**UNIVERSITY OF MAURITIUS**

DEPARTMENT OF CIVIL ENGINEERING

**Degree Project Titles (2013/14)**

1. The effect of untreated fly ash as partial cement replacement in concrete
2. The environmental impact of assuming simple connections in the analysis of reinforced concrete structures
3. Influence of mortar mixes with different GGBS proportions as used in render/plaster on masonry blockwork units subject to fire
4. Comparing the concrete compressive strength on site using the rebound hammer with cube testing in laboratory
5. Comparative assessment of the methods of settlement prediction for shallow foundations
6. Use of quarry fines in flowable fill as backfill material for pipe trenches
7. Evaluating the mechanical properties of plastic concrete for use as a cut-off wall material
8. Characterising clay in aggregates and evaluating its effects on the performance of concrete
9. Study of the interface resistance of soil nails
10. Evaluation of the mechanical properties and environmental impacts of using Coal Bottom Ash in an earthfill

# Sustainability in residential development in Mauritius

1. Designing a coastal protection measure for Riviere des Galets
2. Designing and evaluating the most efficient coastal protection measure against erosion for Mont Choisy Beach
3. Drought prediction in Mauritius
4. Estimating peak discharge for the design of a river diversion structure and feeder canal
5. Flood modeling in urban environments: a case study of Port Louis
6. Lateral stability of steel buildings
7. Comparative study of the design of different types of staircases
8. Effect of shape configurations on design of timber trusses to wind loading
9. Comparative study of truss structures with eccentric rigid connections
10. Determining the most suitable method of lateral stability for a medium rise building in Mauritius
11. Assessing the effectiveness of the existing drainage system in Port-Louis: the March 30, 2013 flood event
12. A flood study of Port Louis: investigating tidal effects on discharge capacity
13. Determination of optimum moisture content (OMC) using different methods
14. Assessing the performance of reinforced soil w.r.t. soil nature, loading and reinforcement
15. Appraisal of slow sand filtration in Mauritius
16. Designing concrete using waste materials: rubber and glass for application in flexible pavement
17. Use of recycled concrete wash water in the production of concrete
18. Building defects assessment during construction stage of hotel project and resulting cost implications
19. Design of lightweight concrete using coconut shells for application in precast boundary walls
20. Design of lightweight concrete using vermiculite for application in partition wall
21. Development of a sustainable concrete mix with stone dust and glass for application in paving blocks
22. Assessing the impacts of structural defects incurred in residential houses in Mauritius, constructed without the aid of proper construction standards
23. Assessing the suitability of a sewer system over a septic system in Mauritius
24. Properties and durability of concrete containing fresh concrete waste as aggregates
25. Partial replacement of cement by GGBS and of fine aggregates by rubber in concrete
26. Experimental investigation on OPC concrete cured with various curing methods – a comparative study