

E17 projects

| Supervisor | Project Number | Title of the Project | Student Reg. No. |
|----------------------------------|-----------------------|--|-------------------------|
| Water & Environmental | | | |
| Prof. SB Weerakoon | C/17/01 | Investigation of the impact of groyne orientation on bank stabilization at a river bend with a lateral inflow | E/17/295 |
| | | | E/17/302 |
| | C/17/02 | Investigation of shear stresses on a bed of a chute followed by a stepped spillway | E/17/395 |
| | | | E/17/231 |
| Prof. KDW Nandalal | C/17/03 | Trends of Wet and Dry Periods in the Central Province of Sri Lanka | E/17/261 |
| | C/17/04 | Extension of streamflow data: Nilwala River | E/17/305 |
| | | | E/17/068 |
| Prof. GBB Herath | C/17/05 | Effective drying and disposal options for Kandy City Wastewater Treatment Plant Sludge | E/17/344 |
| | | | E/17/365 |
| | C/17/06 | Assessing options for Fecal Contamination Detection in Water and Soil | E/17/049 |
| | | | E/17/046 |
| Prof. (Ms) KGN Nanayakkara | C/17/07 | Enhancing the performance of recovery of phosphorus and nitrogen from anaerobically treated wastewater (Co supervised) | E/17/364 |
| | C/17/08 | Hydrodynamic modelling of membrane-based treatment systems using artificial neural networks | E/17/319 |
| | | | E/17/123 |
| Dr (Ms) Hemalie Nandalal | C/17/09 | Variability and rainfall trend analysis | E/17/264 |
| | C/17/10 | Hydrodynamic modelling of membrane-based treatment systems using computational fluid dynamics | E/17/074 |
| | | | E/17/412 |
| Dr GMPR Weerakoon | C/17/11 | Application of Universal Soil Loss Equation (USLE) to Mountainous areas of a rivers basin | E/17/399 |
| | C/17/12 | Rainfall runoff modelling using HEC_HMS | E/17/306 |
| | | | E/17/239 |
| Dr (Ms) WCTK Gunawardana | C/17/13 | Mitigation of clogging effect in vertical subsurface flow constructed wetlands | E/17/223 |
| | C/17/14 | Non-revenue water (NRW) control strategies for Kandy municipal council area | E/17/303 |
| | | | E/17/150 |
| Dr RMLD Ratnayake | C/17/15 | Investigate the effect of integrating Sustainable Stormwater Management in Urban Planning | E/17/224 |
| | C/17/16 | Assessing the effect of ambient fine particulate matter air pollution | E/17/299 |
| | | | E/17/233 |
| Dr NGPB Neluwala | C/17/17 | Evaluating quality in bottled water under different storage conditions | E/17/324 |
| | C/17/18 | Computer application to improve the performances WasteWater Treatment Plants | E/17/124 |
| | | | E/17/002 |
| Dr NGPB Neluwala | C/17/19 | Estimation of reservoir water levels using satellite data products | E/17/080 |
| | C/17/20 | Evaluating the effect of various bathymetric models on simulations of river hydrodynamics in areas with limited data. | E/17/113 |
| | | | E/17/247 |

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| | C/17/21 | Weather forecasting model for Kandy city | E/17/073 |
| | | | E/17/377 |
| Dr (Ms) Gouri De Silva | C/17/22 | Evaluate performance of statistical downscaling of rainfall over Kelani river basin | E/17/217 |
| | C/17/23 | Hydro-Climate Variability and Trend Analysis in Mi-oya river basin | E/17/202 |
| Mr DD Dias | C/17/24 | Modeling a fish aggregating device using CFD approach | E/17/391 |
| | | | E/17/110 |
| Mr DD Dias | C/17/24 | Modeling a fish aggregating device using CFD approach | E/17/193 |
| | C/17/25 | The impact of an accelerated debris' geometry on the force triggered on a coastal structure | E/17/028 |
