



وزارة التعليم العالي والبحث العلمي
جامعة الانبار
كلية علوم الحاسوب وتكنولوجيا
المعلومات



ΓΓΓΟΑÜÐÐΗ ΤΦΝΟΨΟΗ Κ Ε Βγ İ
دليل مسار بولونيا
2025-2024

Module Description
Form

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Structured programming I		Module Type	TYPE C
Module Code	ISSP101	ECTS Credits		8
Module Level	UGI	Semester of Delivery		One
Administering Department	IS	Faculty	CSIT	
Module Leader	Mahmoud Hilal	e-mail	mah2005hilal@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	1.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Learn how to use the Advanced Tools helps programmers write fast, portable programs The main principles of programming and the development of programming languages Learn the principles of Structure programming
Module Learning Outcomes	A1- Knowledge and understanding A2. Learn algorithms A3. Learn flowcharts

	A4. Learn structured programming A5. Learn Python programming
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.4
Unstructured workload (h/w)	8
Total workload (h/w)	13.4

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?

Required Texts	"Starting Out with Python plus My Programming Lab with Pearson Text --Access Card Package (3rd Edition) Tony Gaddis ISBN-13: 978-0133862256"	Yes/No
Recommended Texts		Yes/No
Websites		

Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
First	3 h.	Programming principles	Overview to Programming Language	Explain Menu, Getting Started with python	
Second	3 h.	Algorithms	Algorithms and Flow Charts	Algorithms and Flow Charts	
Third	3 h.	Introduction to Programming	Storing and Manipulating Values Calling Functions Comments Formatting Values Working with Strings Exercises	Storing and Manipulating Values Calling Functions Comments Formatting Values Working with Strings Exercises	Quiz
Fourth	3 h.	Unary Operators	Unary Minus Increment and /decrement Operators.	Program of Unary Minus Increment and /decrement Operators.	
Fifth	3 h.	Operational Operators	Operational Assignment Operators Relational Operators Logical Operators. Bitwise Operator Logical Operators. Bitwise Operator	Program Operational Assignment Operators Relational Operators Program Logical Operators. Bitwise Operator	
Sixth	3 h.	Selection Statements	Boolean Logic If Statements If-Else Statements	Programs in Lectures	Quiz
Seventh	3 h.	Selection Statements	If-Elif Statements If-Elif-Else Statements Nested If Statements	Programs in Lectures	

Ninth	3 h.	To evaluate the students	Monthly exam		By exam
Ninth	3 h.	Repetition	While Loops		By exam
Tenth	3 h.	Repetition	For Loops	Programs in Lectures	
Eleventh	3 h.	Repetition	Nested Loops Exercises	Programs in Lectures	
Twelfth	3 h.	Functions	Functions with Parameters Variables in Functions	Programs in Lectures	
Thirteenth	3 h.	Functions	Return Values	Programs in Lectures	
Fourteenth	3 h.	Functions	Importing Functions into Other Programs Exercises	Programs in Lectures	
Fifteenth	3 h.	To evaluate the students	Monthly exam		By exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information					
Module Title	Fundamental of Information Technology			Module Type	TYPE C
Module Code		ISFI102	ECTS Credits		6
Module Level		UGI	Semester of Delivery		One
Administering Department		IS	Faculty	CSIT	
Module Leader	Mohanad Abdulsalam Younis gedan		e-mail	mohanad.abdul@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	Module Leader's Qualification		Ph. D
Module Tutor			e-mail		
Peer Reviewer Name		/	e-mail	/	
Review Committee Approval		DD/MM/YY	Version Number		2.0

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	- Provide a basic knowledge of computer hardware and software - Introduce the business areas to which computers may be applied. - Provide an introduction to business organization and information systems. - Develop the skills in network & communication, which play an important part in business computing and information processing.
Module Learning	A-Knowledge and Understanding

Outcomes	A1. The student should understand the architecture of any IT systems. A2. The student should understand the parts of hardware. A3. The student should understand the system software. A4. The student should understand the architecture of networks, protocols and communications devices.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.4
Unstructured workload (h/w)	5.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction of Computers and Programming
Week 2	Brief history of computer
Week 3	Generation of Computers & Computer hierarchy
Week 4	Basic Computer Components
Week 5	Computer function (fetch cycle, interrupt cycle, I/O function)
Week 6	Semiconductor main memory (RAM, ROM, CACHE)
Week 7	Mid-Term Exam
Week 8	Computer Software (application software)
Week 9	External & Internal memory
Week 10	Telecommunications system & Network
Week 11	Topology of a network
Week 12	Layering model
Week 13	Protocols
Week 14	addressing communications

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Logic Design I		Module Type	TYPE C
Module Code	ISLD103	ECTS Credits		6
Module Level	UGI	Semester of Delivery		One
Administering Department	IS	Faculty	CSIT	
Module Leader	Muntaser Abdulwahed Salman Abdulaziz	e-mail	Co.montasser.salman@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD.
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	-The student should understand number systems and codes and the conversion between them. -The student should understand the Boolean expression and how to apply it. -The student should recognize among different logic gates and how to use them. -The student should understand how to design a logic circuit. -The student should understand using K-map for simplification.

Module Learning Outcomes	A-Knowledge and Understanding A1. The student should understand number systems and codes and the conversion between them. A2. The student should understand the Boolean expression and how to apply it. A3. The student should recognize among different logic gates and how to use them. A4. The student should understand how to design a logic circuit. A5. The student should understand using K-map for simplification
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	6.4
Unstructured workload (h/w)	3.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction to number system
Week 2	Conversion between systems
Week 3	Codes and conversion between them
Week 4	Boolean expression
Week 5	Logic gates
Week 6	Logic gates design
Week 7	Mid-Term Exam
Week 8	NAND gates
Week 9	NOR gates
Week 10	Sum of product form
Week 11	Product Of sum form
Week 12	Product Of sum form
Week 13	K-map

Week 14	K-map
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Mathematic I		Module Type	TYPE B
Module Code	CCIT060	ECTS Credits		6
Module Level	UGI	Semester of Delivery		One
Administering Department	IS	Faculty	CSIT	
Module Leader	Muhammad Rabie	e-mail	mohammed.rabeea@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD.
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	A - Understand the concept of mathematics, its methods and applications. B - Explain the concept of derivatives and integration and their applications. C - Understand the relationship between extracts and integration and the real problems and how to deal with them
Module Learning Outcomes	A-Knowledge and Understanding A 1. Acquiring the ability and skill to distinguish the bases of derivatives methods and dealing with them A 2. Acquire the capabilities and skills of applications of derivatives

	A3. Dealing with different methods of finite and indefinite derivatives B. Subject-specific skills B1. Summer Training B2. Fourth year projects B3. Scientific projects
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.3
Unstructured workload (h/w)	6.7
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	The Definition of the Derivative Interpretation of the Derivative
Week 2	Properties of Derivative , Some laws of derivatives
Week 3	Properties of Derivative , Some laws of derivatives
Week 4	Derivatives of the six trig functions
Week 5	Exponential Functions, Logarithm Functions
Week 6	Inverse Sine, Inverse cosine, Inverse tangent, Alternate Notation
Week 7	Mid-Term Exam
Week 8	Inverse Sine, Inverse cosine, Inverse tangent, Alternate Notation
Week 9	These are the six hyperbolic trig Functions .and They are defined as
Week 10	There are two forms of the chain rule
Week 11	Defined , formula, and used the chain rule
Week 12	first derivative, second derivative, third derivative.
Week 13	the properties of logarithms

Week 14	Introduction, Critical Points and Minimum and Maximum Values
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	English (1)		Module Type	TYPE S
Module Code	UOA003	ECTS Credits		2
Module Level	UGI	Semester of Delivery		One
Administering Department	IS	Faculty	CSIT	
Module Leader	Akeel Abdulraheem Thulnoon Zoead	e-mail	akeelalhadithy@uoanbar.edu.iq	
Module Leader's Acad. Title	Assistant Professor	Module Leader's Qualification		PhD.
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Enhancing English speaking, reading and writing Memorize a big number of vocabularies Helping students to deal with the English language in easier ways
Module Learning Outcomes	A1. Reading A2. writing A3. Speaking. A4. Listening B. Subject-specific skills

	B1. Learn scanning and skimming skills in reading B2. Right pronunciation B3. Vocabularies
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	2.34
Unstructured workload (h/w)	4.34
Total workload (h/w)	6.68

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the

		Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Unit 1: Hello
Week 2	Unit 2: Your world
Week 3	Unit 3: All about you
Week 4	Unit 4: Family and friends
Week 5	Unit 5: The way I live
Week 6	Unit 6: Every Day
Week 7	Mid-Term Exam
Week 8	Unit 7: My favourites
Week 9	Unit 8: Where I live
Week 10	Unit 9: Times past
Week 11	Unit 10: we had a great time!
Week 12	English for Computer Science
Week 13	Listening
Week 14	Revision of most important topics in the subject
Week 15	Preparatory Week

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	الحريات وحقوق الانسان		Module Delivery
Module Type	S		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	UOA005		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	1	Semester of Delivery	
Administering Department	IS	College	Type College Code
Module Leader	Name	e-mail	E-mail
Module Leader's Acad. Title		Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	أ. تعليم الطلبة على أساسيات حقوق الإنسان وقوانينها. ب. التعرف على الحقوق وأهم الإشكاليات والتحديات التي تواجهها ج- تحديد وفهم المفاهيم المتعلقة بالحريات، بما في ذلك الحقوق الفردية والحريات الشخصية. د. تنمية القدرة على التفكير النقدي حول القضايا المتعلقة بالحريات والحقوق الفردية.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- أن يعرف الطالب مفهوم الحقوق وقوانينها وتطبيقاتها . 2- أن يعرف الطالب كيفية المشاركة في نشر الحقوق وتطبيقها بالعمل الواقعي الحقيقي. 3- القدرة على استخدام الحقوق وسيلة من أجل التعايش السلمي بين مكونات المجتمع وجميع المخلوقات . 4- القدرة على مشاركة الآخرين في نشر هذه الحقوق . 5- القدرة على تحليل وتعريف مفهوم الحرية والتمييز بين أنواع مختلفة من الحريات. 6- التفاعل مع قضايا الحريات على الصعيدين الوطني والدولي والتأثير في تشكيل الرأي العام.
Indicative Contents المحتويات الإرشادية	الحقوق والحريات الأساسية وغير الأساسية الحقوق والحريات المدنية الحقوق السياسية حقوق الانسان والقانون الدولي الإنساني

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	1- المشاركة بالتحضير في قاعة الدرس 2- طريقة الأسئلة والأجوبة في قاعة الدرس 3- الواجبات 4- التقارير

Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	17	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1		Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المناهج الاسبوعي النظري	
	Material Covered
Week 1	تعريف الحقوق
Week 2	أنواع حقوق الانسان
Week 3	الحقوق الأساسية وغير الأساسية
Week 4	- الحقوق المدنية , الحقوق السياسية
Week 5	الحقوق الاقتصادية والاجتماعية والثقافية الحقوق الفردية والحقوق الجماعية
Week 6	طائفة الحقوق الجديدة حقوق الانسان والقانون الدولي الإنساني العلاقة بين حقوق الانسان والقانون الدولي الإنساني
Week 7	امتحان
Week 8	ماهو مفهوم الحريات :مصطلح الحرية والحريات العامة
Week 9	التطور في مفهوم الحريات العامة
Week 10	أشكال الحريات العامة وأنواعه
Week 11	النظام القانوني للحريات العامة
Week 12	تنظيم الحريات العامة من قبل السلطات العامة

Week 13	ضمانات الحريات العامة
Week 14	الحريات في الفكر السياسي الحديث
Week 15	الامتحان النهائي

