

DEPARTMENT OF CIVIL ENGINEERING
PHD QUALIFYING WRITTEN EXAMINATION COURSE POOL

Program Name	Course Code	Course Title
Structures	INS5602	New Approaches in the Design of Reinforced Concrete Structures
	INS5605	Earthquake Resistant Structural Design
	INS5613	Performance Based Design
	INS5619	Numerical Analysis of Structural Systems
	INS5620	Matrix Methods of Structural Analysis
	INS6602	Advanced Dynamics of Structures
	INS6603	Thin-Walled Structures Members
	INS6614	Finite Element Method
	INS5604	Earthquake Resistant Steel Structures
	INS5626	Experimental Analysis in Structural and Earthquake Engineering
Transportation	INS5505	Planning and Operating Techniques of Rail Systems
	INS5508	Transportation Economics
	INS5511	Transportation Planning 1
	INS5515	Quality of Service in Public Transportation
	INS6506	Highway Superstructure and New Pavement Technologies
	INS6507	Traffic Flow Theory
	INS6510	Operations Research in Transport

Coastal and Port Engineering	INS5316	Coastal Engineering
	INS5315	Sea Bed Dynamics and Coastal Morphology
	INS6301	Wave Mechanics
	INS6304	Modeling in Coastal Engineering
	INS6306	Data Analysis for Civil Engineers
	INS6307	Marine Structures
	INS5309	Statistical Methods in Coastal Engineering
	INS5301	Breakwaters
	INS6302	The hydrodynamic of Marine Structure
	INS5208	Advanced Fluid Mechanics
Hydraulics	INS5203	Dam Planning 1
	INS6203	Dam Planning 2
	INS5201	River Haydraulics 1
	INS5209	Advanced Hydrology
	INS5208	Advanced Fluid Mechanics
	INS6204	Computational Fluid Dynamics 1
	INS6202	Turbulent
	INS5213	Hydraulic Transients
	INS6306	Data Analysis for Civil Engineers
	INS5202	River Haydraulics 2
Mechanics	INS5407	Special Problems in Structural Mechanics
	INS5405	Continuum Mechanics
	INS5406	Applied Engineering Mathematics
	INS5403	Elasticity
	INS6405	Fracture Mechanics
	INS5401	Elastic Stability 1
	INS6401	Nonlinear Vibrations

Geotechnical Engineering	INS6102	Advanced Soil Mechanics
	INS6103	Soil Dynamics
	INS5110	Site and Soil Improvement
	INS5104	Rock Mechanics
	INS6107	Geotechnical Engineering Instrumentation and Field Measurements
	INS5107	Shallow and Deep Foundations
	INS5108	Soil Properties and Experimental Soil Mechanics
	INS5111	The Use of Geosynthetics in Geotechnical Applications

Civil Engineering	INS6616	Sustainable Construction Technologies
	INS6602	Advanced Dynamics of Structures
	INS6603	Thin-Walled Structural Members
	INS5603	Earthquake Engineering
	INS5613	Performance Based Design
	INS6614	Finite Element Method
	INS6801	Multicriteria Decision Making Techniques in Construction Management
	INS5837	Selected Topics in Construction Management
	INS5841	Building Information Modelling
	INS5818	Strategic Planning in Construction Industry
	INS5810	Planning in Construction Project