| | | | E/17/132 |
| | | | E/17/014 |
| Geotechnical & Transportation | | | |
| Prof. SBS Abayakoon | C/17/26 | A study on strength characteristics of Sri Lankan timber species | E/17/033 |
| | | | E/17/196 |
| | C/17/27 | Development of response spectra for soft soil amplification of the Greater Colombo Area | E/17/304 |
| | | | E/17/164 |
| Dr AGHJ Edirisinghe | C/17/29 | Most appropriate speed for short distance public transport buses | E/17/270 |
| | | | E/17/042 |
| Dr IMS Sathyaprasad | C/17/30 | Issues and challenges in first-and-last-mile-connectivity in the promotion of public transport in Kandy district | E/17/260 |
| | | | E/17/329 |
| | C/17/31 | A study of the spreading of parking demand due to the sponge effect in multi-functional trip attractors | E/17/225 |
| | | | E/17/336 |
| Dr LC Kurukulasuriya | C/17/32 | Stability of expansive soil slopes | E/17/125 |
| | | | E/17/214 |
| | C/17/33 | Effect of leaching of fine grained particles on the collapse potential of soils | E/17/310 |
| | | | E/17/063 |
| Dr WMVSK Wickramasinghe | C/17/34 | Effect of Crash Barriers on Driver Behavior | E/17/322 |
| | | | E/17/325 |
| | C/17/35 | Estimating the risk of pedestrians' crossing decisions at unsignalized crosswalk | E/17/181 |
| | | | E/17/346 |
| Dr (Ms) DdeS Udakara | C/17/36 | relate soil permeability to particle size and shape | E/17/056 |
| | | | E/17/291 |
| | C/17/37 | soil plasticity with respect to particle size | E/17/283 |
| | | | E/17/104 |
| Dr DTKK Chamindu | C/17/38 | Characterization of Coconut coir-based porous media | E/17/070 |
| | | | E/17/016 |
| | C/17/39 | Comparison of Predictive Models for Soil-gas diffusivity | E/17/118 |
| | | | E/17/389 |
| Dr MCM Nasvi | C/17/40 | Strength and Swell Characteristics of Expansive Road Subgrade Stabilised with Novel Fly Ash-based One-Part Geopolymer | E/17/141 |
| | | | E/17/278 |
| | C/17/41 | Strength and Swell Characteristics of Expansive Road Subgrade Stabilised with Novel Rice Husk Ash-based One-Part | E/17/171 |
| | | | E/17/334 |
| | C/17/42 | Prediction of geotechnical properties of expansive soil stabilized with fly ash/RHA using Artificial Neural Networks | E/17/167 |
| | | | E/17/348 |
| Dr AMRG Athapaththu | C/17/43 | Evaluation of engineering properties of weathered jointed rock masses | E/17/307 |
| | | | E/17/067 |
| | C/17/44 | Liquefaction hazard assessment of Colombo port city | E/17/076 |
| | | | E/17/105 |
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| Dr SK Navaratnarajah | C/17/45 | Artificial Neural Network (ANN) model to predict pile capacity | E/17/281 |
| | | | E/17/163 |
| | C/17/46 | Shredded rubber for ballast replacement in Rail Track Applications | E/17/343 |
| | | | E/17/208 |
| Dr WRSS Dharmarathna | C/17/47 | Influence of gradation on Shear behavior of railway ballast materials | E/17/345 |
| | | | E/17/010 |
| | C/17/48 | Mode choice parameter estimation for airport access by air passengers | E/17/253 |
| | | | E/17/062 |
| | C/17/49 | Comparative analysis of Nested Logit (NL) and Multinomial Logit (MNL) modeling approaches for mode choice decisions | E/17/363 |
| | | | E/17/361 |
| Materials and Structures | | | |
| Prof. PBR Dissanayake | C/17/50 | Application of Biomimicry for Infrastructure Sustainability and Resilience | E/17/177 |
| | | | E/17/179 |
| | C/17/51 | Restructuring urban society for disaster mitigation by university enterprise collaboration in Sri Lanka | E/17/188 |