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Diamond L. & M. F. Plattner, eds., (2009), Democracy. A Reader, Baltimore, Johns Hopkins University Press.	yes
Recommended Texts	مفهوم الحريات العامة وحقوق الانسان ، إطارها التاريخي والفكري والفلسفي، وضماناتها الأساسية- 2010	
Websites	http://ghrorg-learning.blogspot.com	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Structured programming II		Module Type	TYPE B
Module Code	CSIT108	ECTS Credits	8	
Module Level	UGI	Semester of Delivery	Two	
Administering Department	IS	Faculty	CSIT	
Module Leader	Akeel Abdulraheem Thulnoon Zoead	e-mail	akeelalhadithy@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD	
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	CSIT107
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Learn how to use the Advanced Tools helps programmers write fast, portable programs The main principles of programming and the development of programming languages Learn the principles of Structure programming

Module Learning Outcomes	A- Knowledge and Understanding A1. Learn the algorithms A2. Learn the Flowchart A3. Learn C++ Programming
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.34
Unstructured workload (h/w)	8
Total workload (h/w)	13.34

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources
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	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Passing Parameters. Passing by Value. Passing by Reference.
Week 2	Pointers
Week 3	Arrays. Array of One Dimension: Declaration of Arrays.
Week 4	Elements
Week 5	Initializing Array
Week 6	Accessing Array Elements.
Week 7	Mid-Term Exam
Week 8	Read / Write / Process Array Elements.
Week 9	Array of Two Dimension: Declaration of 2D-Arrays.
Week 10	Read / Write / Process Array Elements.
Week 11	Member Function of String stdlib Library.
Week 12	Structures. The Three Ways for Declare the Structure.
Week 13	Array of Structures.
Week 14	The Files

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	DISCRETE STRUCTURE		Module Type	TYPE B
Module Code	CSIT112	ECTS Credits	6	
Module Level	UGI	Semester of Delivery	First	
Administering Department	IS	Faculty	CSIT	
Module Leader	Mohanad Abdulsalam younis gedan	e-mail	mohanad.abdul@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph. D	
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	1-To convey the basic concepts of data structures 2-To understand basic concepts about stacking, queues, lists, trees, and graphs 3-It helps the student to know how to deal with data and how to choose the appropriate graphic structure for it 4-Data structure helps the student to understand the nature of the problem at a deeper level and thus better understanding the world for solving programming problems

Module Learning Outcomes	A- Knowledge and Understanding A1- Know the concept of data structures and how to apply them A2- Understand how to use data structures to know the data to be organized in program memory A3- Understand and know the use of data structures in different real applications A4- Understand and know the methods of different data structures B. Subject-specific skills 1. Providing the student with the skill of applying various data 2- Providing the student with the skill of structuring programs 3- Providing the student with the skill of planning any problem and solving it programmatically 4- Providing the student with the skill of dealing with any type of data
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.4
Unstructured workload (h/w)	6.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources
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	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction
Week 2	General concept
Week 3	Array Data structure
Week 4	Stack data structure
Week 5	Expression Parsing
Week 6	Solving homework
Week 7	Mid-Term Exam
Week 8	Queue data structure
Week 9	circular Queue data structure
Week 10	Pointer & Structure
Week 11	linked list data structure
Week 12	linked list operations
Week 13	Doubly linked list data structure
Week 14	Doubly linked list operations

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Logic Design II		Module Type	TYPE B
Module Code	CSIT111	ECTS Credits	6	
Module Level	UGI	Semester of Delivery	Two	
Administering Department	IS	Faculty	CSIT	
Module Leader	Muntaser AbdulWahed Salman Abdulaziz	e-mail	co.montasser.salman@uoanbar.edu. iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD.	
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	CSIT109
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	• The student should understand encoder, decoder and multiplexers • The student should understand synchronous logic circuit • The student should understand flip-flops and how to use them • The student should understand registers and their types • The student should understand counters and their types • The student should understand ROM and PLA implementation
Module Learning Outcomes	A1. The student should understand encoder, decoder and multiplexers A2. The student should understand flip-flops and how to use them.

	A3. The student should understand registers and their types. A4. The student should understand counters and their types. A5. The student should understand ROM and PLA implementation.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	4.4
Unstructured workload (h/w)	5.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources
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	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Synchronous logic gates
Week 2	Adder and subtractor circuits
Week 3	Comparator circuits
Week 4	Encoders and multiplexers
Week 5	Multiplexers
Week 6	First month exam
Week 7	Mid-Term Exam
Week 8	Flip-flops
Week 9	SR flip flop and j k flip flop
Week 10	T flip flop and D flip flop
Week 11	Second month exam
Week 12	Registers design
Week 13	Counters design
Week 14	ROM PLA State plan

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Mathematic II		Module Type	TYPE C
Module Code	ISDC116	ECTS Credits	6	
Module Level	UGI	Semester of Delivery	One	
Administering Department	IS	Faculty	CSIT	
Module Leader	Mohammed Rabeea Al-Dahhan	e-mail	mohammed.rabeea@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD.	
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	ISDC115
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	In a computer science department, the specific aims of a Mathematics II module can vary depending on the curriculum and the intended learning outcomes. However, here are some common aims of a Mathematics II module in a computer science department: Advanced Algebra and Calculus: The module aims to provide a deeper understanding of advanced algebraic concepts such as matrices, vectors, and complex numbers. It also covers calculus topics including limits, derivatives, and integrals.

	Discrete Mathematics: Discrete mathematics is essential in computer science as it provides the foundation for many algorithms, data structures, and problem-solving techniques. The module aims to introduce topics like logic, set theory, combinatorics, graph theory, and formal languages. Probability and Statistics: Probability theory and statistics play a crucial role in various aspects of computer science, such as machine learning, data analysis, and algorithm design. The module aims to cover probability concepts, random variables, statistical distributions, hypothesis testing, and basic statistical analysis.
Module Learning Outcomes	Understanding Advanced Algebra and Calculus: Students should demonstrate a solid understanding of advanced algebraic concepts, such as matrices, vectors, and complex numbers. They should be able to apply calculus techniques, such as limits, derivatives, and integrals, in the context of computer science problems. Applying Discrete Mathematics: Students should be able to apply discrete mathematics concepts and techniques to solve problems in computer science. This includes understanding and using logic, set theory, combinatorics, graph theory, and formal languages in algorithm design and analysis. Analyzing Probability and Statistics: Students should be able to analyze and interpret probabilistic and statistical data relevant to computer science problems. They should understand concepts such as probability distributions, random variables, hypothesis testing, and basic statistical analysis. Using Numerical Methods: Students should be proficient in using numerical methods to solve computational problems encountered in computer science. This includes employing numerical approximation techniques, solving equations numerically, and performing numerical integration.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.3
Unstructured workload (h/w)	6.7
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Topic: Integral Calculus - Techniques of Integration Integration by substitution Integration by parts Trigonometric substitutions

Week 2	Topic: Integral Calculus - Techniques of Integration Integration by substitution Integration by parts Trigonometric substitutions
Week 3	Topic: Integral Calculus - Techniques of Integration Integration by substitution Integration by parts Trigonometric substitutions
Week 4	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 5	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 6	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 7	Mid-Term Exam
Week 8	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 9	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 10	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions

Week 11	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 12	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 13	Topic: Integral Calculus - Advanced Integration Techniques Partial fraction decomposition Integration using trigonometric identities Integration of rational functions
Week 14	Topic: Review and Practice Comprehensive review of topics covered Problem-solving exercises and practice problems Preparation for the final assessment
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

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MODULE DESCRIPTOR FORM

Module Information					
Module Title	Arabic Language			Module Type	TYPE B
Module Code	UOA137	ECTS Credits		4	
Module Level	UGI	Semester of Delivery		Two	
Administering Department	IS	Faculty	CSIT		
Module Leader	Saad Ibrahim Ahmed Hussein		e-mail	Saad.ibrahim@uonbar.edu.iq	
Module Leader's Acad. Title	Assistant Professor	Module Leader's Qualification		Ph. D	
Module Tutor			e-mail		
Peer Reviewer Name	/	e-mail	/		
Review Committee Approval	DD/MM/YY	Version Number	2.0		

Relation With Other Modules	
Pre-requisites	/
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	تعليم الطلبة على أساسيات اللغة العربية وقواعدها تعليم الطلبة على كيفية الأعراب
Module Learning Outcomes	أن يتعرف الطالب على قواعد اللغة العربية أن يعرف الطالب كيفية بناء الجمل واستخراجها للعنوان المطلوب
Indicative Contents	

Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	2.3
Unstructured workload (h/w)	4.3
Total workload (h/w)	6.6

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

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Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	العدد تذكره وتأنينه
Week 2	الأعداد المفردة والمركبة
Week 3	ألفاظ العقود و الأعداد (مئة ، ألف ، مليون)
Week 4	تعريف العدد وتذكره
Week 5	ما يصاغ من العدد على وزن فاعل
Week 6	كتابة الهمزة المتوسطة والمتطرفة
Week 7	Mid-Term Exam
Week 8	كتابة الألف اللينة
Week 9	كتابة التاء المربوطة والمبسوطة
Week 10	كتابة الضاد والظاء
Week 11	اللامات وأنواعها
Week 12	الهاءات وأنواعها
Week 13	النونات وأنواعها
Week 14	استعمالات (ما ، من) والفرق بين (أما ، إما)
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar
GRADING SCHEME

Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	

Note:

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.



University of Anbar Diploma Supplement

Anbar, Ramadi, Iraq

Phone No.:

e-mail: Contact@uoanbar.edu.iq

URL: <https://www.uoanbar.edu.iq/>



This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all sections should be provided. Where information is not provided, an explanation should give the reason why.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

- 1.1 First Name:
- 1.2 Second Name:
- 1.3 Third Name:
- 1.4 Date of Birth:
- 1.5 Place of Birth:
- 1.6 Student Identification Number:
- 1.7 National ID number:

2. INFORMATION IDENTIFYING THE QUALIFICATION

- 2.1 Name of the Qualification:
- 2.2 Main Field of the Study of the Qualification:
- 2.3 Name and Status of the Awarding Institution:
- 2.4 Language of Instruction/ Examination:

3. INFORMATION ON THE LEVEL OF QUALIFICATION

- 3.1 Level of Qualification

First Cycle (Bachelor's Degree)

- 3.2 Official Length of the Programme

4 years – 8 Semesters

- 3.3 Access Requirements

High School Diploma – Placement through the National Central Admission Requirements

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1 Study System:

Bologna process

4.2 Mode of Study

First Cycle (Bachelor's Degree)

4.3 Program Requirements

A Student is required to have a minimum CGPA of 50% and no falling grades

4.4 Minimum Credits for Semester, Year and Graduation (ECTS)

30 ECTS/Semester | 60 ECTS/Year | 240 ECTS/Programme | 1 ECTS = 25 hrs

4.5 Student Learning Outcomes

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

4.6 Programme Details and the Individual Grade/Marks Obtained

Module Code	Module Name	Type	Mark Grade ECTS
Semester 1			
CSDC110	Computer Technology	Core	6
CSDC111	Programming in C++ I	Core	8
CSDC112	Logic Design I	Core	6
CCIT060	Mathematics	Basic	6
UOA003	English Language I	Support	2
UOA005	Democracy and Human Rights	Support	2
Grade Point Average (GPA) = ()			Total ECTS 30
Semester 2			
CSDC120	Microprocessors	Core	6
CCIT061	Discrete Structures	Basic	6
CSDC121	Programming in C++ II	Core	8
CSDC122	Logic Design II	Core	6
UOA001	Arabic Language I	Support	2
CSDC123	Communication Skills	Core	2
Grade point Average (GPA) = ()			Total ECTS 30
Semester 3			
CSDC210	Database	Core	7
CSDC211	Object Oriented Programming	Core	8
CSDC212	Data Structures	Core	7
CSDC213	Advanced Mathematics	Core	4
UOA006	The crimes of the defunct Ba'ath party	Support	2
UOA002	Arabic Language II	Support	2
Grade Point Average (GPA) = ()			Total ECTS 30
Semester 4			
CSDC220	Computational Theory	Core	5
CSDC221	python	Core	7
CSDC222	Algorithms	Core	6
CCIT062	Numerical Analysis	Basic	4
CCIT063	Computer Networks	Support	6
UOA004	English Language 2	Support	2
GPA = ()			Total ECTS 30
Semester 5			
CSDC310	Visual Programming	Core	6
CSDC311	Computer Graphics	Core	6
CSDC312	Computer Architecture	Core	6
CSDC321	Wireless Networks	Core	6
CSDC323	Mobile Applications Programming	Core	6
Grade Point average (GPA) = ()			Total ECTS 30

