iksaab The student Skills In Update Programs And discovery And specify Errors 2 Software And how Treating it.
. Iksaab The student Skill Analysis The logical one To structure it Rules 3 Connected data On sites Electronic
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For a purpose Statement Ideas Main for the topic.
. Guidance The request To Some Locations Electronic 2 For benefit From her.
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 3 Household.
. A contract Research sessions It is done From During it Explanation And analysis 4 Some Problems A state Ijad Solutions For him.
Ways Evaluation
. Action Tests Theory In The hall Academic 1) daily, monthly, (final)
. Subtract Questions And inquiries Oral On The request For a 2 statement Extent Their response.

. Organize The request In a way Totals And their cost Completely Requirements 3 Building System Certain And evaluation Percentage Their achievement For that Work.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From The decision From During Faith 1 Importantly The decision In The process Educational And in Field Specialization In a way General.
. Ability The student To work On performance Duties And deliver 2 it In The appointment The decision.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
. Thinking The logical one In Study Sides The problem And find Solutions 5 appropriate For her.
. Development Ability The student On Dialogue 6 and discussion.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration Lecture on A form that works The student 2 He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization Keep 3 up Standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings 4 Specific.
. Discussion And participation Effective In Hall 5 The lesson.
. It is considered Tests Now , The quarterly And the final About Commitment 6 And collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With 6 Means Technology.
. Development Ability The student On Dealing 7 With Internet.
. Development Ability The student is on Learn Knock And methods Development 8 Personal Why? After The decision.
. Development Ability The student On Dialogue 9 And discussion.
. Development spirit Creativity And perseverance And search 10 About New In Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General And discussion	Theoretical + practical	Html Introduction	HTML Language/Design Language	4	The first

Questions General A discussion or an exam that I	Theoretical + practical	HTML Elements	HTML Language	4	The second
Questions General And discussion	Theoretical + practical	HTML Elements	HTML Language	4	Third
Exam I am	Theoretical + practical	HTML List	HTML Language	4	Fourth
Questions General A discussion or an exam that I	Theoretical + practical	HTML Forms	HTML Language	4	Fifth
Questions General And Discussion	Theoretical + practical	HTML Table	HTML Language	4	Sixth
Questions General	Theoretical + practical	HTML Attributes	HTML Language	4	Seventh
Duties group	Theoretical + practical	Introduction/Styling	CSS Language/Format Language	4	Eighth

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
		HTML With CSS			
Questions General	Theoretical + practical	Elements and Functions in CSS	CSS Language	4	Ninth
Exam Monthly	Theoretical + practical	Elements and Functions in CSS	CSS Language	4	Tenth
Questions General	Theoretical + practical	Programming Basics Identifiers/ Data Types /Arithmetic Operators/ Comparison Operators/ Logical Operators	Java Script/ Programming Language	4	Elev enth
Discussion and Exam I am	Theoretical + practical	Conditional Sentences	JavaScript	4	The secon d Ten
Questions General	Theoretical + practical	Repetition Loops	JavaScript	4	Third Ten
Duties group	Theoretical + practical	Arrays	JavaScript	4	Fou rtee nth
Discussion	Theoretical + practical	Functions	JavaScript	4	Fiftee nth

Structure Infrastructure			. 11
	Prescribed books required	. 1	
	References Main (Sources)	. 2	
• Puntambekar, AA, 2020. Internet Programming. Technical Publications. Grove, R. F., 2009. Web Based Application Development. Jones & Bartlett Publishers.	Books And references Recommended scientific) journals) , ,Reports(...	- a	
Locations Scientific Sober	References ,electronic Internet sites	- B	

Plan Development The decision Academic	.12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision	

Model Description The decision

Description The decision: (2) Networks Computer Networks(2)) (Computer

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Department of Computer Science	Section University/ The center	. 2
Networks Computer (2)	Name of the rapporteur	. 3
work hours My presenceMy view And practical(	Shapes Attendance available	. 4
Chapter Academic The second/The stage Third	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
Aims The decision To Increase Knowledge The student With networks Computer) Its advantages And Its defects.	•	
Get to know more On Components Network.	•	
Recognition On Classification The problem.	•	
Advantages And Disadvantages Topology Networks.	•	
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	
. Enable The student From Knowledge Basics Networks 1 Computer And the model Reference For networks.		
. Enable The student is from Knowledge Basics 2 And requirements Building Network Computer.		
. Enable The student From Knowledge Jobs Basic 3 Which Availability Networks The computer.		
. Supply The student With 4 concepts About Programming Distributors.		
. Building Networks 5 Wired And wireless.		
Objectives Marathi Private By decision:	- B	
. Iksaab The student Skill Building Network Computer 1 And how Sustain it.		
. Iksaab The student Skill Convert Simulation Network Computer About A simulated way NetworksPacket Cisco		

.Tracer
. Iksaab The student Skills In Maintenance Networks 3 The computer.
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.
. Guidance Students To Some Locations Electronic For 2 benefit From her.
. Cost The student By implementing A group From Programs 3 In Laboratories The process.
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 4 Household.
Ways Evaluation
. Implementation Duties Daily 1.
. Tests Daily And monthly And the final 2.
. Participation In Hall The lesson 3.
. Maintenance On Attendance 4.

Objectives Existentialism And value.	**-C**
. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.	
. Enhancement Cooperation Between Students From 2 During Implementation Duties The process.	
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.	
. Encouragement The request And raise spirit 4 Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities 1 group	
. administration The lecture On A form that works The 2 student He feels Importantly Time.	
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment The student And 1 you carry it Responsibility.	
. Commitment On time specified In Submission Duties 2 And research.	
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	**- Dr**
. Development Ability The student On Dealing With 1 Means Technology.	
. Development Ability The student On Dealing 2 With Internet.	
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.	
. Development Ability The student On Dialogue 4 And discussion.	
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.	

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General and discussion	**Look**	**Introduction About Networks ,Computer advantages and disadvantages of networks The accountant**	**Introduction About Networks The , accountant Advantages and disadvantages of computer networks**	**4**	**The first**

General questions and discussion or Exam I am	Look	Components Network: NIC AndHUB Repeater and Bridge And RouterAnd andBRouter Data And GATEWAY Flow	Components Network: NIC And And Bridge And Repeater HUB BRouter andRouter Data Flow And GATEWAY	4	The second
Questions General And discussion	Look	Classification Network ,LAN , WAN And MAN	, Network classification LAN ,MAN WAN and	4	Third
Exam I am	Look	Topology Network: , Network And a star , And a bus , And a ring The advantages and disadvantages of each Topology.	Topology Network: ,Network , Star, bus ring, advantages and disadvantages All Topology.	4	Fourth
General questions and discussion or Exam I am	Look	Transmission media: magnetic media, twisted pair, coaxial cables For the ,scope Basic coaxial cables with Scope Wide ,Optical fibers cables	Media Transportation: Media Magnets, twisted pair, cables ,Baseband coaxial cables Pivotal Self Scope Wide And fibre Visual , cables	4	Fifth

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General And discussion	Look	Transmission of ,microwaves infrared waves And the millimeter , And transmitting waves Light And media LANWireless	Transfer Waves The minute And waves , X-rays Under Red And , the millimeter lightwave transmission and wirelessLAN media	4	Sixth
Questions General	Look	Types of networks :LAN) Its size , Technology , Move it WAN AND , (..... .MAN	Types Networks:LAN) Its , size , Technology Move it(, WAN .AND MAN	4	Seventh
Duties group	Look	Reference modelOSI	Reference modelOSI	4	Eighth
Questions General	Look	Relationship Services With protocols	Relationship Services With protocols	4	Ninth
Exam Monthly	Look	layer Material	layer Material	4	Tenth
Questions General	Look	Layer Correlation Data	Link layer Data	4	1st Ten
Discussion and Exam I am	Look	Layer devices Network	Layer Network	4	The second Ten
Questions General	Look	Layer Transportation	Layer Transportation	4	Third Ten
Duties group	Look	Session layer	`he session, Layer Display, application layer	4	Fourteenth
Discussion	Look	Transfer Data In Model OSI Model , ReferenceIP / TCP	Transfer Data in Model OSI, Reference modelIP / TCP	4	Fifteenth

Structure Infrastructure			. 11
• Simulation: Principles and Methods By Wayne • Computer Performance Evaluation Modeling, Techniques and Tools, Raymond Marie, Brigitte Plateau, St.Malo, June 3-6, 1997.	Prescribed books required	. 1	
• Probability, Statistics, and Stochastic Processes by Peter Olofsson & Mikael Andersson,2011.	References Main (Sources)	. 2	
	Books And references Which is recommended	- a	

	With it) Magazines , Scientific ,Reports(...		
Locations Scientific Sober	References ,electronic Internet sites	- B	

Plan Development The decision Academic	**. 12**
• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development Obtained by means And the methods Miscellaneous For the decision**	

