

Project Titles (E/15 Batch)

Project Number (C/15/)	Tentative Project Title / Research Area	Students Registration Number	Supervisor's Name
GEOTECHNICAL ENGINEERING			
1	Correlation between Plasticity and compressibility characteristics of Sri Lankan Soils	E/15/045-E/15/378	Dr. (Ms) D.de S Udakara
2	Characterization of Expansive soils in Matale District in Central Province with respect to Plasticity	E/15/282-E/15/333	
3	Characterization of Expansive soils in Anuradhapura District in North Central Province with respect to Plasticity	E/15/143-E/15/196	
4	Experimental and Numerical Analysis of Salinity Intrusion	E/15/204-E/15/166	Dr. D. T. K. K. Chamindu
5	Stability of soil colloids under varying geochemical conditions	E/15/163-E/15/132	
6	Depth-dependent soil-gas diffusivity along a natural texture and organic matter gradient	E/15/002-E/15/013	
7	Suitability of the Existing Rock Mass Classification System for Sri Lankan Metamorphic Rocks	E/15/353-E/15/167	Dr. A. .M. R. G. Athapaththu
8	Assessment of Engineering Properties of Treated Expansive Soils for Subgrades	E/15/275-E/15/026	
9	Examination of shear strength parameters of marine dredged sand for Colombo port city Project	E/15/219-E/15/091	Jointly supervised by Dr. L.C. Kurukulasuriya and Dr. A. .M. R. G. Athapaththu
10	Hydraulic and compressibility characteristics of soil stabilised with cementitious materials	E/15/413-E/15/320	Dr. L.C. Kurukulasuriya
11	Elastic and shear moduli of soil stabilised with cementitious materials	E/15/064-E/15/012	
12	A degradation model for highway bridges in Sri Lanka	E/15/199-E/15/032	
13	Effect of optimum compaction moisture content (OCMC) on the short and long term strength characteristics of geopolymer stabilised soft soil	E/15/240-E/15/244	Dr.M. C. M. Nasvi
14	Stability analysis of Colombo Katunayake Expressway (CKE) embankment using a combination of fly ash (FA) and rice husk ash (RHA) as the embankment material	E/15/186-E/15/200	
15	Development of degradation prediction model for drainage utilities of road infrastructure in Sri Lanka	E/15/118-E/15/093	
16	Pavement degradation model for road infrastructure in Sri Lanka	E/15/225-E/15/144	Dr.S. K. Navaratnarajah
17	Numerical modelling of Effects of geosynthetic and rubber interface on shear behaviour of railway ballast material	E/15/159-E/15/405	
18	Effectiveness of various types of rubber interfaces (variation in surface texture) on railway ballast behavior	E/15/242-E/15/321	
TRANSPORTATION ENGINEERING, TRAFFIC ENGINEERING			
19	Contribution of Sand transporting trucks to traffic flow on main roads	E/15/291-E/15/295	Dr.AGHJ Edirisinghe
20	Effect of three wheelers on urban traffic	E/15/153-E/15/355	

21	Safety of trucks transporting hazardous materials in Sri Lanka	E/15/031-E/15/049	
22	A Discrete choice modeling approach for understanding the mode choice variability of work trips: A case study in Kandy city	E/15/006-E/15/134	Dr. Samal Dharmarathna
MATERIAL AND STRUCTURAL ENGINEERING			
23	Cost Control Measures for Contractors in the Construction Industry of Sri Lanka	E/15/168-E/15/175	
24	Material Management Strategies and their Impact on Construction Project Performance	E/15/232-E/15/226	Dr.PBG Dissanayake
25	External Stakeholder Management in the Sri Lankan Construction Industry	E/15/298-E/15/392	
26	Structural retrofitting of dapped-end RC beams	E/15/150-E/15/117	
27	Optimization of shear retrofitting for RC beams using the deep-embedded system	E/15/214-E/15/284	Dr.HD Yapa
28	Non-linear modelling for slabs with time dependent effects	E/15/055-E/15/151	
29	Study on masonry walls under fatigue loading	E/15/352-E/15/273	
30	Low cycle fatigue (LCF) study for wrought iron	E/15/037-E/15/042	Dr.C.S.Bandara
31	Cyclic performance of concrete	E/15/367-E/15/357	
32	Finite Element (FE) Modeling and Simulation of Pneumatic Tire for Static and Dynamic Responses	E/15/141-E/15/341	
33	Evaluation of Performance of Elastomeric Rail Pads for Dynamic Locomotive Loading.	E/15/331-E/15/327	Dr. J. A. S. C. Jayasinghe
34	Dynamic Performance Evaluation of Interlocking Block wall System	E/15/388-E/15/406	
35	Vibration Mitigation of Pedestrian Bridges Using Tuned Mass Dampers	E/15/161-E/15/402	
36	Applications of Virtual Element Method for Plane Stress-Strain and Axisymmetric problems	E/15/053-E/15/085	Dr.K.K.Wijesundara
37	Seismic risk assessment of type plan school buildings in Sri Lanka	E/15/096-E/15/228	
38	Experimental investigation on dynamic characteristics of post-tension concrete girder bridges & their health monitoring	E/15/017-E/15/409	
39	Investigation on damping characteristics of metallic materials under pre and post yielding conditions	E/15/182-E/15/382	Dr.A.J.Dhammika
40	A topic on non destructive testing of concrete	E/15/374-E/15/236	
41	Structural Health Monitoring based on Artificial Intelligence Techniques	E/15/215-E/15/300	
42	Natural Frequencies and Modal Damping Ratios Identification of Tall buildings from Ambient Vibration Data	E/15/069-E/15/082	Dr.HADS Buddhika