Semester 6

CSDC320	Multimedia	Core	7
CSDE223	Internet of Things	Elective	6
CSDC322	Compilers	Core	7
CSDC313	Software Engineering	Core	6
UOA019	Research methodology	Basic	4

Grade Point Average (GPA) = () Total ECTS 30

Semester 7

CSDC410	Operating Systems I	Core	6
CSDC411	Computer Security 1	Core	6
CSDC412	Artificial Intelligence	Core	6
CSDC413	Digital Image Processing	Core	6
CSDE414	Game Programming	Elective	6

Grade Point Average (GPA) = () Total ECTS 30

Semester 8

CSDC420	Operating Systems II	Core	95	A	5
CSDC421	Computer Security II	Core	87	B	5
CSDC422	Machine Learning	Core	76	C	6
CSDC423	Web Development	Core	65	D	6
UOA020	Project	Basic	65	D	8

Grade Point Average (GPA) = () Total ECTS 30

Cumulative Grade Point Average (CGPA) = **Programme total ECTS 240**

4.7 Grading Scheme and Grade Distribution Guidance

Group	Grade	Marks	Definitions
Success Group (50 - 100)	A - Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	F - Fail	00 - 49	Considerable amount of work required

Marks with Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

4.8 Overall Classification of the Qualification

Cumulative Grade Point Average (CGPA) =
Final Grade of Degree relative RANK: 4 of 23

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to Further Study

May apply to second cycle programs

5.2 Professional Status Conferred

The degree enables the graduate to exercise the profession

6. ADDITIONAL INFORMATION

6.1 Additional Information

**University of Anbar, College of Computer Science and Information Technology,
Department of Computer Science**

6.2 Further Information Sources

University Website <https://uoanbar.edu.iq/>

Registration Office e-mail xxxxxx@uoanbar.edu.iq

7. CERTIFICATION OF THE SUPPLEMENT

7.1 Date **01.10. 2027**

7.2 Name **Full Name**

7.3 Capacity **University General Registrar**

7.4 Signature

7.5 Official Stamp and Seal

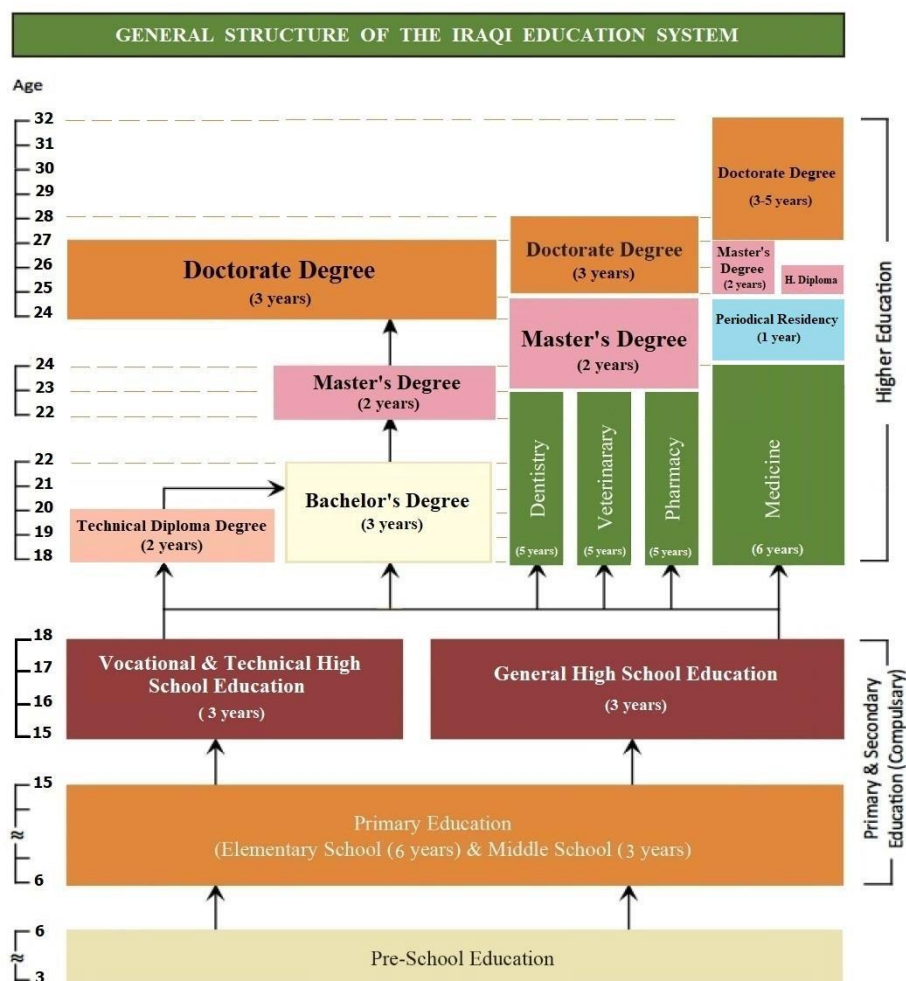
Structure and Degree System

The basic structure of the Iraqi National Education System consists of stages of noncompulsory pre-school education; Compulsory primary (elementary and middle school) and secondary (high school) education; and higher education. Primary education begins at the age of 6 years (72 months), lasts nine years and comprises six years of elementary and three years of middle school education. Secondary education is three years and divided into two categories as "General High School Education" and "Vocational and Technical High School Education". The entry into these categories is through composite scores obtained from centralized exam of secondary schools.

Higher Education System is managed by the Ministry of Higher Education and Scientific Research which is responsible for the planning, coordination, governance and supervision of higher education within the provisions set forth in the Constitution of the Republic of Iraq and Higher Education Law. Both state and private universities are founded by law and subjected to the higher education law and to the regulations enacted in accordance with it.

Higher Education in Iraq comprises all post-secondary higher education programs, consisting of short, first, second and third cycle degrees in terms of the terminology of the Bologna Process. Except for the Architectural Engineering, Pharmacy, Dentistry and Veterinary programs, which are five years (300 ECTS), and Medicine Programme which is six years (360 ECTS), the duration of the first cycle (Bachelor degree) is a full-time four years (240 ECTS) study. The duration of the short cycle (Technical Diploma) is a full-time two years (120 ECTS) study.

Graduate level of Study consists of second cycle (master) and third cycle (doctorate) degree programs. The second cycle is a master with thesis with duration of two years (120 ECTS). Third cycle (doctorate) degree programs are completed having earned a minimum of 180 ECTS credits., which consists of completion of courses, passing a proficiency examination and doctoral thesis.



	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Structured programming I		Module Type	TYPE C
Module Code	ISSP101	ECTS Credits		8
Module Level	UGI	Semester of Delivery		One
Administering Department	IS	Faculty	CSIT	
Module Leader	Mahmoud Hilal	e-mail	mah2005hilal@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	1.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Learn how to use the Advanced Tools helps programmers write fast, portable programs The main principles of programming and the development of programming languages Learn the principles of Structure programming
Module Learning Outcomes	A1- Knowledge and understanding A2. Learn algorithms A3. Learn flowcharts

	A4. Learn structured programming A5. Learn Python programming
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.4
Unstructured workload (h/w)	8
Total workload (h/w)	13.4

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?

Required Texts	"Starting Out with Python plus My Programming Lab with Pearson Text --Access Card Package (3rd Edition) Tony Gaddis ISBN-13: 978-0133862256"	Yes/No
Recommended Texts		Yes/No
Websites		

Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
First	3 h.	Programming principles	Overview to Programming Language	Explain Menu, Getting Started with python	
Second	3 h.	Algorithms	Algorithms and Flow Charts	Algorithms and Flow Charts	
Third	3 h.	Introduction to Programming	Storing and Manipulating Values Calling Functions Comments Formatting Values Working with Strings Exercises	Storing and Manipulating Values Calling Functions Comments Formatting Values Working with Strings Exercises	Quiz
Fourth	3 h.	Unary Operators	Unary Minus Increment and /decrement Operators.	Program of Unary Minus Increment and /decrement Operators.	
Fifth	3 h.	Operational Operators	Operational Assignment Operators Relational Operators Logical Operators. Bitwise Operator Logical Operators. Bitwise Operator	Program Operational Assignment Operators Relational Operators Program Logical Operators. Bitwise Operator	
Sixth	3 h.	Selection Statements	Boolean Logic If Statements If-Else Statements	Programs in Lectures	Quiz
Seventh	3 h.	Selection Statements	If-Elif Statements If-Elif-Else Statements Nested If Statements	Programs in Lectures	

Ninth	3 h.	To evaluate the students	Monthly exam		By exam
Ninth	3 h.	Repetition	While Loops		By exam
Tenth	3 h.	Repetition	For Loops	Programs in Lectures	
Eleventh	3 h.	Repetition	Nested Loops Exercises	Programs in Lectures	
Twelfth	3 h.	Functions	Functions with Parameters Variables in Functions	Programs in Lectures	
Thirteenth	3 h.	Functions	Return Values	Programs in Lectures	
Fourteenth	3 h.	Functions	Importing Functions into Other Programs Exercises	Programs in Lectures	
Fifteenth	3 h.	To evaluate the students	Monthly exam		By exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information					
Module Title	Fundamental of Information Technology			Module Type	TYPE C
Module Code	ISFI102		ECTS Credits		6
Module Level	UGI		Semester of Delivery		One
Administering Department	IS		Faculty	CSIT	
Module Leader	Mohanad Abdulsalam Younis gedan		e-mail	mohanad.abdul@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer		Module Leader's Qualification		Ph. D
Module Tutor			e-mail		
Peer Reviewer Name	/		e-mail	/	
Review Committee Approval	DD/MM/YY		Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	- Provide a basic knowledge of computer hardware and software - Introduce the business areas to which computers may be applied. - Provide an introduction to business organization and information systems. - Develop the skills in network & communication, which play an important part in business computing and information processing.
Module Learning	A-Knowledge and Understanding

Outcomes	A1. The student should understand the architecture of any IT systems. A2. The student should understand the parts of hardware. A3. The student should understand the system software. A4. The student should understand the architecture of networks, protocols and communications devices.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.4
Unstructured workload (h/w)	5.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction of Computers and Programming
Week 2	Brief history of computer
Week 3	Generation of Computers & Computer hierarchy
Week 4	Basic Computer Components
Week 5	Computer function (fetch cycle, interrupt cycle, I/O function)
Week 6	Semiconductor main memory (RAM, ROM, CACHE)
Week 7	Mid-Term Exam
Week 8	Computer Software (application software)
Week 9	External & Internal memory
Week 10	Telecommunications system & Network
Week 11	Topology of a network
Week 12	Layering model
Week 13	Protocols
Week 14	addressing communications