Model Description Decided

Description The decision: Rules Data Distributed Database) (Distributed

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	.1
Section Science Computer	Section University/ The center	.2
Rules Data Distributed	Name of the rapporteur	.3
Attendance time(theoretical and practical)	Shapes Attendance available	.4
Chapter Academic The second/The stage Third	Chapter/ year	.5
An hour 60	Number Hours Academic (total)	.6
0 1/3/4 202	Date Preparation This Description	.7
Goals The decision		.8
They understand Principles Rules	•	

Data And Knock Design it.		
They understand What She is Organization administration A rule Data.	•	
I know him The reasons Which Led To Appearance Rules Data Distributor.	•	
Know what She is Architectures available And The user To build Systems Rules Data Distributor.	•	
Outputs The decision And ways Education And learning And evaluation:		.9
Objectives Knowledge:	- a	
. Definition With principles And Basics Rules Data Distributor And Its systems And Its types.	11	
. Application Concepts Rules Data Distributor.	12	
. Realization Importance Organization Rules Data Distributor .	13	
. Select The difference between Systems Rules Data And Systems Rules Data Distributor.	14	
. Capability On Description Systems Rules Data Distributor.	15	
Objectives Marathi Private By decision:	- B	
. Capability On Meeting Lecturer Related Regularly Rules Distributed data.	9	
. Capability On Design System A rule Data Distributed.	10	
. Capability On Learning And Training On Different Systems Rules Traditional data And Distributor.	11	
. Capability On administration Dialogues And Discussions related By organization Rules Data And rules Data Distributor.	12	
Ways Education And learning		
. Meeting Lectures Scientific In Halls Academic And use the show) (Data For a purpose Statement Ideas Main for the topic.	13	
. Use Device Computer In Implementation Programs.	14	
. Guidance Students To Some Locations Electronic For benefit From her.	15	
. Cost The student By implementing A group From Programs In Laboratories The process.	16	
. Cost The student Prepared Reports Brief For some Topics And Execution of duties Household.	17	
. Episodes Discussion To be treated Problems Which He faces it The student By decision.	18	

Ways Evaluation	
. Implementation Duties Daily 9.	
. Tests Daily And monthly And the final 10.	
. Participation In Hall The lesson 11.	
. Maintenance On Attendance 12.	
Objectives Existentialism And value.	-C
. Encouragement Students On Benefit From The decision From During Faith 9 Importantly The decision In The process Educational And in Field Specialization In a way General.	
. Enhancement Cooperation Between Students From 10 During Execution of duties The process.	
. Development Energies The idea And creativity I have The request From During 11 Implement them To different Duties.	
. Encouragement The request And raise spirit 12 Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On activities 7 group	
. administration The lecture On A form that works The 8 student He feels Importantly Time.	
. Encouragement The student On Submission Work Creativity In Specialization Keep 9 up Standards Quality In Service The community.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment The student And 7 you carry it Responsibility.	
. Commitment On time specified In Submission Duties 8 And research.	
. It is considered Tests Now , The quarterly And the final About Commitment 9 And collection Cognitive And the skills.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	- Dr
Skill administration Data And Knowledge And 65 Technology Information.	
Development Ability The student is on Learn Knock And methods Development 66 Personal Why? After The decision.	
Development Ability The student On Dialogue 67 And discussion.	
Development spirit Creativity And perseverance And search 68 About New In Field His work.	

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General And discussion	Look	Introduction to DB, The function of DBMS, DBA's responsibilities, DB facilities, DB limitations, Advantage of DB.	Introduction to database systems and how to manage database systems Data And benefits and	3	The first

			disadvantages A rule Data		
Questions General A discussion or an exam that I	**Look**	Introduction to DB, The function of DBMS, DBA's responsibilities, DB facilities, DB limitations, Advantage of DB.	**Introduction to database systems and how to manage database systems Data And benefits and disadvantages A rule Data**	**3**	**The secon d**
Questions General And discussion	**Look**	Introduction to DB, The function of DBMS, DBA's responsibilities, DB facilities, DB limitations,	**Introduction to database systems and how to manage database systems Data And benefits and disadvantages A rule Data**	**3**	**Third**

Structure The decision:					.10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
		Advantage of DB.			
Questions General/ Discussion/ My exam	**Look**	Artecheture of DB	**Understanding and learning the database architecture and the three levels For help And the relationship Among them**	**3**	**Fourth**
Questions General/ Discussion/ My exam	**Look**	Artecheture of DB	**They understand And Learn Architectural Database And they understood Levels The third For help And the relationship Among them**	**3**	**Fifth**
Discussion	**Look**	Overview of DDB.	**Includes They understand Concepts The basics about distributed databases, their applications, and the benefits and disadvantages of .distributed systems Distribution and its architecture And its characteristics.**	**3**	**Sixth**
Questions General	**Look**	Overview of DDB.	**Includes They understand Concepts The basics about distributed databases, their applications, and the benefits and disadvantages of .distributed systems Distribution and its architecture And its characteristics.**	**3**	**Seventh**
Duties group	**Look**	DDB integrity	**Includes an explanation of the architecture) (ISO-OSI and an explanation of the (types of networks And characteristics All One of them is .the protocols used.**	**3**	**Eighth**

Questions General	**Look**	DDB integrity	**Includes an explanation of the architecture) (ISO-OSI and an explanation of the (types of networks And characteristics All One of them is .the protocols used.**	**3**	**Ninth**
Exam Monthly	**Look**	Distributed Database Design	**They understand Steps And how Distributed database design and what it is Methods The user In Process Design.**	**3**	**Tenth**
Questions General	**Look**	Distributed Database Design	**They understand Steps And how Distributed database design and what it is Methods The user In Process Design.**	**3**	**Elev enth**
Discussion	**Look**	Distributed Database Design	**They understand Steps And how Distributed database design and what it is Methods The user In Process Design.**	**3**	**Twe lfth**
Exam I am	**Look**	Concurrency Control	**Control Synchronized On Distributed database systems and explaining the types of failures that occur in .databases Distributed NAT and the possibility of discovering Holidays And a repair**	**3**	**Thi rtee nth**
Duties group	**Look**	Database recovery	**It shows This Chapter Possibility Detecting the malfunction And we bless him In**	**3**	**Fourt h Ten**

Structure The decision:					.10
Method Evaluation	**Meth od Educ ation**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
			The organization Distributor And return The system is working From New		
Discussion	**Look**	Database recovery	**This chapter shows the possibility of discovering Holidays And we bless him In distributed systems and back The system is working From New**	**3**	**Fiftee nth**

Structure Infrastructure			.11
• Database system concept, 5\E, Abraham silberschatz and Merry F. Koth, 2006	**Prescribed books required**	**. 1**	
• Stefano Geri and Giuseppe Pelagatti (1984), Distributed Data Bases Principles and systems, Mc-Graw Hill.	**References Main(Sources)**	**. 2**	
• Distributed database, stelane ceri, 2002.	**Books And references Which Recommended With it) , Magazines Scientific ,Reports(...**	**- a**	
Locations Scientific Sober	**,References electronic Locations The Internet ....**	**- B**	

Plan Development The decision Academic	.12
• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development The result In ways and means Miscellaneous For the decision**	

Model Description The decision

Description The decision: Excavation Data Mining) (Data

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

١.	المؤسسة التعليمية	جامعة واسط / كلية علوم الحاسوب وتكنولوجيا المعلومات
٢.	القسم الجامعي / المركز	قسم علوم الحاسوب
٣.	اسم المقرر	تنقيب البيانات
٤.	أشكال الحضور المتاحة	دوام حضوري (نظري وعملي)
٥.	الفصل / السنة	الفصل الدراسي الثاني / المرحلة الثالثة
٦.	عدد الساعات الدراسية (الكلي)	60 ساعة
٧.	تاريخ إعداد هذا الوصف	٢٠٢4/3/١0
٨.	اهداف المقرر	
	• يهدف المقرر الى تعريف الطالب بتنقيب البيانات و التقنيات المستخدمة في استخراج المعلومات المطلوبة بسرعة وكفاءة، بالإضافة الى تعريف الطالب بالتقنيات الحديثة المستخدمة في مجال تصنيف البيانات و مجال التنبؤ، أيضا يهدف المقرر الى اكساب الطالب المعرفة الأساسية في تحويل و تقليل حجم البيانات مما ينعكس إيجابا على مستوى الطالب العلمي خصوصا في مراحل التعليم المستقبلية.	
٩.	مخرجات المقرر وطرائق التعليم والتعلم والتقييم:	
	أ-	الأهداف المعرفية:
	١.	يهدف المقرر الى اكساب الطالب المعرفة الضرورية لادارة و تحليل و تنقيب كمية ضخمة من البيانات.
	٢.	يهدف المقرر الى تعريف الطالب ببعض التقنيات الخاصة بتنقيب البيانات.
	٣.	تعريف الطالب بطرق تصنيف البيانات و دورها في تنقيب البيانات.
	٤.	تعريف الطالب ببعض المفاهيم المتقدمة في تنقيب البيانات.
	ب-	الأهداف المهاراتية الخاصة بالمقرر:
	١.	اكساب الطالب المهارات الضرورية للتعامل مع كمية بيانات ضخمة و استرجاع المعلومات المطلوبة.
	٢.	اكساب الطالب مهارات تصنيف البيانات.
	٣.	اكساب الطالب مهارات التحليل و الاستنتاج.
		طرائق التعليم والتعلم
	١.	القاء المحاضرات العلمية في القاعات الدراسية واستخدام ال (Data show) لغرض بيان الأفكار الرئيسية للموضوع.
	٢.	ارشاد الطلاب الى بعض المواقع الالكترونية للإفادة منها.
	٣.	تكليف الطالب بإعداد تقارير مختصرة لبعض المواضيع و تنفيذ الواجبات المنزلية.
	٤.	حلقات نقاشية لمعالجة المشاكل التي يواجهها الطالب بالمقرر.
		طرائق التقييم
	١.	تنفيذ الواجبات اليومية.
	٢.	الاختبارات اليومية والشهرية والنهائية.
	٣.	المشاركة في قاعة الدرس.
	٤.	المواظبة على الحضور.
	ج-	الأهداف الوجدانية والقيمية.

. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.	
. Enhancement Cooperation Between Students From 2 During Implementation of duties.	
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.	
. Encouragement The request And raise spirit 4 Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities 1 group	
. administration The lecture On A form that works The 2 student He feels Importantly Time.	
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment The student And 1 you carry it Responsibility.	
. Commitment On time specified In Submission Duties 2 And research.	
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.	
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.	
. Development Ability The student On Dealing With 1 Means Technology.	
. Development Ability The student On Dealing 2 With Internet.	
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.	
. Development Ability The student On Dialogue 4 And discussion.	
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.	

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**The hour T**	**The week**
Questions General and discussion	**Theoretical + practical**	Data Mining : Data Mining Functionalities ,Data Mining Process,	**Introduction in Excavation Data**	**3**	**The first**
Questions General and discussi on Or	**Theoretical + practical**	Architecture of a Typical Data Mining Systems, Classification of data Mining Systems,	**Basic topics in data mining Includes Structural Data ,mining systems types of data mining systems**	**3**	**The second**

an exam I am					
Questions General and discussion	**Theoretical + practical**	Data Mining Techniques, Data Preprocessing, Data Cleaning, Data Integration, Data Transformation and Data Reduction	**Some Technologies Excavation Data**	**3**	**Third**
Exam I am	**Theoretical + practical**	Data Mining Techniques, Data Preprocessing, Data Cleaning, Data Integration, Data Transformation and Data Reduction	**Some Technologies Excavation Data**	**3**	**Fourth**
Questions General and discussion Or an exam I am	**Theoretical + practical**	Data Generalization and Summarization Based Characterization	**Generalization And Summary Data**	**3**	**Fifth**
Discussion	**Theoretical + practical**	Mining Association Rules	**Excavation Rules Data ,big**	**3**	**Sixth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**The hour** T	**The week**
		In Large Databases , Classification and Prediction	**Classification and Forecasting**		
Questions General	**Theoretical + practical**	Mining Association Rules In Large Databases, Classification and Prediction	**cavation Rules Data ,Large scale classification and .prediction**	**3**	**Seventh**
Group assign ments	**Theoretical + practical**	Classification By Decision Tree Induction, Bayesian Classification, Prediction, Clusters Analysis, Types of Data In Cluster Analysis, Categorization of Major Clustering Methods, Partitioning Methods, Hierarchical Methods ,	**Classification methods**	**3**	**Eighth**
Questions General	**Theoretical + practical**	Classification By Decision Tree Induction, Bayesian Classification, Prediction, Clusters Analysis, Types of Data In Cluster Analysis, Categorization of Major Clustering Methods, Partitioning Methods, Hierarchical Methods ,	**Classification methods**	**3**	**Ninth**
Discussion	**Theoretical + practical**	Classification By Decision Tree Induction, Bayesian Classification, Prediction, Clusters Analysis, Types of Data In Cluster Analysis, Categorization of Major Clustering Methods, Partitioning Methods, Hierarchical Methods ,	**Classification methods**	**3**	**Tenth**
Questions General	**Theoretical + practical**	Classification By Decision Tree Induction, Bayesian Classification, Prediction, Clusters Analysis, Types of Data In Cluster Analysis, Categorization of Major Clustering Methods, Partitioning Methods ,	**Classification methods**	**3**	**Elev enth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**The hour** T	**The week**
		Hierarchical Methods ,			
iscussion/ General questions	**Theoretical + practical**	Classification By Decision Tree Induction, Bayesian Classification, Prediction, Clusters Analysis, Types of Data In Cluster Analysis, Categorization of Major Clustering Methods, Partitioning Methods, Hierarchical Methods ,	**Classification methods**	**3**	**Twe lfth**
Discussion	**Theoretical + practical**	Applications of Data Mining, Social Impacts of Data Mining, Mining WWW, Mining Text Database , Mining Spatial Databases.	**Concepts Advanced In Excavation Data**	**3**	**Thi rtee nth**
Group assign ments	**Theoretical + practical**	Applications of Data Mining, Social Impacts of Data Mining, Mining WWW, Mining Text Database , Mining Spatial Databases.	**Concepts Advanced In Excavation Data**	**3**	**Fou rtee nth**
Exam	**Theoretical + practical**	Applications of Data Mining, Social Impacts of Data Mining, Mining WWW, Mining Text Database , Mining Spatial Databases.	**Concepts Advanced In Excavation Data**	**3**	**Fiftee nth**

Structure Infrastructure		**. 11**
• Han, jiawei, Jian Pei, and Micheline Kamber. Data mining: concepts and techniques. Elsevier, 2011.	**Prescribed books required**	**. 1**
• Ponniah, Paulraj. Data warehousing fundamentals for IT professionals. John Wiley & Sons, 2011. • Kimball, Ralph, and Joe Caserta. The Data WarehouseÂ ETL Toolkit: Practical Techniques for Extracting, Cleaning, Conforming, and Delivery Data. John Wiley & Sons, 2011.	**References Main(Sources)**	**. 2**
• Kimball, Ralph, and Margy Ross. The data warehouse toolkit: the complete guide to dimensional modeling. John Wiley & Sons, 2011.	**Books And references Which Recommended With it) , Magazines Scientific ,Reports(...**	**- a**
Locations Scientific Sober	**,References electronic Locations The Internet ....**	**- B**

Plan Development The decision Academic	12
• Addition or Delete Vocabulary For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision	

The stage Fourth

1- Advanced website programming
2- operating system
3- Digital image processing
4- Distributed systems
5- Algorithms
6- Computer and network security
7- Mobile applications
8- Cloud Computing
9- graduation project
10- The Internet of things
11- Systems analysis and design
12- English language

Model Description The decision

Description of the course: Programming Locations Advanced electronics programming) (Advanced website

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
electronics Advanced Programming Locations	Name of the rapporteur	. 3
work hours My presenceMy view And practical(	Shapes Attendance available	. 4
Chapter Academic the first/The stage The fourth	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7

Goals The decision	. 8
• Aims This The decision To Supply The student With a look General About Programming Locations Electronic.	
• It is possible The student From Design Pages Web Developed From During A group Complete From Languages Programming.	
• It is possible The student From Program it Pages The web From During A group From Languages Programming.	
• It is possible The student From Design Pages Web You work With Rules Data relational stored On The Internet.	
• It is possible The student From Knock Building Rules Data Effective For applications The web And update it Through The Internet.	
• It is possible The student From Dealing With EnvironmentClient-Server	
Outputs The decision And ways Education And learning And evaluation:	. 9
Objectives Knowledge: - a	
1 . Enable The student From Knowledge Types And Basics Design And Programming Locations Through Internet And the web.	
2 . Enable The student From Knowledge Languages necessary To design And programming Different Types Locations Through The Internet.	
3 . Enable The student From Knowledge Jobs Basic Which Availability Different Languages Design And Programming Private On the web	

. Enable The student From Building Locations It works 4 Effectively Through The Internet.
Objectives Marathi Private - B By decision:
. Iksaab The student Skills Software Especially Programming 1 Locations On The Internet.
. Iksaab The student Skills In Update Programs And discovery And specify Errors 2 Software And how Treating it.
. Iksaab The student Skill Analysis The logical one To structure it Rules 3 Connected data On sites Electronic
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For a purpose Statement Ideas Main for the topic.
. Guidance The request To Some Locations Electronic 2 For benefit From her.
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 3 Household.
. A contract Research sessions It is done From During it Explanation And analysis 4 Some Problems A state Ijad Solutions For him.
Ways Evaluation
. Action Tests Theory In The hall Academic 1) daily, monthly, (final)
. Subtract Questions And inquiries Oral On The request For a 2 statement Extent Their response.

