## Zarqa University Skills Matrix CIS Department



متطلب تخصص اختياري متطلب تخصص اجباري المتطلبات المساندة



متطلب جامعة اجباري متطلب كلية اجباري متطلب جامعة اختياري

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									F	irs	t Ye	ear											Se	COI	nd	Ye	ar			
Skills VS. Courses	Military Sciences	Arabic Language 1	English language1	The ethics of university stu	principles of Education	Fundamentals of Public He	Arabic Language 2	principles of low	principles of Communication	principles of Environmenta	First Aid	Islamic Culture and Conter	Computer Programming (1	Computer Programming (2	Discrete Mathematics	Introduction to Software Er	Data Structures	Web Programming (1)	Research Methodology an	Programming (1) Lab	Programming (2) Lab	Digital Image Processing	Selected Programming La	advanced Programming	Electronic Business	Digital Logic Design	Calculus (1)	Statistics and Probabilities	Linear Algebra 1	Skil
A. Knowledge and understanding of:																														A. Know
Mathematics and Physics																														Mathen
A1. Mathematical and statistical methods appropriate to CS.				X									X	X	X														X	statistical to CS.
A2. Essential physics principles.																														AZ. ESSE
Hardware																														Hardwa
A3. Computer architecture and construction.																														A3. Con and cons
A4. Processor architecture.																														A4. Proc
A5. Basic electronics and logic design.																														A5. Basi
Software																														Softwar
A6. Programming languages.																X		X						X			X			A6. Prog
A7. Software tools and packages.																		X							X	Х		X		A7. Soft
A8. Computer applications.																														A8. Con
A9. Structuring of data and information.												]				X	X		X	X	Х			X			X			A9. Stru

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Communication																												Commu
A10. Computer networks and distributed																												A10. Co
systems.																												and distr
A11. Operating systems.																												A11. Op
Theory																												Theory
A12. Algorithm design and analysis.														Х	Χ	Χ		Χ	Χ	X		Х	Х		Х	Х		A12. Alş
A13. Formal methods and description																					<b>&gt;</b>							A13. Fo1
techniques.														Χ							X							descripti
A14. Modeling and frameworks.																					Х							A14. Mc
A15. Analysis, prediction, and																												A15. An
generalization.																					X							and gene
<b>B. Practical skills</b> – students will be																												B. Pra
able to:																												able to:
B1. Specify, analyze, design, and			<del>                                     </del>				<del>                                     </del>																	<del>                                     </del>		1		D1. Spec
implement computer-based systems.																X	X				X							design, ε
B2. Deploy effectively the computer			<del> </del>				<del>                                     </del>															1,,	\		<u> </u>	1.	1,,	B2. Dep
tools to solve practical problems.															X	X	X	X	X	X	X	X	X		X	X	X	compute
B3. Operate computing equipments																									1			B3. Ope
effectively.																												equipme
C. Cognitive skills – students will be able to:																												C. Cogn able to:
C1. Demonstrate knowledge																												C1. Den understa
understanding of essential facts and														X										X				facts and
concepts in computing.																												
C2. Model, design, and evaluate a																					Х	х						evaluate
computer-based system.																												C3. Reco
C3. Recognize and analyze criteria and													v		v			v	v	_		v	<sub>v</sub>					criteria a
specifications appropriate to specific						١.,	١.,						X		X			X	X	X		X	X	X	_ ا			
problems.						Х	X					X													X	X		appropri
C4. Deploy appropriate theory, practice,																												C4. Dep
and tools to solve real problems.																											X	theory, p
C5. Recognize the professional, moral,	X	Х																										C5. Reco
and ethical issues related to work.										X	X													X				profession

D. General transferable skills – students will be able to:																						D. Gene skills – §
D1. Effectively communicate both orally and in writing using appropriate tools.	Х	х				Х										Х						D1. Effe commun
D2. Work effectively as part of a team.																Х					J	D2. Wor
D3. Effective use of general IT facilities.																					]	D3. Effe
D4. Do independent learning and continue professional development.											X		X	Х	Х		X					D4. Do i learning
D5. Communicate and present logical argument related to computing.									Х	х								х				D5. Con present l
D6. Employ scientific methods in the solution of problems.				х	Х				Х		х		Х	х	Х	Х	х	х				D6. Emp methods

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lls VS. Courses	National Education	History of Jordan and pale	Jerusalem: History and Civ	Scientific Culture	Principles of Astronomy	Computer Networks	Database Systems design & Analysis of Algor	Analysis	Network and Information S	data mining and warehous	Computer Information Sys	Software System Requirer Operations Research	Special programming langu	Software Project Managen	Advanced Systems Analys	Multimedia Fundamentals	Geographical Information (	Web (1) Lab	bute	Adminietrati	Z	Operating Systems	Database Administration	Information Retrival	Internship for CIS	aba	project 2
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methods appropriate							X											X									
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cturing of data and infor	mation.						X		X	X		X	X		Ī		)	( X					Х	X			

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ents effectively.						X			X							`											X	<u>X  </u>			
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## th Year

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				Special Topics in Informati
				Emerging Topics in IT
				Smart Phone Programming
				Computer Assisted Learning

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