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Logic Design I		Module Type	TYPE C
Module Code	ISLD103	ECTS Credits	6	
Module Level	UGI	Semester of Delivery	One	
Administering Department	IS	Faculty	CSIT	
Module Leader	Muntaser Abdulwahed Salman Abdulaziz	e-mail	Co.montasser.salman@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD.	
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	-The student should understand number systems and codes and the conversion between them. -The student should understand the Boolean expression and how to apply it. -The student should recognize among different logic gates and how to use them. -The student should understand how to design a logic circuit. -The student should understand using K-map for simplification.
Module Learning	A-Knowledge and Understanding

Outcomes	A1. The student should understand number systems and codes and the conversion between them. A2. The student should understand the Boolean expression and how to apply it. A3. The student should recognize among different logic gates and how to use them. A4. The student should understand how to design a logic circuit. A5. The student should understand using K-map for simplification
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	6.4
Unstructured workload (h/w)	3.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	۳	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	1۰% (1۰)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction to number system
Week 2	Conversion between systems
Week 3	Codes and conversion between them
Week 4	Boolean expression
Week 5	Logic gates
Week 6	Logic gates design
Week 7	Mid-Term Exam
Week 8	NAND gates
Week 9	NOR gates
Week 10	Sum of product form
Week 11	Product Of sum form
Week 12	Product Of sum form
Week 13	K-map
Week 14	K-map

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Mathematic I		Module Type	TYPE B
Module Code	CCIT060	ECTS Credits		6
Module Level	UGI	Semester of Delivery		One
Administering Department	IS	Faculty	CSIT	
Module Leader	Muhammad Rabie	e-mail	mohammed.rabeea@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD.
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	A - Understand the concept of mathematics, its methods and applications. B - Explain the concept of derivatives and integration and their applications. C - Understand the relationship between extracts and integration and the real problems and how to deal with them
Module Learning Outcomes	A-Knowledge and Understanding A 1. Acquiring the ability and skill to distinguish the bases of derivatives methods and dealing with them A 2. Acquire the capabilities and skills of applications of derivatives

	A3. Dealing with different methods of finite and indefinite derivatives B. Subject-specific skills B1. Summer Training B2. Fourth year projects B3. Scientific projects
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.3
Unstructured workload (h/w)	6.7
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	The Definition of the Derivative Interpretation of the Derivative
Week 2	Properties of Derivative , Some laws of derivatives
Week 3	Properties of Derivative , Some laws of derivatives
Week 4	Derivatives of the six trig functions
Week 5	Exponential Functions, Logarithm Functions
Week 6	Inverse Sine, Inverse cosine, Inverse tangent, Alternate Notation
Week 7	Mid-Term Exam
Week 8	Inverse Sine, Inverse cosine, Inverse tangent, Alternate Notation
Week 9	These are the six hyperbolic trig Functions .and They are defined as
Week 10	There are two forms of the chain rule
Week 11	Defined , formula, and used the chain rule
Week 12	first derivative, second derivative, third derivative.
Week 13	the properties of logarithms

Week 14	Introduction, Critical Points and Minimum and Maximum Values
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information					
Module Title	English (1)			Module Type	TYPE S
Module Code		UOA003	ECTS Credits		2
Module Level		UGI	Semester of Delivery		One
Administering Department		IS	Faculty	CSIT	
Module Leader	Akeel Abdulraheem Thulnoon Zoead		e-mail	akeelalhadithy@uoanbar.edu.iq	
Module Leader's Acad. Title		Assistant Professor	Module Leader's Qualification		PhD.
Module Tutor			e-mail		
Peer Reviewer Name		/	e-mail	/	
Review Committee Approval		DD/MM/YY	Version Number		2.0

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Enhancing English speaking, reading and writing Memorize a big number of vocabularies Helping students to deal with the English language in easier ways
Module Learning Outcomes	A1. Reading A2. writing A3. Speaking. A4. Listening B. Subject-specific skills

	B1. Learn scanning and skimming skills in reading B2. Right pronunciation B3. Vocabularies
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	2.34
Unstructured workload (h/w)	4.34
Total workload (h/w)	6.68

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the

		Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Unit 1: Hello
Week 2	Unit 2: Your world
Week 3	Unit 3: All about you
Week 4	Unit 4: Family and friends
Week 5	Unit 5: The way I live
Week 6	Unit 6: Every Day
Week 7	Mid-Term Exam
Week 8	Unit 7: My favourites
Week 9	Unit 8: Where I live
Week 10	Unit 9: Times past
Week 11	Unit 10: we had a great time!
Week 12	English for Computer Science
Week 13	Listening
Week 14	Revision of most important topics in the subject
Week 15	Preparatory Week

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	الحريات وحقوق الانسان		Module Delivery
Module Type	S		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	UOA005		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	1	Semester of Delivery	
Administering Department	IS	College	Type College Code
Module Leader	Name	e-mail	E-mail
Module Leader's Acad. Title		Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	أ. تعليم الطلبة على أساسيات حقوق الإنسان وقوانينها. ب. التعرف على الحقوق وأهم الإشكاليات والتحديات التي تواجهها ج- تحديد وفهم المفاهيم المتعلقة بالحريات، بما في ذلك الحقوق الفردية والحريات الشخصية. د. تنمية القدرة على التفكير النقدي حول القضايا المتعلقة بالحريات والحقوق الفردية.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	١- أن يعرف الطالب مفهوم الحقوق وقوانينها وتطبيقاتها . ٢- أن يعرف الطالب كيفية المشاركة في نشر الحقوق وتطبيقها بالعمل الواقعي الحقيقي. ٣- القدرة على استخدام الحقوق وسيلة من أجل التعايش السلمي بين مكونات المجتمع وجميع المخلوقات . ٤- القدرة على مشاركة الآخرين في نشر هذه الحقوق . ٥- القدرة على تحليل وتعريف مفهوم الحرية والتمييز بين أنواع مختلفة من الحريات. ٦- التفاعل مع قضايا الحريات على الصعيدين الوطني والدولي والتأثير في تشكيل الرأي العام.
Indicative Contents المحتويات الإرشادية	الحقوق والحريات الأساسية وغير الأساسية الحقوق والحريات المدنية الحقوق السياسية حقوق الانسان والقانون الدولي الإنساني

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	١- المشاركة بالتحضير في قاعة الدرس ٢- طريقة الأسئلة والأجوبة في قاعة الدرس ٣- الواجبات ٤- التقارير

Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	17	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1		Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	تعريف الحقوق
Week 2	أنواع حقوق الانسان
Week 3	الحقوق الأساسية وغير الأساسية
Week 4	- الحقوق المدنية , الحقوق السياسية
Week 5	الحقوق الاقتصادية والاجتماعية والثقافية الحقوق الفردية والحقوق الجماعية
Week 6	طائفة الحقوق الجديدة حقوق الانسان والقانون الدولي الإنساني العلاقة بين حقوق الانسان والقانون الدولي الإنساني
Week 7	امتحان
Week 8	ماهو مفهوم الحريات :مصطلح الحرية والحريات العامة
Week 9	التطور في مفهوم الحريات العامة
Week 10	أشكال الحريات العامة وأنواعه
Week 11	النظام القانوني للحريات العامة
Week 12	تنظيم الحريات العامة من قبل السلطات العامة

Week 13	ضمانات الحريات العامة
Week 14	الحريات في الفكر السياسي الحديث
Week 15	الامتحان النهائي

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Diamond L. & M. F. Plattner, eds., (2009), Democracy. A Reader, Baltimore, Johns Hopkins University Press.	yes
Recommended Texts	مفهوم الحريات العامة وحقوق الانسان ، إطارها التاريخي والفكري والفلسفي، وضماناتها الأساسية- ٢٠١٠	
Websites	http://ghrorg-learning.blogspot.com	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Structured programming II		Module Type	TYPE C
Module Code	ISSP201	ECTS Credits	8	
Module Level	UGI	Semester of Delivery	Two	
Administering Department	IS	Faculty	CSIT	
Module Leader	Mahmoud Hilal Farhan	e-mail	Mah2005hilal@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD	
Module Tutor	Mahmoud Hilal Farhan	e-mail	Mah2005hilal@uoanbar.edu.iq	
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	ISSP101
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Learn how to use the Advanced Tools helps programmers write fast, portable programs The main principles of collections programming and the development of programming languages Learn the advanced principles of Structure programming
Module Learning	A- Knowledge and Understanding collection such as list and Dictionaries

Outcomes	A2.Learn about Files and Exceptions A3.Learn about advanced topics in python
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.34
Unstructured workload (h/w)	8
Total workload (h/w)	13.34

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?

Required Texts	Deitel, Paul, Harvey Deitel, and Paul J. Deitel. Python for Programmers. Addison-Wesley Professional, 2019.	
Recommended Texts	Tony Gaddis, Starting Out with Python, 5th editio, Haywood Community College, Pearson 2021	
Websites	Python in w3schools.com	

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Functions: Functions with Parameters and Variables in Functions
Week 2	Functions: Return Values
Week 3	Functions: Importing Functions into Other Programs
Week 4	Lists: Adding Elements to a List, Removing Elements from a List, and Rearranging the Elements in a List
Week 5	List: Searching a List and Lists as Return Values and Arguments
Week 6	Dictionaries: Accessing, Modifying and Adding Values, Removing a Key-Value Pair and Additional Dictionary Operations
Week 7	Mid-Term Exam
Week 8	Dictionaries: Loops and Dictionaries and Dictionaries as Arguments and Return Values
Week 9	Dictionaries: Dictionaries: Accessing, Modifying and Adding Values, Removing a Key-Value Pair and Additional Dictionary Operations
Week 10	Dictionaries: Loops and Dictionaries and Dictionaries as Arguments and Return Values
Week 11	Files : Opening a File, and Reading Input from a File
Week 12	Files: End of Line Characters and Writing Output to a File

Week 13	Files : Command Line Arguments Exceptions
Week 14	Recursion : Summing Integers , Fibonacci Numbers and Counting Characters
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Logic Design II		Module Type	TYPE B
Module Code	CSIT111	ECTS Credits	6	
Module Level	UGI	Semester of Delivery	Two	
Administering Department	IS	Faculty	CSIT	
Module Leader	Muntaser AbdulWahed Salman Abdulaziz	e-mail	co.montasser.salman@uoanbar.edu. iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD.	
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	CSIT109
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	• The student should understand encoder, decoder and multiplexers • The student should understand synchronous logic circuit • The student should understand flip-flops and how to use them • The student should understand registers and their types • The student should understand counters and their types • The student should understand ROM and PLA implementation
Module Learning Outcomes	A1. The student should understand encoder, decoder and multiplexers A2. The student should understand flip-flops and how to use them.

