

### **Subject Description Form**

<b>Subject Code</b>	CSE49483
<b>Subject Title</b>	Individual Project for EESD
<b>Credit Value</b>	6
<b>Level</b>	4
<b>Pre-requisites</b>	All CSE core subjects at 300-399 or 30000-39999 level
<b>Objectives</b>	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.
<b>Intended Learning Outcomes</b>	<p>Upon completion of the project, students will be able to:</p> <ol style="list-style-type: none"> <li>a. apply the fundamentals of applied science, mathematics, or statistical methods to formulate effective environmental solutions across a wide range of sustainable development issues;</li> <li>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;</li> <li>c. cope with the challenges and developments of the profession, including the increasing application of multi-disciplinary methods in sustainable development;</li> <li>d. communicate logically and lucidly through calculation, analysis, and in writing;</li> <li>e. present ideas and arguments verbally in formal presentations and an ability to work independently;</li> <li>f. recognize the needs and develop an ability to engage in life-long learning;</li> <li>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;</li> <li>h. use techniques, skills, and modern scientific/research tools necessary for Environmental Engineering or Environmental Science research;</li> <li>i. use the computer/IT tools relevant to environmental research along with an understanding of their underlying</li> </ol>
<b>Subject Synopsis/ Indicative Syllabus</b>	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
<b>Teaching/Learning Methodology</b>	<p><b><u>Project Allocation</u></b></p> <p>The Department produces a list of project titles and synopses proposed by the academic staff. Students are encouraged to discuss 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</p>

	<p>supervisor, the Department would then sanction such projects. The project allocation exercise is completed prior to the commencement of the academic year.</p> <p><b><u>Time Allocation</u></b> 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.</p> <p><b><u>Supervision</u></b> Each 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.</p>																																																						
<p><b>Assessment Methods in Alignment with Intended Learning Outcomes</b></p>	<table border="1" data-bbox="518 860 1390 1128"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="9">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>g</th> <th>h</th> <th>i</th> </tr> </thead> <tbody> <tr> <td>1. Project Report</td> <td>89</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> <tr> <td>2. Oral Presentation</td> <td>11</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td>√</td> <td></td> </tr> <tr> <td>Total</td> <td>100</td> <td colspan="9"></td> </tr> </tbody> </table>		Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed									a	b	c	d	e	f	g	h	i	1. Project Report	89	√	√	√	√	√	√	√	√	√	2. Oral Presentation	11	√	√	√	√	√	√		√		Total	100									
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