

Department of Civil Engineering



M.Eng./ PG Dip. in Highway & Traffic Engineering

Code	Course Module	Credit
CE 6601	Highway Construction & Maintenance Techniques	3
CE 6602	Traffic Engineering	3
CE 6603	Highway Infrastructure Design	3
CE 6604	Geotechniques and Pavement Analysis	3
CE 5601	Quantitative Methods for Transport Analysis	3
CE 5602	Systems and Operational Research Methods in Transport	3
CE 5603	Road Safety, Social & Environmental Evaluations	3
CE 5604	Project Management	3
CE 5619	Research Methods	1
CE 5605	Traffic Management & Intelligent Transport Systems	3
CE 5606	Highway Planning & Management	3
CE 5607	Transport Project Planning and Appraisal	3
CE 6611	Urban & Regional Transport Planning	3
CE 6631	GIS and Geomatics in Transport Planning	3
CE 6632	Railway & Airport Infrastructure	3
CE 6633	Freight Transport & Logistics	3
CE 6634	Advanced Methods in Road and airfield Infrastructure Design	3

MSc./ PG Dip. in Transportation

Code	Course Module	Credit
CE 6611	Urban & Regional Transport Planning	3
CE 6612	Transport Demand Analysis	3
CE 6613	Public Transport Systems	3
CE 6614	Transport Economics	3
CE 5601	Quantitative Methods for Transport Analysis	3
CE 5602	Systems and Operational Research Methods in Transport	3
CE 5603	Road Safety, Social & Environmental Evaluations	3
CE 5604	Project Management	3
CE 5619	Research Methods	1
CE 5605	Traffic Management & Intelligent Transport Systems	3
CE 5606	Highway Planning & Management**	3
CE 5607	Transport Project Planning and Appraisal	3
CE 6631	GIS and Geomatics in Transport Planning	3
CE 6632	Railway & Airport Infrastructure	3
CE 6633	Freight Transport & Logistics	3

M.Eng./ PG Dip. in Geotechnical Engineering

Code	Corse Module	Credit
CE 5401	Engineering Properties of Soil	4.5
CE 5402	Engineering Geology	4
CE 5403	Geotechnical Investigations	3
CE 5404	Design of Dewatering Systems	2
CE 5405	Earth Retaining Systems	4
CE 5406	Ground Improvement Techniques	2.5
CE 5407	Design and Construction of Shallow Foundations	3
CE 5408	Structural Design of Foundations	2.5
CE 5409	Design and Construction of Deep Foundations	4
CE 5410	Computer Applications in Geotechnical Engineering	3.5
CE 5414	Rock Mechanics	3
CE 5415	Slope Engineering	4

M.Sc. / PG Diploma in Water Resources Engineering and Management

Code	Corse Module	Credit
CE 5802	Integrated Water Resources Management	4
CE 5804	Remote Sensing and Geographic Information Systems (GIS) for Planning and Management	4
CE 5806	Water Resources Project Planning	2
CE 5809	Research Methods for Water Resources Planning and Management	2
CE 5810	Water Supply and Sanitation Systems and Water Quality Management	4
CE 5811	Advanced Irrigation Water Management for Food and Water Security	4
CE 5812	Advanced River Engineering and Estuary Hydraulics	4
CE 5813	Advanced Surface and Groundwater Hydrology	4
CE 5830	Climate Change Impacts and Adaptation Options for Water Management	4
CE 5831	Disaster Risk Assessment, Reduction and Mitigation	4
CE 5832	Advanced GIS for Water Resources Management	4
CE 5837	Advanced Coastal Engineering and Estuary Management	4
CE 5838	Advanced Water Supply and Sanitation Systems for Engineering Applications	4
CE 5839	Water Resources Systems and Watershed Management for Planning and Management	4
CE 5840	Advanced Remote Sensing and Global Positioning Systems	4
CE 5841	Environmental Assessment of Water and Related Infrastructure Development	2
CE 5842	Service Delivery Assessment Concepts for Water Supply and Irrigation Systems	2

MSc. / PG Dip. in Environmental Engineering & Management

Code	Course Module	Credit
CE5527	Environmental and Social Impact Assessment	2
CE5560	Surface water pollution and control	4
CE5561	Groundwater pollution and control	2
CE5562	Noise & Air pollution and control	2
CE5563	Solid and Hazardous Waste Management	2
CE5564	Environmental Chemistry	4
CE5565	Statistical and Research Methods	2
CE5566	Environmental Law and Policy	2
CE5567	Microbiology and Biotechnology for Environmental applications	2
CE5568	Water Safety and Principles of Water and Wastewater Treatment	4
CE5569	Seminars on Global Environmental Issues	2
CE5591	Comprehensive Design Project	4
CE5525	Environmental Economics	2
CE5570	Meteorology & Climate Change	2
CE5571	Contaminated Land Management	2
CE5572	Design of Water Treatment systems	4
CE5573	Design of Wastewater Treatment systems	4
CE5574	Environmental Quality Management and Environmental Auditing	2
CE5575	Geographical Information Systems (GIS) for Environmental Applications	2
CE 5576	Integrated Water Resources Management	2
CE 5577	Sustainable Building and Infrastructure Design	2
CE5543	Design of Water Retaining Structures	4
CE5544	Advances in Water & Wastewater Treatment	4
CE5545	Water Supply & Sewer Design	4
CE5552	Applied Ecology	4
CE5554	Natural Resources Management	4
CE5555	Forestry and Wildlife Conservation	4

M.Sc./PG Diploma in Construction Project Management

Code	Corse Module	Credit
CE 5251	Project Management I	3
CE 5252	Project Management II	3
CE 5253	Management Information Systems	3
CE 5254	Procurement Management & Law	3
CE 5255	Human Resource Management	3
CE 5256	Project Management Applications	3
CE 5257	Construction Management	3
CE 5258	Financial Management	3
CE 5259	Economics & Development Finance	2
CE 5260	Communication Skill Development	2
CE 5261	Quantitative & Research Methodology	3
CE 5271	Advanced Methods in Building Construction	3
CE 5272	Road & Bridge Engineering	3
CE 5273	Building Services & Asset Management	3
CE 5274	Sustainable Design & Construction	3
CE 5275	Climate Change & Disaster Management	3
CE 5276	Industrial & Commercial Law	3

M.Sc. in Structural Engineering

Code	Corse Module	Credit
CE 5101	Concrete Technology and Forensic Eng.	4
CE 5102	Computer Analysis of Structures	4
CE 5103	Design Project	8
CE 5104	Design of Pre-stressed Concrete Structures	4
CE 5105	Design of Reinforced Concrete Structures	4
CE 5106	Design of Steel Structures	4
CE 5141	Advanced Structures Analysis	2
CE 5142	Bride Engineering	2
CE 5143	Design Methodology	2
CE 5144	Design of Water Retaining Structures	2
CE 5145	Design with Fiber Composites	2
CE 5146	Geo-techniques in Structural Engineering	2
CE 5147	Finite Element Analysis	2
CE 5148	Masonry Design	2

CE 5149	Structural dynamics and control	2
CE 5150	Sustainable design and development	2
CE 5151	Tall Buildings and Services	2
CE 5152	Timber Design	2