

University of Mosul
College of Engineering
Department of Civil Engineering
Curriculum Vocabulary of
Postgraduates
2026-2025

1. Ph.D. – Structures – First Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Engineering Mathematics	CE701	2	-	2
Theory of Plasticity	CE702	2	-	2
Stability of Structures	CE703	2	-	2
Prestressed Concrete	CE704	2	-	2
Theory of Shells	CE705	2	-	2
English language	CEP01	2	-	2
Sum.		12		12

2. Ph.D. – Structures – Second Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Structural Dynamics	CE706	2	-	2
Reliability of Structures	CE707	2	-	2
Advanced Steel Structures	CE708	2	-	2
Special Topics	CE709	2	-	2
Nonlinear Finite Element	CE710	2	-	2
Scientific Research Methods	CEP02	2	-	2
Sum.		12		12

1. Ph.D. – Soil Mechanics – First Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Finite Elements	CE711	2	-	2
Modeling in Geotechnics	CE712	3	-	3
Plasticity and its Applications in Geotechnical Engineering	CE713	2	-	2
Underground Structures	CE714	2	-	2
English language	CEP01	2	-	2
Sum.		11		11

2. Ph.D. – Soil Mechanics – Second Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Unsaturated Soil Mechanics	CE723	3	-	3
Deep Foundations	CE724	3	-	3
Advanced Engineering Mathematics II	CE725	2	-	2
Soil Dynamics and Machine Foundations	CE726	3	-	3
Scientific Research Methods	CEP02	2	-	2
Sum.		13		13

1. Ph.D. – Highways and Transportations – First Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Traffic Flow Theory	CE719	2	-	2
Advanced Railway and Airport Engineering	CE720	3	-	3
Advanced Materials Properties for Highway	CE721	3	-	3
Numerical Analysis	CE722	2	-	2
English language	CEP01	2	-	2
Sum.		12		12

2. Ph.D. – Highways and Transportations – Second Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Traffic Engineering II	CE715	3	-	3
Advanced Geometric Design of Highways II	CE716	3	-	3
Intelligent Transportation System	CE717	2	-	2
Finite Element Applications	CE718	1	2	2
Scientific Research Methods	CEP02	2	-	2
Sum.		11	2	12

1. M.Sc. – Structures – First Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Mathematics and Numerical Analysis	CE601	2	1	2.5
Theory of Elasticity and Plasticity	CE602	2	1	2.5
Advanced Structural Analysis	CE603	3	-	3
Advanced Concrete Technology	CE604	1	1	1.5
Structural Optimization	CE605	1	1	1.5
English language	CEP01	2	-	2
Sum.		11	4	13

2. M.Sc. – Structures – Second Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Fundamentals of Structural Dynamics	CE606	2	-	2
Experimental Stresses Analysis	CE607	-	2	1
Advanced Reinforced Concrete	CE608	3	-	3
Theory of Plates	CE609	2	1	2.5
Finite Element Method	CE610	2	1	2.5
Scientific Research Methods	CEP02	2	-	2
Sum.		11	4	13

1. M.Sc. – Soil Mechanics – First Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Engineering Mathematics I	CE611	2	-	2
Numerical Analysis	CE612	1	2	2
Advanced Special Topics	CE613	2	-	2
Advanced Shear Strength and its Applications	CE614	2	2	3
Ground Improvement	CE615	2	-	2
English language	CEP01	2	-	2
Sum.		11	4	13

2. M.Sc. – Soil Mechanics – Second Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Mechanics of Materials	CE616	2	-	2
Advanced Stresses and Settlement Analysis	CE617	2	-	2
Finite Elements	CE618	2	1	2.5
Advanced Foundation Engineering	CE619	2	1	2.5
Earth Structures	CE620	2	-	2
Scientific Research Methods	CEP02	2	-	2
Sum.		12	2	13

1. M.Sc. – Highways and Transportations – First Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Traffic Engineering	CE621	2	1	2.5
Pavement Analysis and Design	CE622	2	1	2.5
Soil Stabilization	CE623	2	-	2
Advanced Engineering Statistics	CE624	2	-	2
Urban Transportation Planning	CE625	2	-	2
English language	CEP01	2	-	2
Sum.		12	2	13

2. M.Sc. – Highways and Transportations – Second Semester

Subject	Code	Hours		Units
		Theo.	Exp.	
Advanced Geometric Design of Highways I	CE626	2	-	2
Highway Materials	CE627	2	2	3
Computer Applications in Transportation Engineering	CE628	2	-	2
Railways and Airports Engineering	CE629	2	-	2
Traffic and Environmental Safety of the Highway	CE630	2	-	2
Scientific Research Methods	CEP02	2	-	2
Sum.		12	2	13