



Philadelphia University
Faculty of Information Technology

Study Plan for Bachelor Degree in
Software Engineering

(132 Credit Hours)



Software Engineering Department
2021-2022

First: University Requirements (27 Credit Hours)
A. University Compulsory (18 Credit Hours)

Course No.	Course Name	Cr.	Pre-req.	Mark
0111100	Military Sciences ***	3	----	
0111101	National Education	3	----	
0114103	Communication Skills (Arabic Language)	3	0114099	
0130107	Communication Skills (English 1)	3	0130099	
0130108	Communication Skills (English 2)	3	0130107	
0330103	Leadership and Innovation	1	----	
0115102	Leadership and Social Responsibility	1	----	
0170101	Life Skills	1	----	

Second: Faculty Requirements (24 Credit Hours)

Course No.	Course Name	Cr.	Pre-req.	Mark
0731110	Introduction to Information Systems and Technology	3	---	
0721345	Mobile Computing Technology *	3	0731213	
0721250	Computing Ethics and Technical Writing *	3	0750114	
0731213	Introduction to Web Programming	3	0750113	
0721223	Object Oriented Programming *	3	0750114	
0750113	Programming Fundamentals (1)	3	---	
0750114	Programming Fundamentals (2)	3	0750113	
0750215	Visual Programming	3	0721223	

B. Compulsory Supplementary Requirements (27 Credit Hours)

Course No.	Course Name	Cr.	Pre-req.	Mark
0750120	Discrete Mathematics	3	---	
0250231	Introduction to Statistics and Probabilities	3	---	
0750230	Digital Logic Design	3	0731110	
0750323	Algorithms	3	721224	
0750335	Operating Systems	3	0721350	
0731221	Database Fundamentals*	3	0721223	
0731340	Fundamentals of Computer Networks*	3	0721224	
0250241	Linear Algebra(1)	3	0250101	
0250101	Differentiation and Integration (1)	3	---	

*** Compulsory for Jordanian students and elective for Non-Jordanians

B. University Electives (9 credit hours)

Course No.	Course Name	Cr.	Pre-req.	Mark
0170102	Thinking skill	3	---	
0111133	Thought and Human Civilization	3	---	
0140111	Language Skills (1)	3	---	
0140112	Language Skills (2)	3	---	
0670101	Development and Environment	3	---	
0330111	Introduction to Project Management	3	---	
0420140	Human Rights	3	---	
0420143	Legal Culture	3	---	
0320104	Economic culture	3	---	
0750101	Digital Culture	3	---	
0750102	Data Analysis Skills	3	---	
0910102	Health Education	3	---	

Third: Major Requirements (81 Credit Hours)
A. Compulsory Modules (45 Credit Hours)

Course No.	Course Name	Cr.	Pre-req.	Mark
0721111	Software Engineering Fundamentals	3	0731110	
0721224	Data Structures*	3	0721223	
0721222	Software Modelling*	3	0721111	
0721230	Software Requirements	3	0721111	
0721320	Software Architecture	3	0721222	
0721322	System Analysis and Design	3	0721230	
0721351	Database Management	3	0731221	
0721350	Computer Organization and Architecture	3	0750230	
0721425	Software Development and Documentation	3	0721322	
0721331	Software Project Management	3	0721322	
0721422	Web Software Engineering	3	0731213	
0721330	Software Production	3	0721222	
0721410	Secure Software Construction	3	0721425	
0721433	Software Testing	3	0721322	
0721434	Practical Training	3	90 hours	
0721448	Research Project (1)*	1	90 hours	
0721449	Research Project (2)*	2	0721448	

C. Elective Modules (9 Credit Hours)

Course No.	Course Name	Cr.	Pre-req.	Mark
0721439	Special Topics in Software Engineering	3	0721322	
0750436	Cloud Applications Development *	3	0731340	
0721423	Graphical User Interface Design	3	0721322	
0721432	Software Quality Engineering	3	0721322	
0721329	Mobile Applications Development*	3	0721345	
0750352	Data Science and Artificial Intelligence*	3	0750215	
0721437	Software Re-Engineering	3	0721433	

*All major modules include not less 25% Practical work, Tutorial, Lab., and Assignment

All students must apply for exam in Arabic, English language and computer