. Organize The request In a way Totals And their cost Completely Requirements 3 Building System Certain And evaluation Percentage Their achievement For that Work.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From The decision From During Faith 1 Importantly The decision In The process Educational And in Field Specialization In a way General.
. Ability The student To work On performance Duties And deliver 2 it In The appointment The decision.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
. Thinking The logical one In Study Sides The problem And find Solutions 5 appropriate For her.
. Development Ability The student On Dialogue 6 and discussion.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration Lecture on A form that works The student 2 He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization Keep 3 up Standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings 4 Specific.
. Discussion And participation Effective In Hall 5 The lesson.
. It is considered Tests Now , The quarterly And the final About Commitment 6 And collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With 6 Means Technology.
. Development Ability The student On Dealing 7 With Internet.
. Development Ability The student is on Learn Knock And methods Development 8 Personal Why? After The decision.
. Development Ability The student On Dialogue 9 And discussion.
. Development spirit Creativity And perseverance And search 10 About New In Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General And discussion	Theoretical + practical	Html Introduction	HTML Language/Design Language	4	The first

Questions General A discussion or an exam that I	Theoretical + practical	HTML Elements	HTML Language	4	The second
Questions General And discussion	Theoretical + practical	HTML Elements	HTML Language	4	Third
Exam I am	Theoretical + practical	HTML List	HTML Language	4	Fourth
Questions General A discussion or an exam that I	Theoretical + practical	HTML Forms	HTML Language	4	Fifth
Questions General And Discussion	Theoretical + practical	HTML Table	HTML Language	4	Sixth
Questions General	Theoretical + practical	HTML Attributes	HTML Language	4	Seventh
Duties group	Theoretical + practical	Introduction/Styling	CSS Language/Format Language	4	Eighth

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
		HTML With CSS			
Questions General	Theoretical + practical	Elements and Functions in CSS	CSS Language	4	Ninth
Exam Monthly	Theoretical + practical	Elements and Functions in CSS	CSS Language	4	Tenth
Questions General	Theoretical + practical	Programming Basics Identifiers/ Data Types /Arithmetic Operators/ Comparison Operators/ Logical Operators	Java Script/ Programming Language	4	Eleventh
Discussion and Exam I am	Theoretical + practical	Conditional Sentences	JavaScript	4	The second Ten
Questions General	Theoretical + practical	Repetition Loops	JavaScript	4	Third Ten
Duties group	Theoretical + practical	Arrays	JavaScript	4	Fourteenth
Discussion	Theoretical + practical	Functions	JavaScript	4	Fifteenth

Structure Infrastructure			. 11
	Prescribed books required	. 1	
	References Main (Sources)	. 2	
• Puntambekar, AA, 2020. Internet Programming. Technical Publications. Grove, R. F., 2009. Web Based Application Development. Jones & Bartlett Publishers.	Books And references Recommended scientific) journals) , ,Reports(...	- a	
Locations Scientific Sober	References ,electronic Internet sites	- B	

Plan Development The decision Academic	**.12**
• **Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10%** • **Keeping up Development The result In ways and means Miscellaneous For the decision**	

Model Description The decision

Description of the course: Organization Distributed systems) (Distributed

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of Wasit University/ College Science Computer And technology Information	**The institution Educational**	**. 1**
Section Science Computer	**Section University/ The center**	**. 2**
Organization Distributed	**Name of the rapporteur**	**. 3**
Attendance time) Theoretical and practical(	**Shapes Attendance available**	**. 4**
Chapter Academic the first/The stage Fourth	**Chapter/ year**	**. 5**
hours 45	**Number Hours Academic(total)**	**. 6**
0 1/3/4 202	**Date Preparation This Description**	**. 7**
Goals The decision		**. 8**
• **Application Knowledge With technologies And methodologies Systems Distributor.**		
• **Explanation Design And development Systems Distributor And its applications**		
• **Use Application Knock And algorithms Science Computer Basic In Development Systems Distributor And its applications Systems Distributor.**		
• **Different knowledge Concepts And the mechanisms used In Building Networks Contact Between Different Types Systems Distributor .**		
Outputs The decision And ways Education And learning And evaluation:		**. 9**
Objectives Knowledge:		**- a**
Recognition On Vocabulary Article The organization Distributor		

Recognition On administration Operations In Systems Distributor
Recognition On Different Algorithms used To contact Between Systems Distributor
Ways Education And learning
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.
. Use Device Computer In implementation 2 Programs.
. Guidance Students To Some Locations Electronic For 3 benefit From her.
. Cost The student By implementing A group From Programs 4 In Laboratories The process.
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 5 Household.
Ways Evaluation
. Implementation Duties Daily 1.
. Tests Daily And monthly And the final 2.
. Participation In Hall The lesson 3.
. Maintenance On Attendance 4.

Objectives Existentialism And value.	**-C**
Encouragement Students On Benefit From The decision From During Faith Importantly 1 The decision In The process Educational And in Field Specialization In a way General.	
Enhancement Cooperation Between Students From During 2 Execution of duties The process.	
Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.	
Encouragement The request And raise spirit 4 Competition Among them.	
Ways Education And learning	
. Giving Activities group Importance From During Customize Degrees On Activities 11 group	
. Enable The student From Process Connecting Between 12 side Theoretical And practical.	
Ways Evaluation	
. Participation Effective In Hall The lesson Evidence Commitment 19 The student And you carry it Responsibility.	
. Commitment On time specified In Submission Duties 20 And research.	
. It is considered Tests Now , The quarterly And the final About Commitment And 21 collection Cognitive.	
Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	**- Dr**
. Skill Education Self And Contact 25.	
. Skill administration Time And Data 26 .	
. Skill administration Individuals And 27 Motivate them.	
. Skill Work Within A group 28.	

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
General questions and discussion And an exam	**Look**	**?What are the systems Distributor**	**Definition The system Distributor**	**2**	**The first**
Questions General And discussion And an exam	**Look**	**Types Systems Distributor**	**Definition The system Distributor**	**2**	**The second**
Questions General And discussion And an exam	**Look**	**Architectural Systems Distributor**	**Definition The system Distributor**	**2**	**Third**
Questions General And discussion	**Look**	**Management Self In Systems Distributor**	**Definition The system Distributor**	**2**	**Fourth**

And an exam					
Questions General And discussion And an exam	Look	Operations in systems Distributor	Operations	2	Fifth
Questions General And discussion And an exam	Look	Communications basics In Systems Distributor	Operations	2	Sixth
Questions General And discussion And an exam	Look	Messages The wave In Communications	Operations	2	Seventh
General questions and discussion And an exam	Look	Naming And knowledge And the address	Operations	2	Eighth
Questions General And discussion And an exam	Look	Sync in Systems Distributor	Operations	2	Ninth
Questions General And discussion And an exam	Look	Basics Consistency And repetition	Operations	2	Tenth
Questions General And discussion And an exam	Look	Reliability Contact Between Server And the customer	Communications Systems Distributor	2	1st Ten
Questions General And discussion And an exam	Look	Introduction In Security Systems Distributor	Communications Systems Distributor	2	The second Ten

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General And discussion And an exam	Look	Systems Document To Objects Distributor	Communications Systems Distributor	2	Third Ten
General questions and discussion And an exam	Look	Systems Files Distributor	Communications Systems Distributor	2	Fourteenth
Questions General And discussion And an exam	Look	Systems List On Coordination Distributor	Communications Systems Distributor	2	Fifth Ten

Structure Infrastructure		.11
Principles Systems Distributor And its models	Prescribed books required	. 1
Principles Systems Distributor And its models	References Main(Sources)	. 2
IEEE Access	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet	- B

Plan Development The decision Academic	.12
• Addition or Delete items For the curricula Within Development Scientific The result In Every decision And in proportion No Exceeds 10% • Keeping up Development Obtained through methods and means Miscellaneous For the decision	

Model Description The decision

Description The decision: (Algorithms) (Algorithms

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	.1
Section Science Computer	Section University/The center	.2
Analysis And design Algorithms	Name of the rapporteur	.3
Attendance time(Theoretically and practically)	Shapes Attendance available	.4
Chapter Academic The first/The stage The fourth	Chapter/year	.5
An hour 45	Number Hours Academic(total)	.6
0 1/3/4 202	Date Preparation This Description	.7
Goals The decision		.8
Outputs The decision And ways Education And learning And evaluation:		.9
a- Objectives Knowledge :		
. Definition With algorithms 1.		
2 Application of concepts Algorithms .		
Realization Importance Algorithms In Life The process. 3		
. Analysis Algorithms And prefer it On Some 4.		
. Design Algorithms In a way Professional 5		
B- Objectives Marathi Private By decision:		
. The ability to Summary The share Academic. 1		
. The ability to Read The share Academic And he understood it. 2		
. Capacity For discussion Inside The share 3		

Academic.
. The ability to write Reports and programs Computer Private By 4 academic session.
Ways Education And learning
Supply The student With vocabulary The main one And Help related By design And analysis Algorithms Student prompt With reports Know it Self Pray for him For vocabulary Algorithms Translation Some Algorithms To Programs His computer.
Ways Evaluation
Duties Home, daily exams, surprise exams, monthly exams , exams End The course

C- Objectives Existentialism And value.
. 1 Work In spirit The group .
Commitment With ethics Profession And practice side ,2 Educational Safely.
Capability On reading The decision ,3 Academic.
Capability On Solution Duties Home With his ,4 enthusiasm.
Ways Education And learning
Work Workshops For students And Play Roles And ,1 Discussion And Expression The heat.
. Respect Opinion The other And Freedom And Etiquette Expression About Opinion 2 Personal And Etiquette Discussion.
Estimate Personal And Feeling competent And Ability On Solution ,3 Duties Home.
. Encouragement The student On Submission Ideas In the field Specialization Keep 4 up Standards Quality In Service The community.
Use Means Clarification Important In The lecture For ease Receipt Article And increase 5 Understanding And connectivity Between Topics.
Ways Evaluation
· Freedom In Start Destinations Look Different And 1 Participation In Discussions.
. Help In Solution Duties Home 2.
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.
Development Ability The student On Dealing with Means 31 Technology Modern.
Development Ability The student On Dealing 32 With Internet.
Development Ability The student is on Learn Knock And methods 33 Development Personal Why? After The decision.
Development Ability The student On Dialogue 34 And discussion.
Development spirit Creativity The example of the student And search 35 About What's new in Field His work.
Development Estimate Work And carry 36 Responsibility And commitment.
Development Respect Time And time In Achievement 37 And implement Business.

