

MAPPING OF COURSES TO PLOs

Semester No.	Course Code	Course Title	Engineering Technology Knowledge	Problem Analysis	Design/Development of Solutions	Investigation	Modern Tool Usage	The Engineering Technologist and Society	Environment and Sustainability	Ethics	Individual and Team Work	Communication	Project Management	Lifelong Learning
			PLO-1	PLO-2	PLO-3	PLO-4	PLO-5	PLO-6	PLO-7	PLO-8	PLO-9	PLO-10	PLO-11	PLO-12
Semester 1	CTMA-101	Applied Mathematics		✓	✓									
	CT-102	Fundamentals of Computing	✓		✓		✓							
	CT-102L	Fundamentals of Computing					✓							
	CTHU-103	Communication Skills – I										✓		
	CTM-104	Engineering Geology	✓		✓	✓								
	CTM-104L	Engineering Geology												
	CT-105	Mechanics of Materials		✓		✓								
	CT-105L	Mechanics of Materials	✓	✓		✓								
	CT-106	Professional Ethics	✓		✓					✓	✓			
Semester 2	CT-107	Materials and Methods of Construction	✓		✓									
	CT-107L	Materials and Methods of Construction			✓	✓				✓				

Semester 4	CT-206	Soil Mechanics	✓	✓		✓	✓								
	CT-206L	Soil Mechanics	✓			✓	✓								
	CT-207	Hydraulic Machinery	✓			✓				✓					
	CT-207L	Hydraulic Machinery	✓			✓		✓							
	CTEN-208	Water Supply and Waste Water Management			✓			✓	✓						
	CTEN-208L	Water Supply and Waste Water Management	✓		✓			✓							
	CT-209	Quantity Surveying and Contract Documents	✓	✓		✓							✓		
	CT-209L	Quantity Surveying and Contract Documents		✓			✓						✓		
	CTIS -210	Islamic and Pak Studies/ Ethics							✓	✓					✓
	CT-211	Practical Field Training and Report Submission-II									✓	✓	✓		
Semester 5	CT-301	Soil Investigations	✓	✓											
	CT-301L	Soil Investigations	✓			✓									
	CT-302	Hydrology	✓	✓					✓	✓					
	CT-302L	Hydrology		✓		✓				✓					
	CT-303	Bridge Technology	✓		✓				✓						
	CT-303L	Bridge Technology		✓					✓						

Semester 5	CT-304	Concrete Technology – II			✓		✓							
	CT-304L	Concrete Technology – II			✓	✓	✓							
	CT-305	Engineering Economics	✓										✓	
Semester 6	CTEN-306	Environmental Management	✓						✓	✓				
	CTEN-306L	Environmental Management	✓						✓					
	CTAR-307	Introduction to Architecture and Town Planning			✓									
	CT-308	Steel Structures	✓		✓		✓							
	CT-308L	Steel Structures			✓									
	CT-309	Renewable Energy Resources	✓			✓				✓				
	CT-310	Practical Field Training and Report Submission-III									✓	✓	✓	
Semester 7	CT-401	Disaster Management	✓		✓	✓		✓						
	CT-402	Transportation Engineering			✓	✓	✓							
	CT-402L	Transportation Engineering	✓	✓										
	CT-403	Water Resources Engineering	✓	✓	✓					✓				
	CT-404	Computer Applications in Civil Technology	✓	✓	✓									
	CT-404L	Computer Applications in Civil Technology	✓	✓										
	CT-405	Project Management								✓				✓

Semester 8	CT-406	Repair and Maintenance of Structures	✓	✓		✓								
	CT-407	Pavements and Foundations	✓		✓									
	CT-407L	Pavements and Foundations				✓								
	CT-408	Pre-Stressed and Pre-Cast Concrete Technology	✓		✓									
	CT-408L	Pre-Stressed and Pre-Cast Concrete Technology	✓				✓							
	CT-409	Project			✓		✓				✓	✓	✓	✓
	CT-410	Practical Field Training and Report Submission - IV									✓	✓	✓	