

جامعة الانبار



First Cycle – Bachelor's degree of (B.Sc.) – Information Technology
بكالوريوس تكنولوجيا المعلومات



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1. Mission & Vision Statement

Vision Statement

To be a leading center of excellence in Information Technology education, research, and innovation, empowering students and faculty to shape the future of digital transformation globally. The main interest of the department is focused on the software industry in the country and keeping pace with the tremendous developments in this field and dealing with modern technologies and the information network, and the main concern of the department is to study all technical issues, issues of senior management, planning policies and decision-making associated with the employment of computers in the establishment of information technology for major institutions, and the department deals with the theoretical and practical aspects related to the description, analysis, design, implementation and management of systems Information while maximizing the utilization of the information and communication technology infrastructure.

Mission Statement

The Information Technology Department academic staff pursues a multifaceted charge at University of Anbar. Thus, the information technology department mission is to provide high-quality education in Information Technology that equips students with the knowledge, skills, and ethical grounding needed to solve real-world problems, foster innovation, and contribute to the advancement of society through research, collaboration, and community engagement. The Program seeks to provide all Department students with fundamental knowledge of Information technology, as well as a deeper understanding of a selected focus area within the computer sciences. The curriculum and advising have been designed to prepare graduates for their professional future, whether they choose to work as

Information technology specializing in botany or wildlife, or to pursue advanced degrees in the Information Technology.

2. Program Specification

Programme code:	BSc-BIS	ECTS	240
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

Information Technology is a wonderfully wide-ranging subject and is well equipped to deliver. The emphasis of the program is the whole organism to which everything is related, be it the molecules that form proteins or communities of organisms in an ecosystem. The degree is popular - –or some it's' the breadth of the subject that appeals, for others it's a path to specialization. All students have the opportunity to transfer onto our specialist degrees in Information technology at the end of the first year.

Level 1 exposes students to the fundamentals of Information technology, suitable for progression to all programs within the Information technology program group. Program-specific core topics are covered at Level 2 preparing for research-led subject specialist modules at Levels 3 and 4. The University System graduate is therefore trained to appreciate how research informs teaching, according to the University and School Mission statements.

At Levels 2, 3 and 4 students are able to study a range of modules which are selected, that reflect the complexity of life forms from Data Structure, information security, Networks, to free to choose more than half of their module credits with the proviso Artificial Intelligence to ensure the breadth of knowledge expected of a graduate with Information technology degree. This allows students to develop their own wide-ranging interests in Information technology and Data Science. Decisions on what to study are made with input from personal tutors.

The research ethos is developed and fostered from the start via practical's, which are either embedded in lecture modules or taught in dedicated practical modules, research seminars and tutorials. There is a compulsory field course in Level 1, which students must pass in order to progress into Level 2, and optional field courses in Levels 2, 3 and 4. At Level 4 all students carry out an independent research project, which may be a 8 credit library or data analysis project, or a 8 credit field or laboratory based project.

Academic tutorials are held at Levels 1 and 2 with the same tutor, who is also the personal tutor, providing continuity and progressive guidance. Level 1 and 2 tutorials include a number of workshops to teach skills, e.g. library use and presentation skills, followed by assessed exercises, e.g. essays and talks, as opportunities to practice these skills in a subject-specific context.

International years and Industrial placements are also offered and individual needs are discussed with the appropriate tutor and accommodated wherever possible.

3. Program Objectives

1. The department aims to prepare qualified cadres in the field of building systems and databases to provide state departments and institutions with expert cadres, in a way that develops the software industry in Iraq, keeping abreast of the tremendous developments in this field, and dealing with modern technologies and the information network. To be able to study the problems and challenges in the field of information technology science and technology.
2. Prepare the student systematically
3. Enable the systems analyst to lead a software team to prepare a computer system that solves the problems of users and beneficiaries.
4. Developing the students' mental abilities through analysis and logical deduction, and enabling them to solve programming problems
5. The necessary development of school curricula to ensure the integration of recent changes in computer science technology and e-learning applications.
6. Encouraging innovative ideas and projects and developing leadership and creative skills in the field of information technology by urging students to participate in computer events and forums.

4. Student Learning Outcomes

Information technology is the study of the organization and operation of life at business and organizations levels. Graduates obtain information on how to collect, retrieve, process, store and disseminate information for the purpose of facilitating planning, control, analysis, coordination and decision making in business and other organizations. The Department offers a Bachelor of Science in Information technology. Additionally, the Department offers courses to a large number of students from other departments and supports pre-professional programs. The Information technology curriculum and experiences are designed to prepare students, in part, for entry into professional Technology programs, graduate studies, technical careers and education

Outcome 1

Identification of Complex Relationships

Graduates will be able to illustrate the structure and function of information technology components and explain how they interact in a living cell.

