Subject Description Form

Subject Code	CSE49483
Subject Title	Individual Project for ESD
Credit Value	6
Level	4
Pre-requisite	All CSE core subjects in the Year 3 curriculum
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 Learning Outcomes	Upon completion of the project, students will be able to: 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 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 life- long 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 assumptions and limitations.
Subject Synopsis/ Indicative Syllabus	Broadly, there are two main components, a critical assessment of appropriate literature, and the completion of some experimental or theoretical work of an original nature. Literature reviews, in the absence of any significant laboratory, design, numerical analysis, programming or fieldwork are not encouraged in the individual project.
Teaching/Learning Methodology	**Project Supervisor Allocation** Students are required to indicate their preference of supervisors (in priority order) based on their area of interest via an online platform and will be assigned a supervisor based on their current WGPA at the time of submission of the selection form.

	Project Title and Proposal
	Students should discuss with their supervisors to devise a project title and prepare a one-page initial proposal for approval by the supervisor.

Project Supervision and Progress
Students are expected to pursue "unaided" investigations relevant to the chosen topic. The supervisor only acts as a mentor to provide guidance and advice to the student throughout the project period. 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.

During the course of the Individual Project, each student is expected to submit a short, written report and give an oral presentation in English on the progress of the project to his or her supervisor <u>at least once in every two weeks</u> on average.

Interim Report and Feedback
Students are expected to submit a report for interim assessment by the moderator, who acts as an independent assessor/ reviewer of the student's work. Students are expected to solicit feedback from the moderator for improvement of their work.

Final Deliverables
At the end of the project, students are expected to produce a final report, an oral presentation, and a poster as the final deliverables to demonstrate their research outcomes and evidence of learning. Students should submit a revised final report upon the comments given by the supervisor and the moderator.

Academic Integrity
In case of proven academic dishonesty, it would result in a disqualification of the Individual Project, and disciplinary actions will be taken by the Department or the Student Discipline Committee, in accordance with the relevant sections of the Student Handbook.

Acts of academic dishonesty include but are not limited to cheating, plagiarism, unauthorized collaboration or help, fabrication and falsification of results, and aiding academic dishonesty. The use of Generative Artificial Intelligence beyond the allowed use stated in the Final Year Individual Project Guidelines is considered as an act of academic dishonesty.

Detailed arrangements and requirements of the Final Year Individual Project would be communicated to students in a set of guidelines that will be updated on an annual basis. Students should refer to guidelines and requirements announced by the Department in case of discrepancies. |

	Assessment Methods in Alignment with Intended Learning Outcomes								

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed							
		a	b	c	d	e	f	g	h
Project Proposal	0								
Progress and Learning attitude	5						✓	✓	✓
Interim Report ++	20	✓	✓	✓					
Final Report	50	✓	✓	✓	✓			✓	✓
Oral Presentation	20	✓	✓	✓		✓			
Revised Final Report	0								
Poster	5				✓				
Total	100 %								

++ Students must attain at least grade D in the Interim Report in order to attain a passing grade in the overall result.

Student Study Effort Expected

Class contact:	Average hours per week (Semester 1 & 2)
• Project meeting with supervisor	0.5 hrs

Other student study effort:	
• Self-study and Research	7 hrs
• Preparation of report and presentation	1.5 hrs

Total student study effort	**9 hrs**

Reading List and References

Relevant reading and/or references as suggested by individual supervisors.