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Elsa Aat	The week
Exams	Lectures	general vocabulary	The general structure of the subject and the study vocabulary	2	The first
Exams	Lectures	Introduction to the article adopt scheme	Define algorithms, their properties, and how to write. write them	2	The second
			Know the		

Exams	**Lectures**	**Calculate the of the algorithm in terms of time and steps**	**complexity of the algorithm in terms of time and execution**	**2**	**Third**
Exams	**Presently** T	**Recursion**	**Recursion**	**2**	**Fourth**
Exams	**Lectures**	**Solve the assessment methods in the previous 3 lecture. lecture**	**Study all previous lectures with homewor**	**2**	**Fifth**
Exams	**Lectures**	**Sorting, selection, insertion algorithms**	**Sorting, selection, insertion algorithims with examples and HW**	**14**	**Sixth-Twelfth**
Exams	**Presently** T	**Programmatically represent the tree**	**Programmatically represent the tree**	**4**	**Third Ten - Fourth Ten**

Structure The decision:					.10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Elsa Aat	The week
			Summer exam	2	Fifteenth

Structure Infrastructure			.11
Essam yolk, Structures Data, 1002•	Prescribed books required	. 1	
•	References Main(Sources)	. 2	
https:// www.programiz.com/dsa/algorithm https:// www.tutorialspoint.com/data_struc tures_algorithms/index.htm	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a	
https:// www.programiz.com/dsa/algorithm https:// www.tutorialspoint.com/data_struc tures_algorithms/index.htm	,References electronic Locations The Internet	- B	

Plan Development The decision Academic	.12
• Addition Some vocabulary Curricula Within The approach The decision . • Keeping up Development Obtained by means And the methods Miscellaneous For the decision. • Addition Everything He New It is useful for the student To acquire skills New And use Recent sources For development Their capabilities.	

Model Description The decision

Description of the course: Systems Activate System) (Operating

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Systems Activate	Name of the rapporteur	. 3
work hours My presenceMy view And practical(	Shapes Attendance available	. 4
Chapter Academic The first/The stage Fourth	Chapter/ year	. 5
An hour 60	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
Recognition On System Operation And Its importance And its features Benefit Development Continuous For this Systems	•	
And recognition On Tasks System Operation.	•	
Recognition On Structural Operating system.	•	
Recognition On administration Operations And a knock Schedule it.	•	
Recognition On Jobs The task In System Operation.	•	
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	
. Enable The student is from Knowledge 1 Basics Work Systems Operation.		
. Enable The student From Knowledge 2 And they understood Jobs Systems Operation.		
. Enable The student From Knowledge Jobs Basic 3 Which Availability That one Systems.		
Objectives Marathi Private By decision:	- B	
. Aksab The student Skills Dealing With Systems 1 Operation.		
. Aksab The student Knowledge Private With algorithms Schedule 2 Operations In The processor.		
. Iksaab The student Knowledge Private Structurely 3		

Different Systems Operation.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Guidance Students To Some Locations Electronic For 2 benefit From her.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 3 Household.	
. Episodes Discussion To be treated The problems that He 4 faces it The student By decision.	
Ways Evaluation	
. Implementation Duties Daily 1.	
. Tests Daily And monthly And the final 2.	
. Participation In Hall The lesson 3.	
. Maintenance On Attendance 4.	
Objectives Existentialism And value.	**-C**

. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.
. Enhancement Cooperation Between Students From 2 During Implementation of duties.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise 4 spirit Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment 1 The student And you carry it Responsibility.
. Commitment On time specified In Submission 2 Duties And research.
. It is considered Tests Now , The quarterly And the final About Commitment And 3 collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing 1 With Means Technology.
. Development Ability The student On Dealing 2 With Internet.
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.
. Development Ability The student On 4 Dialogue And discussion.
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General and discussion	Look	Introduction to Computer and OS Structure	Introduction to computers and systems Operation And Its structures And Features This organization	4	The first
General questions and discussion or Exam I am	Look	Introduction to Computer and OS Structure	Introduction to computers and systems Operation And Its structures And Features This organization	4	The second

Questions General and discussion	**Look**	Introduction to Computer and OS Structure	**Introduction to computers and systems Operation And Its structures And Features This organization**	**4**	**Third**
Exam I am	**Look**	Introduction to Computer and OS Structure	**Introduction to computers and systems Operation And Its structures And Features This organization**	**4**	**Fourth**
General questions and discussion or Exam I am	**Look**	Process Management	**Learn how to work Process Management And How Its management And Start it And Conditions Stop it**	**4**	**Fifth**
Discussion	**Look**	Process Management	**Learn how to work Process Management And How Its management And Start it And Conditions Stop it**	**4**	**Sixth**
Questions General	**Look**	Threads	**Introduction About theThreads And its types And Synchronize it With Some of them Some**	**4**	**Seventh**
Duties group	**Look**	Threads	**Introduction About the ThreadsAnd Its types And Synchronize it With Some of them**	**4**	**Eighth**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
			Some		
Questions General	**Look**	CPU Scheduling	**Learn how special algorithms work Scheduled One unit Treatment ?Central And What is it The differences Between Every one of them**	**4**	**Ninth**
Discussion	**Look**	CPU Scheduling	**Learn how special algorithms work Scheduled One unit Treatment ?Central And What is it The differences Between Every one of them**	**4**	**Tenth**
Questions General	**Look**	Process Synchronization	**Introduction About Synchronization Operations Inside a unit Treatment Central And How Its management**	**4**	**Eleventh**
Discussion / General questions	**Look**	Process Synchronization	**Introduction About Synchronization Operations Inside a unit Treatment Central And How Its management**	**4**	**Twelfth**
Discussion	**Look**	Deadlocks	**Learn Reasons OccurrenceDeadlocks and how to prevent them from occurring and how to System restore After Its occurrence**	**4**	**Thirteenth**
Duties group	**Look**	Deadlocks	**Learn Reasons OccurrenceDeadlocks And How Prevent Its occurrence And How to restore the system after it ?happens**	**4**	**Fourteenth**
Exam	**Exam**	Exam	**Exam Monthly**	**4**	**Fifth Ten**

Structure Infrastructure			. 11
• OPERATING SYSTEM CONCEPTS by Abraham Silberschatz, Peter Baer Galvin and Greg Gagne. • Operating Systems: Internals and Design Principles by William Stallings	**Prescribed books required**	**. 1**	

	References Main(Sources)	. 2	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a	
Locations Scientific Sober	,References electronic Locations The Internet	- B	

Plan Development The decision Academic	. 12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development Obtained through methods and means Miscellaneous For the decision	

Model Description The decision

Description The decision: Processing Pictures Digital) Processing Image (Digital

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Processing Pictures Digital	Name of the rapporteur	. 3
work hours My presence(Theoretical+ Practical)	Shapes Attendance available	. 4
Chapter Academic The first/The stage Fourth	Chapter/ year	. 5
An hour 45	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7
Goals The decision		. 8
• Recognition On Principles Basic In Processing Pictures Digital.		
• Knowledge Systems Colors used In Pictures Digital.		
• Knowledge Knock Generation Digital images.		
• Recognition On Different Operations Which You are running On Pictures Digital For example Enlarge Pictures digital, Improve Pictures digital, transfers Which You are running On Pictures Digital And Also Knowledge Knock Improve images Digital.		
Outputs The decision And ways Education And learning And evaluation:		. 9
Objectives Knowledge:	- a	
. Definition The student With pictures Digital And System 13 Processing Pictures Digital And Its components Basic.		
. Definition The student In a field 14 Use Pictures Digital.		
. Iksaab The student Knowledge By installation The 15 picture And How Represent it And Store it By calculation.		
. Iksaab Requesting systems Colors used In Pictures And How 16 Transfer From Pictures Colorful To Gray.		
. Definition The student In 17 a way Enlarge the image.		
. Iksaab The student With knowledge 18 Private With improvement Pictures.		
Objectives Marathi Private	- B	