Outcome 2

Oral and Written Communication

Graduates will be able to formally communicate the results of technology investigations using both oral and written communication skills.

Outcome 3

Laboratory and Field Studies

Graduates will be able to perform laboratory experiments and field studies, by using scientific equipment and computer technology while observing appropriate safety protocols.

Outcome 4

Scientific Knowledge

Graduates will be able to demonstrate a balanced concept of how scientific knowledge develops, including the historical development of foundational theories and laws and the nature of science.

Outcome 5

Data Analyses

Graduates will be able to demonstrate scientific quantitative skills, such as the ability to conduct simple data analyses.

Outcome 6

Critical Thinking

Graduates will be able to use critical-thinking and problem-solving skills to develop a research project and/or paper.

5. Academic Staff

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6. Credits, Grading and GPA

Credits

University of Anbar is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 hrs student workload, including structured and unstructured workload.

Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

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:				
Number 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.				

Calculation of the Cumulative Grade Point Average (CGPA)

1. The CGPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

CGPA of a 4-year B.Sc. degree:

$$\text{CGPA} = [(1^{\text{st}} \text{ module score} \times \text{ECTS}) + (2^{\text{nd}} \text{ module score} \times \text{ECTS}) + \dots] / 240$$

7. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISSP101	Structured programming	108	92	8.00	C	
ISFI 102	Fundamental of Information Technology	78	72	6.00	C	
ISLD103	Logic Design I	93	57	6.00	C	
CCIT060	Mathematic I	78	72	6.00	B	
UOA005	Democracy and Human Rights	33	17	2.00	S	
UOA003	English (1)	33	17	2.00	S	
		423	327	30.00		

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISSP201	Structured programming II	108	92	8.00	C	ISSP101
CCIT061	Discrete Structures	78	72	6.00	B	
ISLD202	Logic Design II	93	57	6.00	C	ISLD103
ISMT203	Communication skills	33	17	2.00	C	CCIT060
ISOA204	Office applications	78	72	6.00	C	
UOA001	Arabic Language I	33	17	2.00	S	
		423	327	30.00		

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISOO301	Object Oriented Programming I	95	105	8.00	C	
ISDS302	Data Structures	70	80	6.00	C	
ISCT303	Computational Theory	34	66	4.00	C	
ISEI304	Introduction to Electronic information technology	30	45	5.00	E	

ISDB306	Design and Analysis of Databases	60	65		E	
ISAM307	Advanced Mathematics	63	73	5.00	C	
		352	398	30.00		

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISOO401	Object Oriented Programming II	108	92	8.00	C	
ISDD402	Algorithms	93	82	7.00	C	
ISDI404	Design Internet Pages	78	47	5.00	C	
CCIT062	Numerical Analysis	63	37	4.00	E	
UOA004	English 2	33	17	2.00	E	
UOA006	The Crimes of Baath Regime in Iraq	33	17	2.00	C	
UOA002	Arabic Language 2	33	17	2.00		
		375	309	30.00		

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISDC308	Visual Programming I	80	95	7.00	C	
CCIT063	Principles Of Computer Network	93	57	6.00	B	
ISDE389	Natural Language Processing	65	60	5.00	C	I ISDE215
ISDE324	Compiler					
ISDC307	Project Management Systems	35	65	4.00	C	
ISDE325	Artificial Intelligent I	65	85	6.00	C	
UOA002	Arabic Language II	32	18	2.00	S	
		338	362	30.00		

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISDE323	Visual Programming II	80	95	7.00	C	ISDC308
ISDE325	Artificial Intelligent II	65	85	6.00	C	ISDC305
ISDC323	Data Storage Engineering	35	65	4.00	E	

ISDC309	Software Engineering					
ISDC327	Data Management Systems	35	65	4.00	C	
ISRM3	IT Risk Management	35	40	3.00	C	
ISDC306	Distributed Database Management systems	80	70	6.00	C	ISDC205
		330	420	30.00		

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISDE323	Information Security	35	90	5.00	C	
ISDE322	Internet of Things	65	85	6.00	E	
ISDE324	Cloud Computing				E	
ISDE325	Machine learning	65	85	6.00	C	
ISDC375	Operating Systems I	65	60	5.00	C	
ISDC327	Web Application Programming	65	85	6.00	C	ISDE219
UOA019	Research Methodology	35	15	2.00	S	
		330	420	30		

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ISDC406	Cyber-Security Principles	35	90	5.00	C	ISDE323
ISDC405	Deep Learning	65	60	5.00	C	ISDE325
ISDE333	Information Technology Governance	33	42	3.00	E	
ISDE414	E- Commerce				E	
ISDC309	Data Warehouse and Data Mining	33	42	3.00	C	
ISDC422	Operating Systems II	65	85	6.00	C	
UOA020+D49	Project	93	107	8.00	S	
		324	426	30.00		

8. Contact

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