| | | | E/17/386 |
| Prof. KK Wijesundara | C/17/52 | The numerical prediction of aeroelastic response of rectangular tall buildings | E/17/111 |
| | | | E/17/115 |
| | C/17/53 | Stress concentration on shear walls at transfer structures in tall buildings | E/17/096 |
| | | | E/17/093 |
| Dr KRB Herath | C/17/54 | Study of masonry domes constructed with a cross-herringbone spiraling system | E/17/066 |
| | | | E/17/298 |
| | C/17/55 | Study and design of cobweb safty net structures | E/17/265 |
| | | | E/17/036 |
| Dr (Ms) SR Herath | C/17/57 | Techniques of making curved bamboo elements and their differences | E/17/174 |
| | | | E/17/186 |
| Dr PBG Dissanayake | C/17/58 | Cost Controlling in the Construction Industry of Sri Lanka | E/17/175 |
| | | | E/17/022 |
| | C/17/59 | Effect of Resource Planning on Construction Project Delays | E/17/403 |
| | | | E/17/273 |
| Dr (Ms) CK Pathirana | C/17/60 | Chloride penetration of concrete containing high volume supplementary cementitious materials | E/17/226 |
| | | | E/17/266 |
| | C/17/61 | Use of Damage Rating Index (DRI) method to predict the damage level of concrete affected by alkali-silica reaction (ASR) Co- | E/17/081 |
| | | | E/17/392 |
| Dr HD Yapa | C/17/62 | Assessment of sensitivity of shear span and recess corner geometry on the strength of dapped-end beams | E/17/311 |
| | | | E/17/267 |
| | C/17/63 | Use of artificial neural network (ANN) for formulation of self-compacting concrete mixes | E/17/375 |
| | | | E/17/129 |
| Dr AJ Dammika | C/17/64 | Evaluation of flexural and shear performance of steel-concrete composite beams with flexible shear connectors | E/17/271 |
| | | | E/17/023 |
| | C/17/65 | Investigation of dynamic characteristics of prestressed concrete (PSC) girders & bridges built with PSC girders. | E/17/390 |
| | | | E/17/248 |
| Dr JASC Jayasinghe | C/17/66 | Combined Effect of Stiffener Shape and Relative Stiffness on the Lateral Performance of Concrete-Filled Steel Hollow Piers under | E/17/007 |
| | | | E/17/204 |
| | C/17/67 | Mechanical Performance of Steel Structural Elements (Column/Frame) under Fire Loading: A Coupled Thermo- | E/17/151 |
| | | | E/17/135 |
| | C/17/68 | Rubber based Numerical Simulations: | E/17/126 |
| | | | E/17/393 |
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| Dr CS Bandara | C/17/69 | Shear behaviour of pre-cast elements produced with concrete with plastic aggregate | E/17/349 |
| | | | E/17/387 |
| | C/17/70 | Fatigue failure assessment of welded joints of structural elements | E/17/257 |
| | | | E/17/287 |
| Dr HADS Buddhika | C/17/71 | Development and Characterization of Eco-Efficient Durability Concrete for Marine Applications | E/17/354 |
| | | | E/17/220 |
| | C/17/72 | Natural Frequencies and Modal Damping Ratios Identification of Tall buildings from Ambient Vibration Data | E/17/020 |
| | | | E/17/308 |
| | C/17/73 | Stress Analysis and Rehabilitation of Ancient Stupas in Sri Lanka (Co- Supervised by Prof. Kushan Wijesundara) | E/17/406 |
| | | | E/17/328 |
| Dr KC Chandrasiri | C/17/74 | Synthesis in situ grown CSH to improve the properties of high volume fly ash concrete. | E/17/166 |
| | | | E/17/357 |
| Dr NMSH Bandara | C/17/76 | Structural retrofitting using Ultra High Performance Fibre Reinforced Concrete (UHPFRC) jacketing | E/17/341 |
| | | | E/17/300 |
| | C/17/77 | Feasibility investigation of foam concrete for wall panels | E/17/160 |
| | | | E/17/402 |