By decision:	
Knowledge By design And Writing And Program development Which Related By treating Pictures.	. 9
. Knowledge By design And Writing And Development Algorithms Which Related By treating Pictures.	10
. Enable The student From Solution The problems associated With programmes Processing Pictures.	11
. Enable The student From Work Within His group To solve Problems associated With programmes Processing Pictures.	12
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 11show) (Data For the purpose of a statement Ideas Main for the topic.	
. Use Device Computer In implementation Programs.	12
. Guidance Students To Some Locations Electronic For benefit From her.	13
. Cost The student By implementing A group From Programs In Laboratories The process.	14
. Cost The student Prepared Reports Brief For some Topics And Execution of duties Household.	15

Ways Evaluation
. Implementation Duties Daily 9.
. Tests Daily And monthly And the final 10.
. Participation In Hall The lesson 11.
. Maintenance On Attendance 12.
C- Objectives Existentialism And value.
. Encouragement Students On Benefit From The decision From During Faith 9 Importantly The decision In The process Educational And in Field Specialization In a way General.
Enhancement Cooperation Between Students From During 0 Execution of duties The process.
Development Energies The idea And creativity I have The request From During 1 Implement them To different Duties.
Encouragement The request And raise spirit 2 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 5 group
. Enable The student From Process Connecting Between 6 side Theoretical And practical.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment The student And 7 you carry it Responsibility.
. Commitment On time specified In Submission Duties 8 And research.
. It is considered Tests Now , The quarterly And the final About Commitment 9 And collection Cognitive And the skills.
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.
. Skill Education Self And Contact 9.
. Skill administration Time And Data 10.
. Skill administration Individuals And 11 Motivate them.
. Skill Work Within A group 12.

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
scussion/ General questions	**Theoretical + practical**	Introduction to Image Processing	**Knowing what the pictures mean Digital And What ?is it Processing Pictures Digital**	**4**	**The first**
Discussion/ Questions General/ Real time test	**Theoretical + practical**	Computer Imaging system	**Knowledge Systems Digital image processing**	**4**	**The second**

scussion/ General questions	**Theoretical + practical**	Digital Image file format	**wledge Types And Structure Image file**	**4**	**Third**
scussion/ General questions	**Theoretical + practical**	Digital Image Representation	**Acting The picture And How Store it In ,Calculator and Sampling Quantization**	**4**	**Fourth**
scussion/ General questions	**Theoretical + practical**	Region Of Interest Image Geometry	**Select Area Attention In the picture**	**4**	**Fifth**
scussion/ General questions	**Theoretical + practical**	Color Image Types	**Types Pictures Digital**	**4**	**Sixth**
scussion/ General questions	**Theoretical + practical**	Basic Retionships between Pixels	**Knowledge Relationships Basic ,between pixels ,commerce**	**4**	**Seventh**

Structure The decision:					. 10
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
			ontact, path, The area and boundaries of the object		
Discussion/ Questions General	**Theoretical + practical**	Image Zooming	**Knowing the ways Enlarge The picture**	**4**	**Eighth**
Discussion/ Questions General	**Theoretical + practical**	Image Zooming	**Knowing the ways Enlarge The picture**	**4**	**Ninth**
scussion/ General questions	**Theoretical + practical**	Arithmetic operation on Image	**rations Sports On the picture**	**4**	**Tenth**
scussion/ General questions	**Theoretical + practical**	Logic operation onImage	**perations The region On the picture**	**4**	**Elev enth**
scussion/ General questions	**Theoretical + practical**	Image Enhancement	**Learn about improving images Digital And Roads used**	**4**	**Twe lfth**
scussion/ General questions	**Theoretical + practical**	Image Edge Detection	**Knock Ejaad Edges Digital images**	**4**	**Thi rtee nth**
Discussion/ Questions General	**Theoretical + practical**	Image Segmentation	**Knock Cutting Pictures Digital**	**4**	**Fourth Ten**
Exam	**Exam Comprehen sive**	**Exam Comprehensive**	**Exam Comprehensive**	**4**	**Fifth Ten**

Structure Infrastructure		. 11
• Rafael C. Gonzalez & Richard E. Wood, "Digital Image Processing", 2/E, Prentice-Hall 2001	**Prescribed books required**	**. 1**
• Scott E. Umbangh, "Computer Vision and Image Processing", Prentice-Hall 1998 • Nick Efford, "Digital Image Processing, a Practical Approach Using Java", Pearson Eduction 2000	**References Main(Sources)**	**. 2**
• John R. Jensen, "Introduction Digital Image", 3/E, Prentice-Hall, 2005	**Books And references Which Recommended With it) , Magazines Scientific ,Reports(...**	**- a**
Locations Scientific Sober	**,References electronic Locations The Internet ....**	**- B**

Plan Development The decision Academic	.12

- **Addition or Delete items For the curricula Within Development Scientific The result In Every decision And in proportion No Exceeds 10%**
- **Keeping up Development Obtained through methods and means**

Miscellaneous For the decision

Model Description The decision

Description The decision: Internet Things things) Of (Internet

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

University of Wasit/ College Science Computer And technology Information	The institution Educational	. 1
Section Science Computer	Section University/ The center	. 2
Internet Things	Name of the rapporteur	. 3
Attendance time (Theoretical and practical(	Shapes Attendance available	. 4
Chapter Academic the second/The stage Fourth	Chapter/ year	. 5
An hour 45	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7

Goals The decision . 8

• It is considered Internet Things (IoT) For example The revolution The next one In Field Computing.It works Billions From Devices Pump Data connected On the Internet Indeed On Change Method Our lives And we worked In a way Radical. Provides This The decision They are deeply For technologies Internet Things. He will learn Students Programming Devices Internet ThingsArduino) And Pi (Raspberry And technologies , Sensor And operation , And protocolsZigbee IoT And 5 , G , NFC ,MQTT , .etc) , network interface design and security implementation, and data science for the Internet IoT, Internet of Things based on Cloud platforms such asIoT Students will be directed toAWS. During practical tasks designed to give them practical experience in the real world, Where they will deploy a Wi-Fi monitoring service A distributed, cloud-based IoT service platform that serves dozens of users Thousands of sensors Pulses The heart , And more From That. He will come out Students From Chapter By teaching Developed In This Sector emerging technology Quickly , And with confidence To implement Tasks Which They will face her Usually In Environments Industrial.

Outputs The decision And ways Education And learning And evaluation: . 9

Objectives Knowledge:	- a
. Enable The student is from 1 Knowledge For technologies Internet Things	
. Enable The student From Learn 2 Programming Devices Internet Things.	
. Enable The student From Knowledge 3 Protocols Internet Things.	

. Supply The student With concepts About Internet Things 4 Document To The cloud Platforms For exampleIoT .AWS	
. Building Networks Approved 5 On Internet Things.	
Objectives Marathi Private By decision:	**- B**
. Iksaab The student Capacity On They are engineering Internet 1 Things And the world Caller.	
. Iksaab The student Possibility Discovery And Use Different Devices And 2 technologies Sensor To build Applications Internet Things.	
. Iksaab The student Skills Building Applications Internet Things In Time The 3 real one To create A world Smart.	
. Iksaab The student Possibility They understand Services cloud available And an 4 interface Programming Applications Communications To develop Cities Memory.	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Guidance Students To Some Locations Electronic For 2 benefit From her.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 3 Household.	

. Episodes Discussion To be treated The problems that He 4 faces it The student By decision.
Ways Evaluation
. Implementation Duties Daily 1.
. Tests Daily And monthly And the final 2.
. Participation In Hall The lesson 3.
. Maintenance On Attendance 4.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.
. Enhancement Cooperation Between Students From 2 During Implementation of duties.
. Development Energies The idea And creativity I have The request From During 3 Implement them To different Duties.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Encouragement The student On Submission Work Creativity In Specialization 3 Complies with standards Quality In Service The community.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment The student And 1 you carry it Responsibility.
. Commitment On time specified In Submission Duties 2 And research.
. It is considered Tests Now , The quarterly And the final About Commitment 3 And collection Cognitive And the skills.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With 1 Means Technology.
. Development Ability The student On Dealing 2 With Internet.
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.
. Development Ability The student On Dialogue 4 And discussion.
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General	Look	Definition and characteristics Internet	Definition and characteristics	2	The first

And discussion		Things	Internet Things		
General questions and discussion or Exam I am	Look	Design Material Internet Things	esign Material Internet of things	2	The second
Questions General And discussion	Look	Design The logical one Internet Things	Design The logical one Internet Things	2	Third
Exam I am	Look	Architectural And protocolsIOT	Architectural And protocols IOT	2	Fourth
General questions and discussion or Exam I am	Look	Platforms Different Internet Things	rms Different Internet of things	2	Fifth
Questions General And Discussion	Look	Examples In Time The actual one Internet Things	Realistic examples Internet Things	2	Sixth

