Subject Description Form

Subject Code	CSE49983					
Subject Title	Individual Project for Environmental Engineering					
Credit Value	6					
Level	4					
Pre-requisites	All CSE core subjects at 300-399 or 30000-39999 level					
Exclusion	CSE49483					
Objectives	The objective of this individual project is to train students to design					
	and conduct a research type of work to solve problems in major					
	environmental areas related in sustainable development in their final					
	year study.					
Intended	Upon completion of the project, students will be able to:					
Learning						
Outcomes	 a. apply the fundamentals of applied science, mathematics, or statistical methods to formulate effective environmental solutions across a wide range of sustainable development issues; b. critically analyse and interpret data for an in-depth study of a particular process or subject area in sustainable 					
	 a particular process or subject area in sustainable development at area or regional scales; c. cope with the challenges and developments of the profession, including the increasing application of multi-disciplinary methods in sustainable development; d. communicate logically and lucidly through calculation, analysis, and in writing; 					
	 e. present ideas and arguments verbally in formal presentations and an ability to work independently; f. recognize the needs and develop an ability to engage in lifelong learning; g. reflect on and review the progress of the projects, and seek assistance or guidance as appropriate in order to enhance the quality of their work; 					
	 h. use techniques, skills, and modern scientific/research tools necessary for Environmental Engineering or Environmental Science research; i. use the computer/IT tools relevant to environmental research along with an understanding of their underlying commuticate and limitations. 					
Subject	Broadly there are two main components a critical assessment of					
Subject Synonsis/	appropriate literature, and the completion of some experimental or					
Indicative	theoretical work of an original nature Literature reviews in the					
Syllabus	absence of any significant laboratory design, numerical analysis.					
~ j us	programming or fieldwork are not encouraged in the individual					
Teaching/Learn	Project Allocation					
ing	The Department produces a list of project titles and synopses					
Methodology	proposed by the academic staff. Students are encouraged to discuss					
80	these proposals with the staff members concerned, and to identify					
	their preferences on the listed topics. Students are also encouraged to					
	propose topics of their own, perhaps related to their work during					
	summer training placements. Subject to acceptance of the academic					
	credibility of such proposals, and the availability of a suitable staff					

	supervisor, the Department would then sanction such projects. The project allocation exercise is completed prior to the commencement of							
	the academic year.							
	<u>Time Allocation</u> A formal allocation of four hours per week is provided in the timetable. However, in practice, one whole day per week is recommended for students to concentrate on their individual project activities.							
	SupervisionEach student is supervised by a staff member who is usually the proposer of the project. Such supervision requires the regular discussion of the student's work, and guidance and advice throughout the academic year. Although such guidance is available to the student, it is stressed that the ultimate responsibility for the direction and content of the project lies with the student.							
Assessment		0 /	.		. 1			
Methods in	Specific		Inter	nded subj	ect le	arnıng		
Alignment with	assessment	weighting	oute	omes to be assessed				
Loarning	methods/tasks	90	a b	c d e	Î	g h	1	
Outcomes	1. Project Report	89	N N	N N N	N	N N	N	
Outcomes	2. Oral Progentation	11	$\sqrt{\sqrt{1-1}}$	$\sqrt{\sqrt{\sqrt{-1}}}$		\checkmark		
	Total	100						
	 Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: Two Reports (interim and final) : To assess students' progress, topic-related knowledge, self-learning ability, and written communication skills. One oral presentation : To assess students' oral communication skills. One poster : To assess students' visual communication skills and abilit of knowledge synthesis. Students must attain at least grade D in both coursework and fin examination (whenever applicable) in order to attain a passing grade the overall result. 							
Student Study Effort	Class contact:	Average hours per week						
Exnected	 Laboratory and 	(Semester 1 & 2)						
Laperica	Other student study		6 Hrs.					
	Total student study effort				9 Hrs.			
Reading List	As students will take up different projects, the reading list and references							
and	will be provided by their own supervisor.							