	A3. The student should understand registers and their types. A4. The student should understand counters and their types. A5. The student should understand ROM and PLA implementation.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	4.4
Unstructured workload (h/w)	5.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the

		Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Synchronous logic gates
Week 2	Adder and subtractor circuits
Week 3	Comparator circuits
Week 4	Encoders and multiplexers
Week 5	Multiplexers
Week 6	First month exam
Week 7	Mid-Term Exam
Week 8	Flip-flops
Week 9	SR flip flop and j k flip flop
Week 10	T flip flop and D flip flop
Week 11	Second month exam
Week 12	Registers design
Week 13	Counters design
Week 14	ROM PLA State plan
Week 15	Preparatory Week

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Arabic Language		Module Type	TYPE B
Module Code	UOA137	ECTS Credits		2
Module Level	UGI	Semester of Delivery		Two
Administering Department	IS	Faculty	CSIT	
Module Leader	Saad Ibrahim Ahmed Hussein		e-mail	Saad.ibrahim@uonbar.edu.iq
Module Leader's Acad. Title	Assistant Professor	Module Leader's Qualification		Ph. D
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	تعليم الطلبة على أساسيات اللغة العربية وقواعدها تعليم الطلبة على كيفية الأعراب
Module Learning Outcomes	أن يتعرف الطالب على قواعد اللغة العربية أن يعرف الطالب كيفية بناء الجمل واستخراجها للعنوان المطلوب
Indicative Contents	

Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	2.3
Unstructured workload (h/w)	4.3
Total workload (h/w)	6.6

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

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Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	العدد تذكره وتأنينه
Week 2	الأعداد المفردة والمركبة
Week 3	ألفاظ العقود و الأعداد (مئة ، ألف ، مليون)
Week 4	تعريف العدد وتذكره
Week 5	ما يصاغ من العدد على وزن فاعل
Week 6	كتابة الهمزة المتوسطة والمتطرفة
Week 7	Mid-Term Exam
Week 8	كتابة الألف اللينة
Week 9	كتابة التاء المربوطة والمبسوطة
Week 10	كتابة الضاد والظاء
Week 11	اللامات وأنواعها
Week 12	الهاءات وأنواعها
Week 13	النونات وأنواعها
Week 14	استعمالات (ما ، من) والفرق بين (أما ، إما)
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar
GRADING SCHEME

Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	

Note:

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Communication Skills		Module Type	Type c
Module Code	ISMT203	ECTS Credits		2
Module Level	UGI	Semester of Delivery		Two
Administering Department	IS	Faculty	CSIT	
Module Leader	Mohammed .Rabeea	e-mail	mohammed.rabeea@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	1.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	The aims of a module focused on communication skills typically revolve around equipping individuals with the tools and techniques necessary to effectively convey information, ideas, and emotions in various contexts.
Module Learning Outcomes	A1- Define and explain the key concepts and theories of communication.

	- Identify and analyze the different types of communication. - Apply communication skills in a variety of contexts. - Evaluate the effectiveness of their own communication skills. - Develop a plan to improve their communication skills.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.4
Unstructured workload (h/w)	8
Total workload (h/w)	13.4

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes		% ()	3,7 and 11	
Assignments	4	5% (20)	2 and 12	
Projects / Lab.	1/0	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	10% (10)	7	
Final Exam	1Z	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts	Communication: Building Relationships by Judy C. Pearson, 10th Edition, Allyn & Bacon, 2019	Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Definition of communication and its significance
Week 2	Models of communication The role of perception and context in communication
Week 3	Principles of effective writing Grammar, punctuation, and sentence structure
Week 4	Crafting clear and concise messages Writing for different audiences and purposes
Week 5	Public speaking fundamentals Speech organization and delivery techniques
Week 6	Overcoming stage fright and anxiety Practicing persuasive communication
Week 7	Mid-Term Exam
Week 8	Active listening skills Empathetic communication and rapport-building
Week 9	Conflict resolution strategies Cultural sensitivity and communication
Week 10	Understanding body language and facial expressions Gestures, posture, and eye contact
Week 11	Interpreting non-verbal cues in communication

	Using non-verbal communication to enhance message clarity
Week 12	Ethical communication Ethical principles in communication
Week 13	Communication in academic settings (presentations, group discussions)
Week 14	Professional communication (emails, meetings, networking)
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Communication skills		Module Delivery
Module Type	C		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	CSDC123		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	UGI	Semester of Delivery	
Administering Department	CSIT	College	Type College Code
Module Leader	Name	e-mail	
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	- Develop Effective Communication Strategies: Learn how to adapt communication styles for different audiences, situations, and purposes. - Enhance Written Communication: Improve the ability to express thoughts and ideas clearly and concisely in written form, including emails, reports, and other written documents. - Improve Presentation Skills: Learn how to prepare and deliver effective presentations, including structuring content, using visual aids, and engaging an audience.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	On successful completion of the module, students will be able to: - Articulate their thoughts and ideas clearly and concisely, with improved vocabulary and grammar. - Produce well-structured, error-free written documents, such as emails, reports, and other written materials. - Adapt their communication style to suit different audiences, situations, and purposes. - Prepare and deliver engaging and informative presentations, utilizing appropriate structure, visual aids, and audience engagement techniques.
Indicative Contents المحتويات الإرشادية	Introduction to communication skills Study skills Library skills Listening skills Presentation skills

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	- The student should use utilities in the lab to apply scientific experiment - The ability to execute the applications software.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	17	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	INTRODUCTION TO COMMUNICATION SKILLS
Week 2	Verbal Communication
Week 3	Communication cycle
Week 4	Study skills
Week 5	Presentation of Work
Week 6	Planning work
Week 7	Mid-term exam
Week 8	Library skills
Week 9	Academic library
Week 10	Research libraries
Week 11	LISTENING SKILLS
Week 12	Why You Need Good Listening Skills
Week 13	Barriers to effective listening
Week 14	READING SKILLS
Week 15	Types and methods of reading

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Communication skills vol.I Wambui et al.	No
Recommended Texts		No
Websites		

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Office Application		Module Type	TYPE C
Module Code	ISOA204	ECTS Credits		6
Module Level	UGI	Semester of Delivery		Two
Administering Department	IS	Faculty	CSIT	
Module Leader	Khalid Shaker Jasim	e-mail	khalidalhity@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		PhD
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	1.0	

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	This module aims to equip students with the knowledge and skills to effectively utilize a suite of office applications for various business and productivity needs.
Module Learning Outcomes	- Demonstrate a strong understanding of the core functionalities of common office applications (e.g., word processing, spreadsheet, presentation software). - Apply these functionalities to create professional documents, presentations, and spreadsheets for diverse purposes. - Employ advanced features of the software to enhance the efficiency and

	effectiveness of their work. • Collaborate effectively on documents and projects within a team setting using the application's collaborative tools. • Analyze and interpret data effectively using spreadsheet functions and data visualization tools.
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.4
Unstructured workload (h/w)	8
Total workload (h/w)	13.4

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	LO #1, #2, #4, #5 and #10, #11
Assignments	2	6% (6)	2 and 12	LO #3, #4 and #6, #7
Projects / Lab.	1	15% (15)	Continuous	ALL
Report	1	5% (5)	13	LO #9, #11
Midterm Exam	2 hr	18% (18)	7	LO #1 - #7
Final Exam	3 hr	50% (50)	16	ALL
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites	Both Microsoft (https://support.microsoft.com/en-us/training) and (https://support.google.com/a/users/answer/9282959) offer extensive tutorials, video guides, and documentation for their respective office suites (Microsoft Office & Google Workspace).	

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction to Office Applications Word Processing Basic
Week 2	Advanced Word Processing Spreadsheets Basics
Week 3	Presentations Basics
Week 4	Basic Computer Components
Week 5	Advanced Presentations
Week 6	Advanced Databases
Week 7	Mid-Term Exam
Week 8	Advanced Email
Week 9	Office Applications in the Workplace
Week 10	Accessibility and Assistive Technologies
Week 11	Troubleshooting and Problem Solving
Week 12	Ethics and Legal Issues

Week 13	Resume Writing and Interviewing Skills
Week 14	Final Project Presentations
Week 15	Preparatory Week

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information					
Module Title	Discrete Mathematics			Module Type	TYPE B
Module Code		CCIT061	ECTS Credits		6
Module Level			Semester of Delivery		Two
Administering Department		IS	Faculty	CSIT	
Module Leader	Akeel A Thulnoon		e-mail	akeelalhadithy@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	Module Leader's Qualification		PhD.
Module Tutor			e-mail		
Peer Reviewer Name		/	e-mail	/	
Review Committee Approval		25/02/2024	Version Number		2.0

Relation With Other Modules	
Pre-requisites	/
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	The aim of studying of discrete mathematics equips you with the tools to analyze and solve problems involving distinct, countable objects. It builds foundational skills in logical reasoning, counting techniques, and analyzing relationships between structures. Mastering these concepts empowers you to tackle problems in various fields, including computer science, cryptography, information theory, and areas of mathematics itself. By understanding the fundamental properties of discrete structures, you gain the ability to model and analyze real-world scenarios with precision and efficiency.

Module Learning Outcomes	A1. Enhanced problem-solving skills A2. Strong foundation in logical thinking A3. Proficiency in counting techniques. A4. Understanding of discrete structures B. Ability to model real-world scenarios
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	2.34
Unstructured workload (h/w)	4.34
Total workload (h/w)	6.68

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.		5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction, Sets
Week 2	Relations, Practice
Week 3	Mathematical Logic (Propositional logic, Propositional calculus)
Week 4	Mathematical Logic (Predicate logic, Practice)
Week 5	Group Theory (Basic Concept)
Week 6	Group operations
Week 7	Mid-Term Exam
Week 8	Counting Theory (counting principles)
Week 9	Pigeonhole principle
Week 10	Probability (Basic concepts)
Week 11	Counting techniques, Bayes' theorem
Week 12	Mathematical Induction and Recurrence Relations
Week 13	Graph Theory and Trees
Week 14	Boolean Algebra

Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Object Oriented Programming I		Module Type	TYPE C
Module Code	ISOO301	ECTS Credits	8	
Module Level	UGII	Semester of Delivery	Three	
Administering Department	IS	Faculty	CSIT	
Module Leader	Doaa Yaseen Khudhur Abdul Rahman Al-ani	e-mail	co.doaa.yassin@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	The student's acquisition of the concept of entity programming, classes, and objects, and how to deal with them. Clarify the concept of classes, what are the functions and properties of them, and the objects of each class. Giving the student experience in dealing with objects and classes and the distribution of properties and functions. The study of structured

	programming, entity programming and what is known as object-oriented programming, knowledge of injunctions and functions to prepare the student to know how to write a set of commands, knowing what are injunctions, how to build classes and objects, what the class has of properties and functions, how to build several classes and several objects, and how properties are inherited between them.
Module Learning Outcomes	A Knowledge and Understanding A1. Gain the ability and skill to distinguish and deal with program instructions and functions of entity programming. A2- Acquire the skill of distinguishing between objects, classes and functions and linking them. A3- Dealing with the attributes and characteristics of each class and programming functions. B. Subject-specific skills B1. summer training B2. Graduate Research B3. Scientific Reports
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.34
Unstructured workload (h/w)	8
Total workload (h/w)	13.34

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Programming principles Overview to Programming Language
Week 2	Algorithms and Flow Charts
Week 3	Character set Identifiers Getting Started with C++. Variables Declaration
Week 4	Variables Constants Arithmetic Operations The “math.h” Library Unary Minus Increment and /decrement Operators.
Week 5	Unary Minus Increment and /decrement Operators.

