حيث تصبح الرؤية واقعاً"
"When Vision Becomes Reality"

" عراقة وجودة"
"Tradition and Quality"

Study Plan for Bachelor program - Study Plan Development and Updating Procedures/ Software Engineering Department	QF01/0407-4.0E

Course Plan for Software Engineering (Bachelor Program) No.: (2024/2025)	
Approved by Deans Council by decision (01/2024-2025) dated (25/9/2024)	
(133) Credit Hours	Study system / hybrid program

Type of specialty	☐ Humanitarian	✓ Scientific / technical	☐ Medical Sciences

Teaching style	Percentage of study plan hours / number	Model used (synchronous: asynchronous)
Complete e-learning courses	10% - 20% Maximum / number( ) C h	2:1 (For SUN. TUE. THER) or 1:1 (for MON. WED.)
Blended Learning courses (For Humanity)	40% - 60% Maximum / number( ) C h	2:1 (For SUN. TUE. THER) or 1:1 (for MON. WED.)
Blended learning courses (for scientific and medical)	30% -50% Maximum / number ( ) C h	2:1 (For SUN. TUE. THER) or 1:1 (for MON. WED.)
Traditional learning courses (for humanity)	20% Minimum / number ( ) C h	3:0 For all academic divisions
Traditional learning courses (for scientific and medical)	30% Minimum / number ( ) C h	3:0 For all academic divisions

Important note: (The teaching patterns of the subjects are distributed at all academic levels in the program)

Program vision: Building specialized competencies in the field of ...., provided with the knowledge, skills and leadership, creative and entrepreneurial competencies necessary to compete in the global labor market, through creative application in the use of information technology and modern teaching and learning strategies.

Program mission and objectives:
1. Achieving the conformity of the learning outcomes in all areas of specialization with the seventh level descriptors (knowledge, skills and competencies) in the National Qualifications Framework.
2. Integrating modern information technology and employing it creatively in the teaching and learning processes in order to achieve more effective learning and take into account the needs of the learner.
3. Promote the principle of self-sustainable, lifelong learning, and highlight the creativity of the learner in light of global changes through the application of various teaching and learning strategies

Program learning outcomes ((MK= Main Knowledge, MS= Main Skills, MC= Main Competences)

Main knowledge	
MK1	Knowledge of software engineering principles and understanding of its processes.
MK2	Knowledge of the basics of systems and software development.
Basic skills	
MS1	The ability to analyze, design, validate, maintain, and manage software systems to meet desired needs and solve problems within realistic constraints.
MS2	Ability to use modern techniques, skills and tools necessary to implement software engineering.
General competencies	
MC1	Ability to work within multidisciplinary teams and communicate effectively.
MC2	Ability to develop software systems and keep pace with change.
Transferable skills	
MT1	Ability to work in a team, communicate effectively and work in a team spirit.

جامعة الزيتونــة الأردنيــة
Al-Zaytoonah University of Jordan
كلية العلوم وتكنولوجيا المعلومات
Faculty of Science and IT

حيث تصبح الرؤية واقعاً"
"When Vision Becomes Reality

" عراقة وجودة"
"Tradition and Quality"

Study Plan for Bachelor program - Study Plan Development and Updating Procedures/ Software Engineering Department	QF01/0407-4.0E

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
Fully electronic learning	Blended learning	Traditional learning							Semester	year
1. Requirements (27) Credit Hours										
1.1 Mandatory requirement (21 credit hour)										
.			0420101	Military Sciences	3	3	0		1	1
.			0420151	National Education	3	3	0		2	1
.			0420271	Life skills	3	3	0		1	2
.			0420115	Communication skills in Arabic	3	3	0	Remedial Arabic Language	1	1
.			0420122	Communication skills in English	3	3	0	Remedial English Language	2	1
.			0420261	Entrepreneurship and innovation	3	3	0		2	2
.			0420241	Leadership and social responsibility	3	3	0		1	2
1.2 University elective requirements(06 credit hour)										
.			0420142	Human Civilization	3	3	0		1	1
.			0420253	Development and environment	3	3	0		1	2
.			0420172	Digital skills	3	3	0	Remedial computer skills	2	1
.			0420201	first aid	3	3	0		2	2
.			0420134	Sports and health	3	3	0		1	1
.			0420212	Islamic culture	3	3	0		1	2
•			0420392	Principals of Psychology	3	3	0		1	3
•			0420341	Principals of German Language	3	3	0		2	3

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
Fully electronic learning	Blended learning	Traditional learning							Semester	year
2. Faculty Requirements (21) Credit Hours										
		•	0130100	Fundamentals of Information Technology	3	3	0	Remedial Computer Skills (Synchronous)	1	1
		•	0135101	Technical English for IT Students	3	3	0	----------------------	1	1
		•	0133102	Emerging Topics in Information Technology	3	3	0	Fundamentals of Information Technology	2	1
		•	0130110	Discrete Mathematics	3	3	0	----------------------	1	1
		•	0130130	Computer Programming	3	2	2	Fundamentals of Information Technology + Technical English for IT Students	2	1
		•	0130231	Applied Programming	3	2	2	Computer Programming	1	2
	•		0131390	Entrepreneurship and Project Planning	3	0	6	Technical English for IT Students	1	3

