

Batch 2019–2023

Sl No.	Project Title	Factors considered	Relevant PO(s)	Relevant PSO(s)	SDGs addressed
1	Defluoridation using sugarcane bagasse	Environment, sustainability (use of agricultural waste), cost-effectiveness, ethics (safe drinking water/public health), standards (water quality limits like BIS/WHO),	PO1, PO2, PO6, PO7	PSO2	SDG 6, SDG 12
2	Comparative study of steel vs. concrete structures	Environment, sustainability (Material comparison, resource utilisation), Cost-effectiveness, ethics (economic comparison), standards (Codal provisions/Minimum standard requirements)	PO1, PO2, PO3, PO6	PSO1, PSO2	SDG 9, SDG 11
3	Roll over stability of vehicles on combined curves	Safety, standards (road design/vehicle safety codes), sustainability (reduction of accidents & losses)	PO2, PO3, PO4, PO6	PSO1, PSO3	SDG 11
4	Use of demolition waste & rice husk in pavements	Environment, sustainability, cost-effectiveness, standards (pavement/material codes), ethics (waste reuse)	PO1, PO2, PO3, PO6, PO7	PSO2	SDG 11, SDG 12, SDG 13
5	Characterisation of microplastics in ambient air in Kochi city	Environment, sustainability, ethics (public health relevance), standards (sampling/testing protocols)	PO1, PO2, PO6, PO7	PSO2	SDG 11
6	Statistical and geospatial analysis of groundwater quality in coastal aquifers	Environment, sustainability (water resource protection), ethics (public welfare), standards (water quality norms)	PO2, PO3, PO5, PO6	PSO2	SDG 6, SDG 13
7	Pedestrian level of service analysis at unsignalised intersections	Safety, standards (IRC/traffic guidelines), cost (implementation of improvements), sustainability (walkability)	PO2, PO3, PO6, PO10	PSO3	SDG 11
8	Geospatial mapping of water assets in Irinjalakuda	Sustainability (resource management), cost (asset optimization), standards (GIS/data standards), ethics (equitable access)	PO2, PO3, PO5, PO6	PSO2	SDG 6
9	Efficiency analysis of water hyacinth in phytoremediation of heavy metals	Environment, sustainability, cost (low-cost treatment), ethics (eco-friendly methods), standards (water quality benchmarks)	PO1, PO2, PO6, PO7	PSO2	SDG 6