Supplementary Table 1. Classified categories for environmental engineering curriculum analysis.

	Main category Sub category		Remarks		
Engineering fundamental (MSC)		Mathematics	Mathematics, Engineering mathematics, Probability&statistics, Numerical analysis		
		Chemistry	General chemistry&lab		
		Physics	General physics&lab		
		Biology, earth science	General biology&lab, Earth science		
		Computer	Computer programing, CAD related		
Intro. environmental eng. Applied chemistry Env. microbiology Chemical, mechanical eng. base Civil eng. base Electrical eng. base		Intro. environmental eng.	Introduction to environmental engineering or similar subject		
		Applied chemistry	Env. chemistry, Env. organic chemistry, Water chemistry, Instrumental analysis etc.		
		Env. microbiology	Env. microbiology, Env. biotechnology etc.		
		•	Mass/energy balance, Thermodynamics/heat transfer, Reaction engineering, Mechanics of material etc.		
		Civil eng. base	Fluid mechanics, Hydraulics, Hydrology, Mechanics of structures etc.		
		Electrical eng. base	Electrical instrument, Environmental instrumentation equipment etc.		
	Water	Quality management	Introduction to water quality, Water quality management, Analytical lab of wastewater etc.		
		treatment	Water&wastewater treatment related		
		Water supply&sewer	Water supply&sewerage-design, planning, pipe networking related		
	Air	Climate, Air quality	Climate, Air quality, Modeling, Indoor air pollution, Analytical lab of air pollutant etc.		
		Control	Air pollution control related		
	Solid waste	Solid waste management	Solidwaste management, Hazardous waste treatment, Analytical lab for solidwaste etc.		
concent- ration		Recycling, LCA	Recycling, LCA related		
	Soil/groundwater	-	Soil/groundwater-assessment, purification, remediation related		
	Ecology/remediation /impact assessment	-	Environmental impact assessment, Ecology, Environment remediation etc.		
	Health/toxicity/ risk assessment	-	Environmental health, Hazardous material handling & management, Pollution prevention, Environmental risk assessment, Environmental toxicology etc.		
	Noise/vibration	-	Noise/vibration-control, analysis, measurement related		
	Eco/renewable energy	-	Renewable& alternative energy, Clean materials and processes, Eco material, Low carbon energy, Bio-green technology etc.		
	Management/policy/law	-	Environmental management, policy, law®ulation related		
	Environment etc. I	-	Engineering subjects not included in the above categories, Experiment&practice, engineering design that are difficult to classify in the above categories		
	Environment ect. II		Field practice, internship etc. Subjects with few engineering elements		

Supplementary Table 2. Universities offering environmental field studies in Korea.

Total no. of	Engineering			Science	
universities	University (Department)	National/Private	Accreditation of eng. education	University (Department)	National/Private
71	63(63)	25/38	20	14(15)	4/10
Department name	Environmental-energy el eng., Marine enviro environment eng., Arch Chemical-biotechni	tment, major, division), Soc ng., Urban environmental e nmental eng., Environment itectural- environmental en cal-environmental eng., Bio g., Environmental science&	(Earth)Environmental science, Environmental health and environmental ecology, Bio-environmental science, Bio-environmental-energy, Environmental biology, Marine environmental science		