جامعة الزيتونـــة الأردنيـة
Al–Zaytoonah University of Jordan
كلية العلوم وتكنولوجيا المعلومات
Faculty of Science and IT

Science & IT

حيث تصبح الرؤية واقعاً
"When Vision Becomes Reality"

" عراقة وجودة"
"Tradition and Quality"

Study Plan for Bachelor program - Study Plan Development and Updating Procedures/ Software Engineering Department	QF01/0407-4.0E

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
Fully electronic learning	Blended learning	Traditional learning							Semester	year
3.			**Requirements for a major family (33) Credit Hours**							
	•		0131111	Computer Networks	3	3	0	Fundamentals of Information Technology	2	1
	•		0131112	Digital Logic Design	3	3	0	Discrete Mathematics	2	1
		•	0131203	Database Design and Development	3	2	2	Computer Programming	2	2
	•		0131213	Computer Organization and Architecture	3	3	0	Digital Logic Design	1	2
	•		0131214	Operating Systems	3	3	0	Digital Logic Design	1	2
		•	0131215	Data Structures and Algorithms	3	2	2	Applied Programming	2	2
		•	0131232	Visual Programming Applications	3	2	2	Applied Programming	2	2
		•	0131333	Internet Applications Programming 1	3	2	2	Database Design and Development	1	3
		•	0131334	Internet Applications Programming 2	3	2	2	Internet Applications Programming 1	2	3
		•	0131304	Systems Analysis and Design	3	2	2	Database Design and Development	1	3
		•	0131305	Database Systems Management	3	2	2	Database Design and Development	1	3

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	Prerequisite Co-requisite	Indicative	
Fully electronic learning	Blended learning	Traditional learning							Semester	year
4.			**Major requirements (52) Credit Hours**							
4.1 Mandatory requirements (37) credit hours										
	•		0131106	Fundamentals of Software Engineering	3	3	0	*Remedial computer skills	2	1
	•		0131220	Software Requirements Engineering	3	3	0	Fundamentals of Software Engineering	1	2
	•		0131221	Software Architectural Engineering	3	3	0	Software Requirements Engineering	2	2
		•	0131322	Software Testing and Maintenance	3	2	2	Software Architectural Engineering	2	3
		•	0131307	Intelligent Systems Development	3	2	2	Internet Applications Programming 1	2	3
		•	0131308	User Experience Design	3	2	2	Visual Programming Applications	1	3
		•	0131323	Software project management	3	2	2	Systems Analysis and Design	2	3
		•	0131424	Software Security	3	3	0	Software Testing and Maintenance	2	4
	•		0131425	Software Documentation	3	3	0	Software Testing and Maintenance	1	4
	•		0131491	Field Training	3	0	6	Complete 90 hours	1	4
	•		0131492	Graduation Project 1	2	0	4	Department approval	1	4

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية العلوم وتكنولوجيا المعلومات
Faculty of Science and IT

حيث تصبح الرؤية واقعاً"
"When Vision Becomes Reality"

"عراقة وجودة"
"Tradition and Quality"

Study Plan for Bachelor program - Study Plan Development and Updating Procedures/ Software Engineering Department	QF01/0407-4.0E

	•		0131493	Graduation Project 2	2	0	4	Graduation Project 1	1	4
	•		0131494	Professional Practices Bootcamp	3	0	6	Department approval + Entrepreneurship and Project Planning	2	4
4.2 electives requirements (9) credit hours										
		•	0131326	Business Process Support	3	3	0	Software Requirements Engineering	2	3
		•	0131327	Software Economics	3	3	0	Systems Analysis and Design	2	3
		•	0131335	Mobile Applications Programming	3	2	2	Systems Analysis and Design	2	3
		•	0131409	Cloud Computing	3	2	2	Database Systems Management	1	4
		•	0131428	Big Data Analysis and Representation	3	2	2	Database Systems Management	2	4
		•	0131429	Software Quality Management	3	3	0	Software Testing and Maintenance	1	4
		•	0131495	Selected Topics in Software Engineering 1	3	2	2	Department approval	1	4
		•	0131496	Selected Topics in Software Engineering 2	3	2	2	Department approval	2	4
		•	0131436	Special Programming Language	3	2	2	Department approval	2	4
4.3 supporting requirements (6) credit hours										
		•	0101112	Foundations of Mathematics	3	3	0	Remedial Computer Skills (Synchronous)	1	1
		•	0101274	Computerized Mathematical Applications	3	2	2	Foundations of Mathematics	2	2

The end of the study plan for the major students

Subjects taught in the major for students of other majors (university requirements, college requirements, major family requirements, support requirements)

Teaching style			Course No.	Course name	Credit hour	Theory Hours	Practical Hours	The type of requirement and the recipient
Fully electronic learning	Blended learning	Traditional learning						
	•		0131390	Entrepreneurship and Project Planning	3	0	6	College Core Requirements: Software Engineering, Data Science and Artificial Intelligence, Cybersecurity