43	Modeling bond-slip deformations in reinforced concrete beam-column joints	E/15/312-E/15/380	
44	Effect of Masonry infill walls on seismic behaviour of medium-high RC buildings in Sri Lanka	E/15/145-E/15/155	Dr. (Ms) S. R. Herath
45	Efficiency of Hollow sections in Structural applications	E/15/170-E/15/169	
46	Mechanical properties of selected Lattice structured materials	E/15/206-E/15/098	
47	Behaviour of different admixtures on the properties of sustainable high performance concrete	E/15/103-E/15/276	Dr. (Ms) C. K. Pathirana
48	Soil -steel –concrete composite bridge structures.	E/15/337-E/15/057	Dr. A. L. M. Mauroof
49	Progressive collapse of multi-storey frames	E/15/165-E/14/184	
HYDRAULICS & WATER RESOURCES ENGINEERING			
50	A Study on Crenulate Shaped- Bays in Coastline of Sri Lanka	E/15/115-E/15/135	Prof.K.P.P.Pathirana
51	Infiltration Characteristics in Heterogeneous Soil Profiles	E/15/253-E/15/272	
52	Modelling Approach to Predict the Influence of Salinity Barrier in Kelani River at Ambatale on Upstream Flooding	E/15/322-E/15/370	
53	Coastal effects of waves generated by high winds	E/15/190-E/15/039	Prof.JJ Wijethunge
54	Coastal flooding due to combined effects of precipitation and storm surges	E/15/290-E/15/386	
55	Influence of tide on coastal water levels during storm surges	E/15/105-E/15/398	
56	Impact of Tsunami driven structures on coastal structures	E/15/250-E/15/365	Mr.D.D.Dias
57	Development of flood forecasting model for Mi oya basin	E/15/302-E/15/252	
58	Numerical weather forecasting capabilities during Heavy rainfalls	E/15/376-E/15/107	Dr. Panduka Neluwala
59	Flood prediction using multi GCM data	E/15/393-E/15/255	
60	Climate Downscaling with machine learning	E/15/185-E/15/289	
61	Evaluation of rainfall distribution method on the accuracy of rainfall-runoff model results; A case study in upper Kelani river basin	E/15/256-E/15/176	Dr. (Ms) Gouri De Silva
ENVIRONMENTAL ENGINEERING			
62	Membrane Bioreactor for Leachate Treatment	E/15/113-E/15/344	Dr. K B S N Jinadasa
63	Application of Water Safety Plans	E/15/060-E/15/008	
64	Pollution mitigation in urban lakes	E/15/245-E/15/384	Jointly supervised by Dr. K B S N Jinadasa and Dr.(Ms) G. M. P. R. Weerakoon

65	Vertical subsurface flow wetlands for wastewater treatment	E/15/411-E/15/412	Dr.(Ms) G. M. P. R. Weerakoon
66	Optimization of land area requirement for wastewater treatment in constructed wetlands	E/15/251-E/15/004	
67	Assessment of water quality in a cascade irrigation system	E/15/414-E/15/047	Dr.(Ms) KGN Nanayakkara
68	Removing heavy metals from storm water treatment using permeable reactive concrete	E/15/090-E/15/152	
69	Removing nutrients from storm water treatment using permeable reactive concrete	E/15/264-E/15/397	
70	Effect of atmospheric pollutant load on rainwater quality	E/15/283-E/15/062	Dr. (Ms) C. Gunawardana
71	Determine the organic and inorganic pollutant loads on urban paved surfaces	E/15/102-E/15/046	
72	Adsorbent material development for heavy metal removal	E/15/067-E/15/213	
73	Recycling of construction waste for sustainable drainage systems	E/15/001-E/15/227	Dr.L.Ratnayake
74	Analyses of distribution of Coliforms in water sources using novel rapid methods	E/15/218-E/15/078	
75	Synthesis of Titania Silica Nanocomposites and their application for removal of Lead and Cadmium from Wastewater	E/15/088-E/15/030	