Week 6	Operational Assignment Operators Relational Operators Logical Operators. Bitwise Operator Logical Operators. Bitwise Operator
Week 7	Mid-Term Exam
Week 8	Selection Statements the Single. The Switch Selection Statement (Selector
Week 9	Nested If and If/else Statements If Statement Structure Conditional Statement
Week 10	The Switch Selection Statement
Week 11	While Repetition Structure. Do/While Statement for Statement
Week 12	Do/While Statement for Statement
Week 13	For Statement
Week 14	Break and Continue Control Statements Nested Loops
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

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MODULE DESCRIPTOR FORM

Module Information				
Module Title	DATA STRUCTURES		Module Type	TYPE C
Module Code	ISDS302	ECTS Credits		6
Module Level	UGII	Semester of Delivery		Three
Administering Department	IS	Faculty	CSIT	
Module Leader	Mahmoud Hilal	e-mail	mah2005hilal@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecture	Module Leader's Qualification		PHD
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	
Co-requisites	/
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	1. The student will be able to understand and understand the mechanics of their algorithmic data repair problems in terms of their degree of complexity. 2. Trees, how to build them in C++, self-recall, and how to deal with them 3.. that the student be able to understand the working mechanics of algorithms for data structures 4. What are the best search algorithms, and the criteria for choosing the type of algorithm? 5.sorting algorithm

Module Learning Outcomes	A- Knowledge and Understanding This article is based on knowledge B. Subject-specific skills Learn to program in C++ in a professional way
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	4.4
Unstructured workload (h/w)	5.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources
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	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	The general structure of the subject and the study vocabulary. general vocabulary. general vocabulary
Week 2	Define algorithms, their properties, and how to write them Introduction to the article.
Week 3	complexity of the algorithm in terms of time and execution Calculate the complexity of the algorithm in terms of time and steps
Week 4	Recursion
Week 5	Study all previous lectures with homework Solve the assessment methods in the previous 3 lectures
Week 6	How to choose the type of sorting algorithm according to the data Introduction for sorting algorithm
Week 7	Mid-Term Exam
Week 8	Understand the workings of the algorithm. selection sort algorithm
Week 9	Insertion sort algorithm
Week 10	Bubble sort algorithm
Week 11	Solve the assessment methods in the previous 3 lectures
Week 12	Representing data as a tree. the trees

Week 13	Programmatically represent the tree. Print, delete and add to the tree in the form of code
Week 14	How to search in trees. search algorithms
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	

Note:

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Advanced Mathematics		Module Type	TYPE C
Module Code	ISAM307	ECTS Credits	5	
Module Level	UGII	Semester of Delivery	Three	
Administering Department	IS	Faculty	CSIT	
Module Leader	Taisir Ahmed yaseen	e-mail	taisir.ahmed@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	1-To describe the aim of study advance mathematics 2-To understand what difference between ordinary equation and differential equation 3- To understand the difference between the type of differential equation 4- To learn the type of method to solve the differential equation 5- To apply the application of differential equation
Module Learning Outcomes	A- Knowledge and Understanding A1. Understand the concept of ordinary and partial

	A2. Understand the method of solving the first order differential equation A3. Understand the method of solving second order differential equation A4. Understand the Laplace transform A5. Understand the Fourier series B. Subject-specific skills B1. Explain what mean of ordinary and partial B2. Classify the method of solving B3. Classify the differential equation
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	3.4
Unstructured workload (h/w)	5
Total workload (h/w)	8.34

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	10% (10)	5 and 10	
Assignments	2	10% (10)	2 and 12	
Projects / Lab.	1	10% (10)	Continuous	
Report	1	10% (10)	13	
Midterm Exam	2 hr	10% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the

		Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Abstract of differential equation
Week 2	Separable equation
Week 3	Solve some example
Week 4	Homogenous equation
Week 5	Exact equation
Week 6	Linear equation
Week 7	Mid-Term Exam
Week 8	Some example
Week 9	Bernoulli equation
Week 10	Second order differential equation
Week 11	Some example
Week 12	Laplace transform
Week 13	Power series , Fourier series
Week 14	Review
Week 15	Preparatory Week

APPENDIX:

UNIVERSITYof Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Computation Theory		Module Delivery	
Module Type	Core		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	ISCT303			
ECTS Credits	4			
SWL (hr/sem)				
Module Level	1	Semester of Delivery		1
Administering Department	Type Dept. Code	College	Type College Code	
Module Leader	Dr. Ehab abd-aljabar		e-mail	E-mail: iehab.a.k@uoanbar.edu.iq
Module Leader's Acad. Title		Module Leader's Qualification	Ph.D.	
Module Tutor		e-mail	E-mail	
Peer Reviewer Name	Name	e-mail	E-mail	
Scientific Committee Approval Date		Version Number	1.0	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	Finite automata are useful models for many important kinds of hardware and software. Here are the most important kinds: Software for designing and checking the behavior of digital circuits; The “lexical analyzer” of a typical compiler, that is, the compiler component that breaks the input text into logical units, such as identifiers, keywords, and punctuation; Software for scanning large bodies of text, such as collections of Web pages, to find occurrences of words, phrases, or other patterns; Software for verifying systems of all types that have a finite number of distinct states, such as communication protocols or protocols for secure exchange of information.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Knowledge and understanding - Acquire a full understanding and mentality of Automata Theory as the basis of all computer science languages design - Have a clear understanding of the Automata theory concepts such as RE's, DFA's, NFA's, Stack's, Turing machines, and Grammars • Cognitive skills (thinking and analysis). - Be able to design FAs, NFAs, Grammars, languages modelling, small compilers basics - Be able to design sample automata • Communication skills (personal and academic). - Be able to minimize FA's and Grammars of Context Free Languages • Practical and subject specific skills (Transferable Skills).
Indicative Contents المحتويات الإرشادية	• Training in the applied use of key coding languages for creative computing • Training in key frameworks for creative computing • Introduction to online collaboration for creative computing

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Class discussions with examples.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	109	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem)	200		

الحمل الدراسي الكلي للطلاب خلال الفصل	
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Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Reglual grammar
Week 2	Context-Free Grammars
Week 3	Parse Trees; Ambiguity in Grammars and Languages
Week 4	Standard Forms; Chomsky Normal Forms;
Week 5	Chomsky normal form
Week 6	Greibach normal Forms.
Week 7	Minimization of CFG's.
Week 8	Pushdown Automata (PDA)
Week 9	Deterministic and Non-Deterministic (PDA); Formal definition of NPDA.
Week 10	Mid exam
Week 11	Transition functions of NPDA; NPDA Execution.
Week 12	Accepting Strings with NPDA; Equivalence of PDAs and CFG
Week 13	The Turing Machine.
Week 14	Programming Techniques for Turing Machines; Formal definition of TM's.

Week 15	Decidable Languages and NP-Complete Problems
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المناهج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Introduction to Computer Theory, Daniel I. A. Cohen, Prentice-Hall, Second Edition, 1997.	Yes
Recommended Texts	JohnE.Hopcroft, RajeevMotwani, JeffreyD.Ullman: Introduction to Automata Theory, Languages, and Computation; Addison Wesley, 2000.	No
Websites	https://www.coursera.org/courses?query=theory%20of%20computation	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

ISDC202MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Design and Analysis of Information Systems		Module Delivery
Module Type	Elective learning activity (E)		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ISDA305		
ECTS Credits	3		
SWL (hr/sem)			
Module Level	2	Semester of Delivery	
Administering Department	CSIT	College	Type College Code
Module Leader	Dr. Waleed Abdulmaged Hammood		e-mail
		E-mail: waleed.abdulmaged@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The Design and Analysis of Information Systems module aims to provide students with a comprehensive understanding of the principles and techniques involved in designing and analyzing complex information systems. The specific aims of this module may include: System Design Principles: The module aims to introduce students to the fundamental principles and concepts involved in designing information systems. This includes understanding system requirements, system modeling techniques, system architecture, and system integration
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Software Development Lifecycle: Students will learn about the various phases of the software development lifecycle, including requirements gathering, system analysis, system design, implementation, testing, deployment, and maintenance. The aim is to familiarize students with industry-standard practices and methodologies for developing robust and scalable information systems. Database Design and Management: The module aims to provide students with a solid understanding of database design principles and techniques. This includes conceptual data modeling, entity-relationship modeling, normalization, database query languages (e.g., SQL), and database management systems (DBMS).
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning. Modeling and Design: Use a range of specialist models to model the problems of computer and communication systems, such as deadlock, and design efficient and effective handling procedures. [15 hrs] Creative: Extend knowledge in information systems to construct specific and effective solution to manage and control computer resources.[11 hrs] Presentation: All students should participate in different presentations about different subjects. [11 hrs]

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	1. Providing students with the fundamentals and topics related to thinking. 2. Giving students daily assignments. 3. Encouraging the formation of group discussions during the lecture. 4. Present stimulating questions during the lecture, such as 'how' and 'why'.
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Student Workload (SWL)

الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	91	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	3.4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	3.9	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	3.8
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	125		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	5% (5)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	5% (5)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	20% (20)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Defining Analysis of Information System
Week 2	Role of a system analyst

Week 3	Qualities of systems Analyst
Week 4	Types of Subsystems
Week 5	A framework for system approach
Week 6	System Characteristic
Week 7	Mid-term Exam
Week 8	Executive Support System (ESS)
Week 9	Decision Support System (DSS)
Week 10	Office Automation System (OAS)
Week 11	Transaction Processing System (TPS)
Week 12	System Development Strategies
Week 13	Unified Methodology Approach
Week 14	Technique Approach
Week 15	Preparatory Week
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Davis, W. S., & Yen, D. C. (Eds.). (2019). <i>The information system consultant's handbook: Systems analysis and design</i> . CRC press.	Yes
Recommended Texts		Yes

Websites	https://link.springer.com/book/10.1007/978-1-84628-655-1
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Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

ISDC202MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Introduction to E-Business Systems		Module Delivery
Module Type	Elective learning activity (E)		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ISEI304		
ECTS Credits	3		
SWL (hr/sem)			
Module Level	2	Semester of Delivery	
Administering Department	CSIT	College	Type College Code
Module Leader	Dr. Waleed Abdulmaged Hammood		e-mail
		E-mail: waleed.abdulmaged@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Introduce information systems concepts, terminology, and provide an understanding of the differences between various types of computer-based Information systems. 2. Review applications and models utilizing information systems solutions to 3. Business problems. 4. Study current trends in Information Technology, the impact of IT on Organizations, managers, and users, as well as ethical, social and legal issues. 5. Improve computer skills through individual assignments with spreadsheet, Access and other software.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1) Fundamentals of Human Resource Information systems (HRIS) 2) Group Decision Support Systems (GDSS) in HRIS 3) Computer Crimes, Ethics and Human Resource Information System Security Control.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning. Modeling and Design: Use a range of specialist models to model the problems of computer and communication systems, such as deadlock, and design efficient and effective handling procedures. [15 hrs] Creative: Helping students to explore specific technologies enables organizations to succeed. Especially focus on the decision models in spread sheet. Providing students with a view of how to plan, develop and manage the information technology applications in an organization. [11 hrs]. Presentation: All students should participate in different presentations about different subjects. [11 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Providing students with the fundamentals and topics related to thinking. 2. Giving students daily assignments. 3. Encouraging the formation of group discussions during the lecture. 4. Present stimulating questions during the lecture, such as 'how' and 'why'.