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Questions General	Look	Internet challenges Things	Internet challenges Things	2	Seventh
Duties group	Look	IoT and M2M	IoT and M2M	2	Eighth
Questions General	Look	Model Reference Internet Things	Model Reference Internet Things	2	Ninth
Exam Monthly	Look	Big data And the Internet Things	Big data And the Internet Things	2	Tenth
Questions General	Look	Sensors With Arduino	Devices Sensor With Arduino	2	1st Ten
Discussion and Exam I am	Look	Devices Sensor With Raspberry Bye	Devices Sensor With Raspberry Bye	2	The second Ten
Questions General	Look	Platforms cloud ForIOT	Platforms cloud For IOT	2	Third Ten
Duties group	Look	Cities Memory	Cities Memory	2	Fourteenth
Discussion	Look	Environment As a reminder	Environment As a reminder	2	Fifteenth

Structure Infrastructure		11
• Adrian McEwen, Hakim Casually, ―Designing the Internet of Things‖, John Wiley and Sons 2014. • Francis daCosta, "Rethinking the Internet of Things: A Scalable Approach to Connecting Everything‖, A press publications, 1st Edition, 2013.	Prescribed books required	. 1
•	References Main(Sources)	. 2
•	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet	- B

Plan Development The decision Academic	12
• Addition or Delete Vocabulary For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development The result In ways and means Miscellaneous For the decision	

Model Description The decision

Description of the course: Security Computers And networks security) network and (Computer

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

١.	المؤسسة التعليمية	جامعة واسط / كلية علوم الحاسوب وتكنولوجيا المعلومات
٢.	القسم الجامعي / المركز	قسم علوم الحاسوب
٣.	اسم المقرر	امنية الحواسيب والشبكات
٤.	أشكال الحضور المتاحة	دوام حضوري (نظري وعملي)
٥.	الفصل / السنة	الفصل الدراسي الاول / المرحلة الرابعه
٦.	عدد الساعات الدراسية (الكلي)	60 ساعة
٧.	تاريخ إعداد هذا الوصف	٢٠٢4/3/١0
٨.	اهداف المقرر	
	• التعرف على مفهوم خوارزميات التشفير.	
	• تطوير مهارات الطالب في خوارزميات التشفير.	
	• تطوير مهارات الطالب في التشفير.	
	• التعرف على انواع خورزميات التشفير	
٩.	مخرجات المقرر وطرائق التعليم والتعلم والتقييم:	
	أ- الأهداف المعرفية:	
	١٩. تعريف الطالب مجالات التشفير .	
	٢٠. تعريف الطالب بمجالات استخدام خورزميات التشفير.	
	٢١. اكساب الطالب المعرفة ببناء خورزميات التشفير.	
	طرائق التعليم والتعلم	
	١٦. القاء المحاضرات العلمية في القاعات الدراسية واستخدام ال (Data show) لغرض بيان الأفكار الرئيسية للموضوع.	
	١٧. استخدام جهاز الحاسوب في تنفيذ البرامج.	
	١٨. ارشاد الطلاب الى بعض المواقع الالكترونية للإفادة منها.	
	١٩. تكليف الطالب بتنفيذ مجموعة من البرامج في المختبرات العملية.	
	٢٠. تكليف الطالب بإعداد تقارير مختصرة لبعض المواضيع و تنفيذ الواجبات المنزلية.	
	طرائق التقييم	
	١٣. تنفيذ الواجبات اليومية.	
	١٤. الاختبارات اليومية والشهرية والنهائية.	
	١٥. المشاركة في قاعة الدرس.	
	١٦. المواظبة على الحضور.	
	ج- الأهداف الوجدانية والقيمية.	
	٣ تشجيع الطلاب على الاستفادة من المقرر من خلال الايمان بأهمية المقرر في العملية التعليمية وفي مجال التخصص بشكل عام.	
	٤ تعزيز التعاون بين الطلاب من خلال تنفيذ الواجبات العملية.	
	٥ تنمية الطاقات الفكرية والإبداعية لدى الطلبة من خلال تنفيذهم لمختلف الواجبات.	

Encouragement The request And raise spirit 6 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 7 group
. Enable The student From Process Connecting Between 8 side Theoretical And practical.
Ways Evaluation
. Participation Effective In Hall The lesson Evidence Commitment 13 The student And you carry it Responsibility.
. Commitment On time specified In Submission Duties 14 And research.
. It is considered Tests Now , The quarterly And the final About Commitment And 15 collection Cognitive.
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.
. Skill Education Self And Contact 17.
. Skill administration Time And Data 18 .
. Skill administration Individuals And 19 Motivate them.
. Skill Work Within A group 20.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
[Assessment]		introduction	Key distribution concept	3	The first
		Random number. number generator	Random number. number generator concepts	3	The second
[Familiarity]		Prime number. number and primarily test. test	How to find. find prime. prime number. number	3	Third
[Assessment]		Public key cryptosystem	Public key. key cryptosystem concept	3	Fourth
[Familiarity]		Diffie- Hellman system	Key exchange. exchange secret session key. key	3	Fifth
[Assessment]		Digital signature	How to make digital signature	3	Sixth
[Assessment]		Elgamal cryptosystem	Elgamal cryptosystem concepts	3	Seventh
[Familiarity]		Hash function	How to use hash function to authenticate message.	3	Eighth

[Familiarity]		**Malware:-virus, Trojan horse and worm**	**Malware concepts**	**3**	**Ninth**
[Assessment]		**introduction**	**Key distribution concept**	**3**	**Tenth**
		Random number. number generator	**Random number. number generator concepts**	**3**	**1st Ten**
[Familiarity]		**Prime number. number and primarily test. test**	**How to find. find prime. prime number. number**	**3**	**The secon d Ten**
[Assessment]		**Public key. key**	**Public key. key**	**3**	**Third**

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
		cryptosystem	cryptosystem concept		Ten
[Familiarity]		Diffie- Hellman system	Key exchange secret session key. key	3	Fourteenth
Exam	Exam Comprehensive			3	Fifth Ten

Structure Infrastructure		.11
William Stallings, Cryptography and Network Security: Principles and Practice, 6/E, Pearson Education, Inc., 2014.	Prescribed books required	. 1
Mark Stamp, Information Security Principles and Practice, John Wiley & Sons, 2006	References Main(Sources)	. 2
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet	- B

Plan Development The decision Academic	.12
• Addition or Delete items For the curricula Within Development Scientific The result In Every decision And in proportion No Exceeds 10% • Keeping up Development Obtained through methods and means Miscellaneous For the decision	

Model Description The decision

Description of the course: Computing cloud Computing) (Cloud

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

of Wasit University/ College Science Computer And technology Information	The institution Educational	. 1
Systems Department Information Computer	Section University/ The center	. 2
Computing cloud	Name of the rapporteur	. 3
Attendance time) Theoretical and practical(	Shapes Attendance available	. 4
Chapter Academic The second/The stage Fourth	Chapter/ year	. 5
An hour 45	Number Hours Academic(total)	. 6
0 1/3/4 202	Date Preparation This Description	. 7

Goals The decision . 8

- Aims This Course To Supply Students At a glance General About Concepts And basics Computing Cloud.Includes

Topics Which It will happen Eating it: Concepts General Models Computing cloud ,basics Computing cloud

,Cloud computing architecture and management, cloud deployment models technology drivers Method for cloud computing, models Service cloud , simulation Default , Models Programming Private By computing cloud, software development In cloud, Networks For computing cloud Provided Services cloud , Support Open Source

For the cloud Security In Computing cloud, Concepts Advanced In Computing Cloud.

Outputs The decision And ways Education And learning And evaluation: . 9

Objectives Knowledge:	- a
. Enable The student From Knowledge 1 Basics Computing Cloud.	
. Enable The student From Knowledge 2 Architectural Computing Cloud.	

. Enable The student From Knowledge Jobs Basic Which 3 Availability Computing Cloud.	
. Enable The student From Knowledge 4 Simulation The default.Virtualization	
Objectives Marathi Private By decision:	**- B**
. Iksaab The student Skill Building Network Computer 1 And how Sustain it.	
. Iksaab The student Skill Convert Simulation Computing Cloud About A way 2 Simulator NetworksPacket Cisco .Tracer	
. Iksaab The student Skills Simulation The default 3 Virtualization .	
Ways Education And learning	
. Meeting Lectures Scientific In Halls Academic And use the 1show) (Data For the purpose of a statement Ideas Main for the topic.	
. Guidance Students To Some Locations Electronic For 2 benefit From her.	
. Cost The student Prepared Reports Brief For some Topics And Implementation Duties 3 Household.	
. Episodes Discussion To be treated The problems that He 4 faces it The student By decision.	
. Guidance Students To Some Locations Electronic For 5 benefit From her.	
Ways Evaluation	
. Implementation Duties Daily 1.	
. Tests Daily And monthly And the final 2.	

