

**B.Sc. Software Engineering  
Subject to PLO Mapping**

UET Course Title	HEC Domain	Credit Hours	PLO-1	PLO-2	PLO-3	PLO-4	PLO-5	PLO-6	PLO-7	PLO-8	PLO-9	PLO-10
Programming Fundamentals	Computing Core	3	CLO-2	CLO-1	CLO-3 CLO-4							
Programming Fundamentals Lab	Computing Core	1			CLO-1			CLO-2	CLO-4		CLO-3	
Application of Information and Communication Technologies	GER	2	CLO-2, CLO-3		CLO-1							
Application of Information and Communication Technologies Lab	GER	1			CLO-3	CLO-1	CLO-2					
Discrete Mathematics	GER	3		CLO-1, CLO-2	CLO-3				CLO-4			
Calculus	GER	3	CLO-1, CLO-2									
Functional English	GER	3							CLO-1, CLO-2			
Workshop Practice	UE	1						CLO-1	CLO-2		CLO-3	
Object Oriented Programming	Computing Core	3	CLO-1	CLO-3, CLO-6	CLO-2, CLO-4, CLO-5							
Object Oriented Programming Lab	Computing Core	1	CLO-1	CLO-3, CLO-6	CLO-2, CLO-4, CLO-5							
Database Systems	Computing Core	3		CLO-2	CLO-3, CLO-4	CLO-5						CLO-1
Database Systems Lab	Computing Core	1			CLO-4	CLO-1, CLO-2, CLO-3						
Applied Physics	GER	2	CLO-1, CLO-2									
Applied Physics Lab	GER	1	CLO-1, CLO-2									
Calculus II	MSC	3	CLO-1, CLO-2									
Applied Statistics and Probability	MSC	3	CLO-1	CLO-2	CLO-3							
Communication Skills (Lab)	GER	1						CLO-3	CLO-1, CLO-2			
Translation of the Holy Quran-I	UE	1									CLO-1, CLO-2,	

												CLO-3	
Data Structures and Algorithms	Computing Core	3		CLO-5	CLO-1, CLO-2, CLO-3, CLO-4								
Data Structures and Algorithms Lab	Computing Core	1	CLO-3, CLO-4		CLO-1, CLO-2								
Linear Algebra	MSC	3	CLO-1, CLO-4	CLO-2, CLO-3									
Digital Logic Design	Computing Core	2	CLO-1		CLO-2, CLO-3							CLO-4	
Digital Logic Design Lab	Computing Core	1	CLO-1	CLO-2	CLO-3, CLO-4	CLO-5							CLO-6
Computer Networks	Computing Core	2	CLO-1, CLO-5	CLO-3	CLO-2, CLO-4								
Computer Networks Lab	Computing Core	1			CLO-3, CLO-4	CLO-2	CLO-1						
Software Engineering	Computing Core	3		CLO-1	CLO-2	CLO-3							
Islamic & Pakistan Studies-I	GER	2										CLO-1, CLO-2	CLO-3
Computer Organization and Assembly Language	Computing Core	2	CLO-1, CLO-2	CLO-3									
Computer Organization and Assembly Language Lab	Computing Core	1	CLO-1	CLO-3	CLO-2							CLO-4	
Information Security	Computing Core	2	CLO-1, CLO-2	CLO-4		CLO-3							
Information Security Lab	Computing Core	1	CLO-1, CLO-2	CLO-4		CLO-3							
Artificial Intelligence	Computing Core	2	CLO-1	CLO-2	CLO-3, CLO-4								
Artificial Intelligence Lab	Computing Core	1		CLO-1, CLO-2	CLO-3	CLO-4						CLO-5	
Software Requirement Engineering	SE Domain Core	3	CLO-1	CLO-2, CLO-3									
Design and Analysis of Algorithms	Computing Core	3		CLO-1, CLO-2, CLO-3	CLO-4								
Software Design & Architecture	SE Domain Core	2	CLO-1	CLO-2	CLO-3, CLO-4								
Software Design & Architecture Lab	SE Domain Core	1			CLO-1, CLO-2,					CLO-4		CLO-5	

					CLO-3							
Translation of the Holy Quran-II	UE	1									CLO-1, CLO-2, CLO-3	
Operating Systems	Computing Core	2	CLO-1, CLO-2				CLO-3	CLO-4				
Operating Systems Lab	Computing Core	1	CLO-1	CLO-3	CLO-2						CLO-4	
Software Construction and Development	SE Domain Core	2	CLO-1		CLO-2, CLO-3							
Software Construction and Development Lab	SE Domain Core	1		CLO-1, CLO-2				CLO-3				
Software Quality Engineering	SE Domain Core	3		CLO-4	CLO-2, CLO-3	CLO-1						
Psychology	GER	2	CLO-1	CLO-2								
Software Project Management	SE Domain Core	3	CLO-1				CLO-2, CLO-3		CLO-4			
Parallel and Distributed Computing	Domain Core	2	CLO-1	CLO-4	CLO-2, CLO-3							
Parallel and Distributed Computing Lab	Domain Core	1	CLO-1	CLO-4	CLO-2, CLO-3							
Translation of the Holy Quran-III	UE	1									CLO-1, CLO-2, CLO-3	
Final Year Project – I	Computing Core	2	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	CLO-7	CLO-8	CLO-9	CLO-10
Leadership Strategies	GER	3					CLO-1	CLO-2				
Technical Writing and Presentation Skills	MSC	3							CLO-1, CLO-2, CLO-3			
Entrepreneurship & Business Management	GER	2					CLO-3	CLO-2				CLO-1
Final Year Project – II	Computing Core	4	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	CLO-7	CLO-8	CLO-9	CLO-10
Islamic & Pakistan Studies – II	GER	2									CLO-1, CLO-2	CLO-3
Professional Practices in Software Development	GER	2						CLO-1		CLO-2	CLO-3	
Translation of the Holy Quran-IV	UE	1									CLO-1, CLO-2, CLO-3	