

**Princess Sumaya University for Technology – King Hussein School for
Computing Science
Proposed Curriculum for – 2015/2016
Software Engineering Department – Bachelor Degree**

1- University Requirements: (27 Credit Hours)

a. Mandatory Courses (12 Credit Hours)

No	Course Title	Credit Hours	Prerequisite
11100	Computer Skills (Remedial)	0	-
31019	Arabic Language (Remedial)	0	-
31029	English Language (Remedial)	0	-
31111	Arabic Language	3	31019
31121	English Language	3	31029
31151	National Education (Jordanian Students)	3	-
31153	Entrance to the Community and Technology and Environmental Protection	0	
31251	Military Science(Jordanian Students)	3	-

b. Elective Courses (15 Credit Hours)

- Scientific and Practical Skills (9 Credit Hours)

No	Course Title	Credit Hours	Prerequisite
31130	Foreign Languages	3	-
31255	Entrepreneurship for Business	3	-
31311	Scientific Research Methods	3	-
31372	Business Skills	3	60 credit

- Public (6 Credit Hours)

No	Course Title	Credit Hours	Prerequisite
31100	Health & Sport	3	-
31152	Arabic Islamic Civilization	3	-
31161	Introduction to Library Science	3	-
31171	History of Science.	3	-
31211	Arabic Literature	3	31111
31261	Introduction to Politics and Economic Science	3	-
31262	Introduction to Educational Science	3	-
31271	Environmental Science	3	-
31351	Contemporary Issues in the Arab World	3	
31352	Jerusalem: History and Facts	3	
31361	Introduction to Psychology	3	
31371	Health Education	3	-

2- College Requirements (25 credit hours):

Course Number	Course Title	Credit Hours	Prerequisite
11102	Introduction to Computer Science	3	-
11103	Structured Programming	3	11102
11151	Structured Programming Lab	1	11103*
20132	Calculus (1)	3	-
20133	Calculus (2)	3	20132
20134	Discrete Mathematics (1)	3	-
20234	Linear Algebra	3	20133
20233	Statistical Methods	3	-
31263	Technical Writing Communication Skills	3	31121, 31111

*Co-requisite

3- Department Requirements (80 credit hours):

a. Mandatory Courses (68 credit hours to be chosen from the following list):

Course Number	Course Title	Credit Hours	Prerequisite
11206	Object Oriented Programming	3	11103, 11151
12343	Visual Programming	3	11206
11212	Data Structures and Introduction to Algorithms	3	11206, 20134, 11253
12241	Webpage Design and Internet programming	3	11206
12242	Webpage Design and Internet programming Lab	1	12241*
11253	Object Oriented Programming Lab	1	11206*
11323	Database Systems	3	11212
11335	Operating Systems	3	11212
11313	Algorithms analysis and design	3	11212
11354	Database Systems Lab.	1	11323*
11355	Operating Systems Lab.	1	11335*
22241	Logic Design	3	-
11435	Data Communications and Computer Networks	3	11335
11455	Data Communications and Computer Networks Lab	0	11435*
11449	Computer and Society	1	111 Cr. Hrs.
13211	Introduction to Software Engineering	3	11206
13212	Software Construction	3	13211,11212
13432	Software Project Management	3	13324
13327	Software Design and Architecture	3	13212,11212
13324	Systems Analysis and Design	3	13211
13325	Software Requirements Analysis	3	13324
13428	Software Quality Assurance and testing	3	13212
13391	Practical Training	3	90 Cr. Hrs.
13326	Software Engineering Approaches to Human Computer Interaction	3	11206
13435	Database Management Systems	3	11323
13491	Graduation Project 1	1	90 Cr. Hrs.
13493	Graduation Project 2	2	13491
22342	Computer Organization and Assembly Language	3	22241

*Co-requisite.

b. Elective Courses (12 credit hours):

Course Number	Course Title	Credit Hours	Prerequisite
11347	Electronic Business	3	11241
11447	Wireless Networks and Applications	3	11435
11464	Information Systems Security	3	11212
13393	Special Topic in Software Engineering (1) **	3	Set by Dept.
13413	Formal methods in Software Engineering	3	13324
13424	Software Re-Engineering	3	13212
13427	Software Documentation	3	13324
13433	Risk management for Software intensive projects	3	13324
13494	Special Topic in Software Engineering (2)	3	Set by Dept.
20333	Numerical Analysis	3	20133
13334	Mobile Application Development	3	11206
13335	Server Side Programming	3	12241,11323,11206
13434	Secure Software Development	3	11323,12241
13431	Advanced Topics in Programming	3	Set by Dept.
11428	Artificial Intelligence		11212

***Topics to be offered in 13393 and 13494 will be set by the department at the beginning of the semester*