. Participation In Hall The lesson 3.
. Maintenance On Attendance 4.
Objectives Existentialism And value. -C
. Encouragement Students On Benefit From decided by During Faith Importantly The 1 decision In The process Educational And in Field Specialization In a way General.
. Enhancement Possibilities The student In 2 Thinking The logical one.
. Development Energies The idea And creativity From During Enhancement Ability 3 Search and Survey And Analysis And Deduction.
. Encouragement The request And raise spirit 4 Competition Among them.
Ways Education And learning
. Giving Activities group Importance From During Customize Degrees On Activities 1 group
. administration The lecture On A form that works The 2 student He feels Importantly Time.
. Enable The student From Process Connecting Between 3 side Theoretical And practical.
. Encouragement The student On Submission Work Creativity In Specialization 4 Complies with standards Quality In Service The community.
Ways Evaluation
. Commitment In attendance For a hall The lesson And finish Business The taxpayer 1 With itDuties and reports (Within Timings Specific.
. Discussion And participation Effective In Hall 2 The lesson.
Skills Public And qualification movable) Skills Others related Capable - Dr Employment And development Personal(.
. Development Ability The student On Dealing With 1 Means Technology.
. Development Ability The student On Dealing 2 With Internet.
. Development Ability The student is on Learn Knock And methods Development 3 Personal Why? After The decision.
. Development Ability The student On Dialogue 4 And discussion.
. Development spirit Creativity And perseverance And search 5 About What's new in Field His work.

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
Discussion/ Questions General	Look	Introduction In Models Computing cloud	General concepts Models Computing cloud	2	The first
Questions General/ iscussion/ My exam	Look	Basics Computing cloud	Basics Computing cloud	2	The second

Questions General/ Discussion	Look	Architectural Computing cloud And its management	Architectural Computing cloud And its management	2	Third
Exam I am	Look	Publication models The cloud	Publication models The cloud	2	Fourth
General questions/ discussion/ Exam I am	Look	ves Technology For cloud computing	tives Technology For cloud computing	2	Fifth
Questions General/ Discussion	Look	Service models cloud	Service models cloud	2	Sixth
Questions General	Look	Simulation Default	Simulation Default	2	Seventh
Duties group	Look	Programming models Private By cloud computing	Programming models Private By cloud computing	2	Eighth
Questions General	Look	Development Software In The cloud	Development Software In The cloud	2	Ninth
Exam Monthly	Look	Networks For computing cloud	Networks For computing cloud	2	Tenth
Questions General	Look	Service providers cloud	Service providers cloud	2	1st

Structure The decision:					. 10
Method Evaluation	Method Education	Name Unit/or Topic	Outputs Learning required	Hours	The week
					Ten
iscussion/ My exam	Look	Support Open Source For the cloud	Support Open Source For the cloud	2	Twelfth
Questions General	Look	Security In Computing cloud	Security In Computing cloud	2	Third Ten
Duties group	Look	Concepts Advanced In Computing Cloud.	Concepts Advanced In Computing Cloud.	2	Fourth Ten
Discussion	Look	Concepts Advanced In Computing Cloud.	Concepts Advanced In Computing Cloud.	2	Fifth Ten

Structure Infrastructure		. 11
• "Essentials of Cloud Computing", K Chandrasekaran, 2014 • "Cloud Computing For Dummies", Judith S. Hurwitz , Robin Bloor , Marcia Kaufman ,Fern Helper, 2009	Prescribed books required	. 1
	References Main(Sources)	. 2
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	- a
Locations Scientific Sober	,References electronic Locations The Internet....	- B

Plan Development The decision Academic	. 12
• Addition or Delete items For the curricula Within Development Scientific obtained in Every decision And in proportion No Exceeds 10% • Keeping up Development Obtained through methods and means Miscellaneous For the decision	

Model Description The decision

Description The decision: English 4) (English

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

١.	المؤسسة التعليمية	جامعة واسط / كلية علوم الحاسوب وتكنولوجيا المعلومات
٢.	القسم الجامعي / المركز	قسم علوم الحاسوب
٣.	اسم المقرر	إنكليزي 4
٤.	أشكال الحضور المتاحة	الدوام الحضوري (الفرع)
٥.	الفصل / السنة	الفصل الدراسي الثاني / المرحلة الرابعة
٦.	عدد الساعات الدراسية (الكلي)	٣٠ ساعة
٧.	تاريخ إعداد هذا الوصف	٢٠٢٤/3/١٠
٨.	اهداف المقرر	
	•	تعلم المهارات الأساسية للغة الإنكليزية
	•	تعلم اساسيات مهارة القراءة
	•	تعلم اساسيات مهارة الكتابة
	•	القدرة على الأصغاء
	•	فهم المعاني واضافة مفردات جديدة
	•	تعلم التكلم والمناقشة باستخدام مفردات اللغة
٩.	مخرجات المقرر وطرائق التعليم والتعلم والتقييم:	
	أ-	الأهداف المعرفية:
		١. القدرة على قراءة نصوص اللغة بشكل صحيح
		٢. القدرة على كتابة فقرات بشكل مترابط
		٣. القدرة على وصف مكونات اي موضوع
		٤. القدرة على وصف مخططات بشكل فقرات مترابطة
	ب-	الأهداف المهاراتية الخاصة بالمقرر:
		١. اكتساب المهارة على المناقشة باستخدام مفردات اللغة
		٢. تنمية مهارات الطالب للعمل ضمن فريق وفهم الواجبات الخاصة وانجازها ضمن مدة
	طرائق التعليم والتعلم	
		١. إدارة المحاضرة على نحو يشعر بأهمية الوقت.
		٢. تكليف الطالب ببعض الأنشطة والواجبات الجماعية.
		٣. تخصيص نسبة من الدرجة للأنشطة الجماعية.
	طرائق التقييم	
		١. المشاركة الفاعلة في قاعة الدرس دليل التزام الطالب وتحمله المسؤولية.
		٢. الالتزام بالموعد المحدد في تقديم الواجبات والبحوث.
		٣. تعبر الاختبارات الفصلية والنهائية عن الالتزام والتحصيل المعرفي والمهاري.
	ج-	الأهداف الوجدانية والقيمية.
		١. تطوير قدرة الطالب للعمل على أداء الواجبات وتسليمها في الموعد المقرر.

Development Ability The student On Dialogue And discussion.	**. 2**
Ways Education And learning	
Giving activities group Importance From During Customize Degrees On Activities The group.	**. 1**
administration The lecture On Shape It works The student He feels Importantly Time.	**. 2**
Encouraging the student On Submission Work Creativity In Specialization Keep up Standards Quality In Service The community.	**. 3**
Ways Evaluation	
Commitment In attendance For a hall The lesson And finish Business The taxpayer With itDuties and reports (Within Timings Specific .	**. 1**
Discussion And participation Effective In Hall The lesson.	**. 2**
Method of interrogation And that About A way Show Questions Related With the material Scientific In The hall Academic.	**. 3**
Dr- Skills Public And qualification movable) Skills Others related Capable Employment And development Personal(.	
This Article I will Build In The student Capacity On Thinking And communication Between him And between His colleagues others In Same The subject and other materials, and this is very important to improve the students' relationship with each other. The student will also develop his ability to think and Use Language English In Communication With others Whether It was That Inside His surroundings or In Various End The world.	**. 1**

Structure The decision:					**. 10**
Method Evaluation	**Method Education**	**Name Unit/or Topic**	**Outputs Learning required**	**Hours**	**The week**
Questions General And discussion	**Look**	Getting to Know you		**2**	**The first**
Questions General And discussion Or an exam I am	**Look**	The way. way we live		**2**	**The second**
Questions General And discussion	**Look**	It all went wrong		**2**	**Third**
Exam I am	**Look**	Let's go. go shopping. shopping		**2**	**Fourth**
Questions General and discussion	**Look**	What do. do you want to do?		**2**	**Fifth**

Questions General And Discussion	**Look**	Tell me! What's it like?		**2**	**Sixth**
Questions General	**Look**	Case studies or exercises: test, revision, more examples		**2**	**Seventh**
Group assign ments	**Look**	Present Perfect, Fame		**2**	**Eighth**
Questions General	**Look**	Do's and don'ts		**2**	**Ninth**
Questions General	**Look**	Going Places(Time clauses)		**2**	**Tenth**
Questions General	**Look**	Scared to death (Verb Patterns)		**2**	**1st Ten**
Discuss ion and examin ation I am	**Look**	Things that Changed the world		**2**	**Twe lfth**
Questions General	**Look**	Earning a living		**2**	**Third Ten**
Duties group	**Look**	Family ties		**2**	**Fourt h Ten**
Discussion	**Look**	Case studies or exercises: Test, exercises, revision.		**2**	**Fiftee nth**

Structure Infrastructure			11
• Soars & John, (2006). New Headway plus (Pre-Intermediate)Oxford University Press.	**Prescribed books required**	**. 1**	
	References Main(Sources)	**. 2**	
	Books And references Which Recommended With it) , Magazines Scientific ,Reports(...	**- a**	
Locations Electronic Specialized	**,References electronic Locations The Internet....**	**- B**	

Plan Development The decision Academic	12
• **Addition or Delete Vocabulary For the curricula Within Development The result In Every decision And in proportion Do not exceed.% 10** • **Keeping up Development The result In ways and means Miscellaneous For the decision Addition Everything He New It is useful for the student To acquire Skills New And keep up Development The result.**	