Student Workload (SWL) الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	91	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	3.4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	3.9	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	3.8
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	125		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	5% (5)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	5% (5)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	20% (20)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	HRIS Basics
Week 2	Human resource policies and practices enabled by HRIS

Week 3	Internet recruiting and applicant tracking
Week 4	E-learning and other forms of technology-based training
Week 5	Telecommuting and the virtual workplace
Week 6	Personnel Administration Data Systems, Database considerations, Database tables, Subsystems, Personnel Status Reporting, Personnel action data system, Applications of HRIS
Week 7	Mid-term Exam
Week 8	Evolution of Group decision support system, Applications of GDSS in human resource area, Classification, Design and development
Week 9	Design principles of DSS, Application in commercial environments
Week 10	Introduction to Artificial Intelligence, General concepts, Planning, Decision making and problem solving, Introduction to Expert systems, Application of expert systems
Week 11	Enterprise Resource Planning (ERP) - Introductory concepts, ERP basics, ERP design and implementation, ERP applications, Business process re-engineering
Week 12	Security issues, Vendor evaluation, Ethics, Fraud, Internal Control
Week 13	Business Ethics, Areas of Business Ethics.
Week 14	Computer Ethics, Factors that Contribute to Fraud, Computer Fraud Schemes
Week 15	Limitations of Internal Controls, IT Controls.
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Davis, W. S., & Yen, D. C. (Eds.). (2019). <i>The information system consultant's handbook: Systems analysis and design</i> . CRC press.	Yes

Recommended Texts		Yes
Websites	https://link.springer.com/book/10.1007/978-1-84628-655-1	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	Object Oriented Programming II		Module Type	TYPE C
Module Code	ISOO401	ECTS Credits		8
Module Level	UGII	Semester of Delivery		Four
Administering Department	IS	Faculty	CSIT	
Module Leader	Doaa Yaseen Khudhur Abdul Rahman Al-ani	e-mail	co.doaa.yassin@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	The student's acquisition of the concept of entity programming, classes, and objects, and how to deal with them. Clarify the concept of classes, what are the functions and properties of them, and the objects of each class. Giving the student experience in dealing with objects and classes and the distribution of properties and functions. The study of structured

	programming, entity programming and what is known as object-oriented programming, knowledge of injunctions and functions to prepare the student to know how to write a set of commands, knowing what are injunctions, how to build classes and objects, what the class has of properties and functions, how to build several classes and several objects, and how properties are inherited between them.
Module Learning Outcomes	A Knowledge and Understanding A1. Gain the ability and skill to distinguish and deal with program instructions and functions of entity programming. A2- Acquire the skill of distinguishing between objects, classes and functions and linking them. A3- Dealing with the attributes and characteristics of each class and programming functions. B. Subject-specific skills B1. summer training B2. Graduate Research B3. Scientific Reports
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	5.34
Unstructured workload (h/w)	8
Total workload (h/w)	13.34

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction to Operator Overloading
Week 2	Operator Overloading Using Member Functions
Week 3	Unary Operators Overloading
Week 4	Operator Overloading Tips and Restrictions
Week 5	Nonmember Operator Functions
Week 6	Using a Friend to Overload a Unary Operator

Week 7	Overloading the Relational and Logical Operators
Week 8	Introducing Inheritance
Week 9	Base Class Access Control
Week 10	Using protected Members
Week 11	Inheriting Multiple Base Classes
Week 12	Constructors, Destructors, and Inheritance
Week 13	Passing Parameters to Base Class Constructors
Week 14	Virtual Base Classes
Week 15	Final Exam

APPENDIX:

UNIVERSITY of Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information					
Module Title	Numerical Analysis			Module Type	TYPE C
Module Code		CCIT062	ECTS Credits		5
Module Level		UGII	Semester of Delivery		Four
Administering Department		IS	Faculty	CSIT	
Module Leader	Dr. Abdul Azim Zaili		e-mail	ab72d74@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	Module Leader's Qualification		Ph D.
Module Tutor			e-mail		
Peer Reviewer Name		/	e-mail	/	
Review Committee Approval		DD/MM/YY	Version Number		2.0

Relation With Other Modules	
Pre-requisites	ISDC203
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	A-Understanding the concept of numerical analysis, its methods and applications. B-Explain the concept of the Matrices and its application in numerical analysis. C-Understanding the relationship between the numerical methods and the real problems and how to deal with it.
Module Learning Outcomes	A1. Knowledge and Understanding A2. Gain the ability and skill to distinguish the numerical methods and deal with them. A3. Gain the ability and skills of the matrices applications.

	A4. Dealing with the different numerical methods. B. Subject-specific skills B1. Summer Training B2. Fourth year projects B3. Scientific projects
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	4.4
Unstructured workload (h/w)	5.6
Total workload (h/w)	10

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	3	6% (6)	3,7 and 11	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	15% (15)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	50% (50)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources
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	Text	Available in the Library?
Required Texts		Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Direct Methods Direct methods for solving linear system of equation Theoretical and Experimental
Week 2	Gaussian Elimination Simple Gaussian elimination method, gauss elimination method with partial pivoting, Theoretical and Experimental
Week 3	Determinant determinant evaluation, gauss Jordan method, Theoretical and Experimental
Week 4	LU decomposition L U decompositions Doolittle's LU decomposition, Doolittle's method with row interchange Theoretical and Experimental
Week 5	Matrix inverse Finding Matrix Inverse Theoretical and Experimental
Week 6	Iteration methods Iterative methods for solving linear systems of equations Theoretical and Experimental
Week 7	Mid-Term Exam
Week 8	Jacobian iteration. Jacobian iteration, gauss – seidel method, Theoretical and Experimental
Week 9	gauss – seidel method, Successive over relaxation method (sort method) Theoretical and Experimental

Week 10	Newton-Raphson's. Newton-Raphson's Method. Theoretical and Experimental
Week 11	Runge-kutta. Runge-kutta Method. Theoretical and Experimental
Week 12	Polynomial, Data Approximation. Interpolation and the Lagrange Polynomial, Data Approximation and Neville's Method, Theoretical and Experimental
Week 13	Differential Equation method Numerical Analysis Methods for Differential Equation Experimental
Week 14	Integral Equation methos. Numerical Analysis Methods for Integral Equation Theoretical and Experimental. Numerical Analysis Methods for Integral Equation
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	

Note:

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

ISDC202MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Design Internet Pages		Module Delivery
Module Type	Type E		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ISDI404		
ECTS Credits	5		
SWL (hr/sem)			
Module Level	Fourth	Semester of Delivery	
Administering Department	IS	College	Type College Code
Module Leader	Dr. mohanad Abdulsalam younis gedan		E-mail: mohanad.abdul@uoanbar.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor	mohanad Abdulsalam younis gedan		E-mail: mohanad.abdul@uoanbar.edu.iq
Peer Reviewer Name	Name	E-mail	E-mail
Scientific Committee Approval Date	2024-2025	Version Number	2.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	CUE31012	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The course covers the basics of designing and building web pages, types of web pages, and how to publish pages and websites on the Internet. The course also deals with the use of one of the commonly used web page editing programs in building a personal or educational website.
Module Learning Outcomes	A-Knowledge and Understanding A1. Explains the basics of designing and building web pages and related matters

مخرجات التعلم للمادة الدراسية	Concepts, terminology and steps. A2. Explains the types of pages and websites and the languages used in design and building pages and websites A3. Explains the components, specifications, and standards for page design and websites and their interfaces and uses them to evaluate the sites A4. It discusses the most important and famous programs and tools for building and designing websites and pages and compares them. B. Subject-specific skills B1. summer training B2. Graduate Research B3. Scientific Reports
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Sudden daily and continuous weekly tests. Exercises and activities in the classroom. Guide students to some websites to benefit from them. 1. Providing students with the fundamentals and topics related to thinking. 2. Giving students daily assignments. 3. Encouraging the formation of group discussions during the lecture. 4. Present stimulating questions during the lecture, such as 'how' and 'why'.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	91	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3.4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	3.9	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	3.8
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation تقييم المادة الدراسية				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome

Formative assessment	Quizzes	1 or 2	6% (6)	5 or 5, 10	
	Assignments	2	6% (6)	At the start	
	Projects / Lab.	1	5% (5)	Continuous	
	Report	1	5% (5)		
Summative assessment	Midterm Exam	2 hr	18% (18)	8	
	60% (60)	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	The basics of designing and building web pages and websites, the main concepts, steps and stages of website design.
Week 2	Types of websites: fixed-content websites and variable-content websites
Week 3	Components, specifications and standard standards for designing pages and websites and designing user interfaces and screens
Week 4	Languages and applications used to design web pages and associated tools Microsoft Word, HTML, FrontPage, Dreamweaver, php, CSS, (CS5 and java scripts, cgi scripts (Linux based) and VB scripts
Week 5	World Wide Web
Week 6	World Wide Web -History
Week 7	Uniform Resource Locator
Week 8	CSS
Week 9	JavaScript
Week 10	Why Study JavaScript?
Week 11	JavaScript Can Change HTML Content
Week 12	JavaScript Can Change HTML Attribute Values
Week 13	JavaScript Functions and Events
Week 14	Preparatory Week
Week 15	Final Exam

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1. Designing and Developing Web Applications Using Microsoft .NET Framework 4 by Tony Northrup (Nov 3, 2011) 2. HTML5: Designing Rich Internet Applications (Visualizing the Web) by Matthew David (Jul 28, 2010) 3. Nielsen, J. (2006) Prioritizing Web Usability. Berkeley, CA: New Riders. (0-321- 35031-6)	Yes
Recommended Texts	- المحاضرات المقدمة من قبل مدرس المادة - الكتب المتوفرة في مكتبة الكلية	
Websites		

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C – Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

ISDC202MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Algorithms		Module Delivery
Module Type	C		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ISDD402		
ECTS Credits	7		
SWL (hr/sem)			
Module Level	2	Semester of Delivery	
Administering Department	CSIT	College	Type College Code
Module Leader	Dr. Mahmoud Hilal Farhan	e-mail	E-mail: mah2005hilal@uoanbar.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor		e-mail	
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date	01/09/2024	Version Number	2.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	The module aims to build a strong foundation in algorithms by introducing their fundamental principles, characteristics, and importance in problem-solving. Learners will explore algorithm analysis techniques, focusing on time and space complexity using Big-O notation. The course emphasizes algorithm design and development, including problem-solving paradigms like recursion. Core topics include searching and sorting algorithms, highlighting their efficiency and real-world applications. Additionally, learners will implement graph-based algorithms for traversal, shortest paths, and network optimization. By the end of the module, students will be proficient in analyzing, designing, and coding efficient algorithms to solve diverse computational problems.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	By the end of this module, learners will be able to: 1. Comprehend fundamental concepts of algorithms, their characteristics, and their role in problem-solving. 2. Analyze algorithms using time and space complexity, employing Big-O notation to evaluate performance. 3. Design and develop algorithms using paradigms like recursion, divide-and-conquer, and dynamic programming. 4. Implement and compare searching algorithms (e.g., binary search) and sorting algorithms (e.g., quicksort, mergesort) for efficiency and application. 5. Develop and apply graph algorithms, including traversal (DFS, BFS), shortest path (6. Solve computational problems with well-optimized algorithmic solutions.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning. Modeling and Design: Use a range of specialist models to model the problems of computer and communication systems, such as deadlock, and design efficient and effective handling procedures. [15 hrs] Creative: Extend knowledge in information systems to construct specific and effective solution to manage and control computer resources. [11 hrs] Presentation: All students should participate in different presentations about different subjects. [11 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Providing students with the fundamentals and topics related to thinking. 2. Giving students daily assignments. 3. Encouraging the formation of group discussions during the lecture. 4. Present stimulating questions during the lecture, such as 'how' and 'why'.

Student Workload (SWL) الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل		Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل		Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل			

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	30% (15)	Continuous	All
	Report	1	10% (5)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	20% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction: Importance of Algorithms in Computer Science, Analysis of Algorithms.
Week 2	Introduction: Types of Algorithms, Big O Notation, and Space and Time complexity
Week 3	Recursion: Recursion Essentials, Types of Recursions, Factorial, Fibonacci Sequence
Week 4	Recursion: GCD, Integer Power, Tower of Hanoi, Non-attacking Eight Queens
Week 5	Searching Algorithms: Linear Search, and Binary Search
Week 6	Sorting Algorithm: Bubble Sort, Insertion Sort, and Selection Sort
Week 7	Advanced Sorting Algorithm: Quick Sort and Merge Sort
Week 8	Mid-term Exam
Week 9	Graph: Introduction to Graphs, Graph Terminology, Types of Graphs, and Cyclic and Acyclic Graphs
Week 10	Graph: Connected and Disconnected Graphs, Bipartite Graphs, Complete Graphs, and Sparse and Dense Graphs
Week 11	Graph Representation: Adjacency Matrix, Adjacency List, Edge List
Week 12	Graph Traversal Methods: Traversal Strategies, Comparison of Traversal Strategies
Week 13	Applications of Graph Traversals: Depth-First Search (DFS)
Week 14	Applications of Graph Traversals: Breadth-First Search (BFS)
Week 15	Preparatory Week
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المناهج الاسبوعي للمختبر	
	Material Covered
Week 1	A set of different programs as introduction
Week 2	Factorial, Fibonacci Sequence
Week 3	GCD, Integer Power
Week 4	Linear Search, and Binary Search
Week 5	Insertion Sort, and Selection Sort
Week 6	Bubble Sort
Week 7	Merge Sort
Week 8	Quick Sort
Week 9	Mid-term Exam
Week 10	Adjacency Matrix,
Week 11	Adjacency List
Week 12	Edge List
Week 13	Depth-First Search (DFS)
Week 14	Breadth-First Search (BFS)
Week 15	Preparatory Week
Week 16	Final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Davis, W. S., & Yen, D. C. (Eds.). (2019). <i>The information system consultant's handbook: Systems analysis and design</i> . CRC press.	Yes
Recommended Texts		Yes
Websites	https://link.springer.com/book/10.1007/978-1-84628-655-1	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

	Ministry of Higher Education and Scientific Research. University of Anbar. Department of Information System.	
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MODULE DESCRIPTOR FORM

Module Information				
Module Title	ENGLISH (2)		Module Type	TYPE S
Module Code	UOA004	ECTS Credits	2	
Module Level	UGII	Semester of Delivery	FOUR	
Administering Department	IS	Faculty	CSIT	
Module Leader		e-mail		
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification		
Module Tutor		e-mail		
Peer Reviewer Name	/	e-mail	/	
Review Committee Approval	DD/MM/YY	Version Number	2.0	

Relation With Other Modules	
Pre-requisites	UOA140
Co-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Enhancing English speaking, reading and writing Memorize a big number of vocabularies Helping students to deal with the English language in easier ways
Module Learning Outcomes	A1. Reading A2. writing A3. Speaking. A4. Listening B. Subject-specific skills

	B1. Learn scanning and skimming skills in reading B2. Right pronunciation B3. Vocabularies
Indicative Contents	
Learning and Teaching Strategies	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Module Delivery	
Structured workload (h/w)	2.34
Unstructured workload (h/w)	4.34
Total workload (h/w)	6.68

Module Evaluation				
	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	2	6% (6)	5 and 10	
Assignments	2	6% (6)	2 and 12	
Projects / Lab.	1	5% (5)	Continuous	
Report	1	5% (5)	13	
Midterm Exam	2 hr	18% (18)	7	
Final Exam	3 hr	60% (60)	16	
Total		100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts	New Headway Plus Pre-Intermediate Student's Book New Headway Plus Pre-Intermediate Student's Workbook	Yes/No
Recommended Texts		Yes/No
Websites		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Grammar, reading, writing, listening, vocabulary Unit 1: Getting to know you
Week 2	Grammar, reading, writing, listening, vocabulary. Unit 2: The way we live
Week 3	Grammar, reading, writing, listening, vocabulary Unit 3: it all went wrong
Week 4	Grammar, reading, writing, listening, vocabulary. Unit 4: Let's go shopping
Week 5	Grammar, reading, writing, listening, vocabulary. Unit 5: What do you want to do?
Week 6	Grammar, reading, writing, listening, vocabulary. Unit 5: What do you want to do?
Week 7	Mid-Term Exam
Week 8	Grammar, reading, writing, listening, vocabulary. Unit 6: Tell me what's it like?
Week 9	Grammar, reading, writing, listening, vocabulary. Unit 7: Famous couples
Week 10	Grammar, reading, writing, listening, vocabulary. Unit 8: Do's and Don'ts
Week 11	Grammar, reading, writing, listening, vocabulary. Unit 9: Going places

Week 12	Grammar, reading, writing, listening, vocabulary. Unit 10: Scared to death
Week 13	Grammar, reading, writing, listening, vocabulary. English for Computer Science
Week 14	listening. Revision of most important topics in the subject
Week 15	Preparatory Week
Week 16	Final Exam

APPENDIX:

UNIVERSITY of Anbar				
GRADING SCHEME				
Group	ECTS Grade	% of Students/Marks	Definition	GPA
Success Group (50 - 100)	A - Excellent	Best 10%	Outstanding Performance	5
	B - Very Good	Next 25%	Above average with some errors	4
	C - Good	Next 30%	Sound work with notable errors	3
	D - Satisfactory	Next 25%	Fair but with major shortcomings	2
	E - Sufficient	Next 10%	Work meets minimum criteria	1
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The university has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	اللغة العربية ٢		Module Delivery	
Module Type	Type S		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	UOA002			
ECTS Credits	2			
SWL (hr/sem)	50			
Module Level	1	Semester of Delivery		Four
Administering Department	CSIT	College	Type College Code	
Module Leader	Dr. SAAD IBRAHIM AHMAD		e-mail	E-mail: saad.ibrahim@uoanbar.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.	
Module Tutor	Name (if available)		e-mail	E-mail
Peer Reviewer Name	Name		e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١- تعليم الطلبة على أساسيات اللغة العربية وقواعدها ٢- تعليم الطلبة على كيفية الاعراب ٣- أن يتعلم الطالب على قواعد اللغة العربية ٤- أن يتعلم الطالب كيفية بناء الجمل واستخراجها للعنوان المطلوب ٥- القدرة على استعمال العبارات الصحيحة ٦- القدرة على مشاركة الآخرين في الحوار الصحيح ٧- تطوير قدرة الطالب على الحوار والمناقشة في الأمور العامة والخاصة ٨- تطوير قدرات الطالب في القيام بالأنشطة اللغوية والأدبية ٩- تطوير قدرات الطالب على التعامل مع الكتب الرسمية والمخاطبات باللغة السليمة
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	١- إدارة المحاضرة على نحو تطبيقي مرتبط بواقع الحياة اليومية ٢- تكليف الطالب ببعض الأنشطة والواجبات ٣- المشاركة الفاعلة في قاعة الدرس دليل التزام الطالب وتحمله المسؤولية ٤- الالتزام بالموعد المحدد في تقديم الواجبات والبحث ٥- الاختبارات الأسبوعية والشهرية ونهاية الفصل تعبر عن الالتزام والتحصيل المعرفي
Indicative Contents المحتويات الإرشادية	١- حث الطلبة على الاهتمام بالجانب الصحي ٢- حث الطلبة على الاهتمام بالجانب العلمي ٣- إرشاد الطلبة في مجال المحافظة على توقيتات المحاضرات

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	١- المشاركة بالتحضير في قاعة الدرس ٢- طريقة الاسئلة والاجوبة في قاعة الدرس ٣- الاختبارات الأسبوعية والشهرية ونهاية الفصل

Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	93	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	6.2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	57	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	3.8
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	150		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	5% (5)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	5% (5)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	20% (20)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	ظرف الزمان وظرف المكان
Week 2	الضمير وأقسامه
Week 3	همزة الوصل
Week 4	الحروف الصغيرة الزائدة على الرسم
Week 5	النسبة والاختصاص
Week 6	الاعراء والتحذير
Week 7	مفردات الاستهلال في الكتب الرسمية
Week 8	علامات الترقيم في الكتابة العربية ومواقع استعمالها : تعريفها ، اقسامها ، اهميتها
Week 9	الفاصلة (،) والفاصلة المنقوطة (؛)
Week 10	النقطة (.) والنقطتان الرأسيتان (:)
Week 11	الشارحة أو الوصلة (-) والشارحتان (--)
Week 12	علامة الاستفهام (?) وعلامة التعجب (!) وعلامة الحذف (...)
Week 13	الأقواس ، والأقواس المزدوجة ، والألوان
Week 14	الاشارة المائلة (/) والاشارة المائلة المعاكسة (\) واشارة القوة (^) واشارة الضرب (*) واشارة العطف (&)
Week 15	طرق التخلص من التقاء الساكنين عند القراءة
Week 16	امتحان

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	١- الكتاب : الحوار في شرح الاجرومية ، تأليف السيد بن حسن الديب ، تقريظ : (أ.د. حمزة بن عبدالله – د. عبدالله بن محمد) ، الناشر : (دار الارقم ، مصر) – (دار الرسالة العالمية ، بيروت – لبنان) ، الطبعة الاولى ، ١٤٣٣ هـ - ٢٠١٢ م . ٢- الكتاب : قواعد اللغة العربية المبسطة ، تأليف : عبد اللطيف السعيد ، الطبعة الثالثة - ٢٠٠٦ . ٣- الكتاب : إضاءات لغوية في المخاطبات الادارية ، تأليف: صفاء صابر مجيد البياتي مطبعة المجمع العلمي العراقي، بغداد- العراق ، ط ١ ، ١٤٤٥ هـ- ٢٠٢٣ م.	Yes
Recommended Texts		Yes
Websites	https://www.os-book.com/OS9/	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	The crimes of the defunct Ba'ath party		Module Delivery
Module Type	S		☒ Theory ☐ Lecture ☒ Lab ☒ Tutorial ☐ Practical ☐ Seminar
Module Code	UOA006		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	1	Semester of Delivery	3
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	DR. Walaa Ahmed rashied		e-mail
Module Leader's Acad. Title	Asst. Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	تغطي هذه الوحدة القضايا التالية: مفهوم الجرائم وأنواعها، تعريف الجريمة ومصطلحاتها، أنواع الجرائم الدولية، القرارات الصادرة من المحكمة الجنائية العراقية العليا، الجرائم النفسية والاجتماعية وآثارها، الجرائم البيئية.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	- مفهوم الجرائم وأنواعها، تعريف الجريمة ومصطلحاتها، أنواع الجرائم الدولية، القرارات الصادرة من المحكمة الجنائية العراقية العليا، الجرائم النفسية والاجتماعية وآثارها، الجرائم البيئية.
Indicative Contents المحتويات الإرشادية	- مفهوم الجرائم وأنواعها، تعريف الجريمة ومصطلحاتها، أنواع الجرائم الدولية، القرارات الصادرة من المحكمة الجنائية العراقية العليا، الجرائم النفسية والاجتماعية وآثارها، الجرائم البيئية.

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	- مفهوم الجرائم وأنواعها، تعريف الجريمة ومصطلحاتها، أنواع الجرائم الدولية، القرارات الصادرة من المحكمة الجنائية العراقية العليا، الجرائم النفسية والاجتماعية وآثارها، الجرائم البيئية.

Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	٢
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	17	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	١
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7

	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	جرائم نظام البعث وفق قانون المحكمة الجنائية العراقية العليا لعام ٢٠٠٥ تعريف الجريمة ومصطلحاتها
Week 2	أنواع الجرائم جرائم نظام البعث وفق توثيق قانون المحكمة الجنائية العراقية العليا لعام ٢٠٠٥
Week 3	الجرائم النفسية والاجتماعية وأثارها الجرائم النفسية
Week 4	الجرائم النفسية الليات الجرائم النفسية
Week 5	الجرائم الاجتماعية اثار الجرائم النفسية
Week 6	عسكرة المجتمع انتهاكات القوانين العراقية
Week 7	امتحان
Week 8	الجرائم البيئية لنظام البعث في العراق (التلوث الحربي والاشعاعي وانفجار الالغام)
Week 9	تدمير المدن والقرى
Week 10	تجفيف الاهوار
Week 11	تجريف البساتين
Week 12	جرائم المقابر الجماعية
Week 13	احداث مقابر الابداء الجماعية المرتكبة من النظام البعثي في العراق
Week 14	احداث الانتفاضة الشعبانية عام ١٩٩١ وعلاقتها بالمقابر الجماعية
Week 15	مقابر الابداء الجماعية لضحايا لمجزرة الانفال للمدة (١٩٨٧-١٩٨٨)

Learning and Teaching Resources

مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	https://www.uoanbar.edu.iq/ComputerCollege//catalog/INFO_depart/lectures/infoS_2_1_baathall_compressed.pdf	No
Recommended Texts		No
Websites	https://www.uoanbar.edu.iq/ComputerCollege//catalog/INFO_depart/lectures/infoS_2_1_baathall_compressed.pdf	

Grading Scheme				
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