

## Subject Description Form

<b>Subject Code</b>	BSE5518
<b>Subject Title</b>	Sustainability and the Built Environment
<b>Credit Value</b>	3
<b>Level</b>	5
<b>Pre-requisite/ Co-requisite/ Exclusion</b>	Nil
<b>Objectives</b>	<p>a. To provide an overview of the sustainable development concepts, critical issues and current debate.</p> <p>b. To acquire an advanced understanding on environmental sustainability of built environments, and their potential impacts on the local and global environment.</p> <p>c. To acquire a basic understanding of drivers and policy framework for sustainable built environments.</p> <p>d. To enhance the understanding on building life cycle and how improved design, construction and operational procedures can enhance sustainability.</p> <p>e. To familiarise with different current building assessment schemes in the world.</p> <p>f. To acquire an understanding on global, local and indoor environmental performance criteria and benchmarks, and their relationships within the context of building and environmental regulations, local codes and good practice guides.</p> <p>g. To acquire a basic knowledge on the evaluation of the costs and financial benefits of sustainable development.</p>
<b>Intended Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <p>a. understand the concepts of sustainable built development / 'green' buildings and identify and quantify their major impacts on global, regional and local indoor environment;</p> <p>b. understand the motivators and policy framework behind sustainable built development;</p> <p>c. acquire basic knowledge on policies, regulations, codes, standards and practices aimed at improving sustainability of built environment;</p> <p>d. understand the ways to enhance the sustainability of the built environment;</p> <p>e. familiarize with the structure and operational details of major building environmental assessment schemes in the world;</p> <p>f. estimate the financial impacts of various design solutions for sustainable building developments.</p>
<b>Subject Synopsis/</b>	This course is intended to provide an overview on the issues of sustainability

<b>Indicative Syllabus</b>	in relation to built environments as well as to equip students with some basic knowledge and skills on conducting sustainability assessments for built environments and sustainable buildings.																																																											
<b>Teaching/Learning Methodology</b>	Lectures, case-studies workshops and group projects are employed throughout the course for delivering the teaching materials. Outside guest speakers may also be invited for conveying the sustainability message.																																																											
<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	<table border="1"> <thead> <tr> <th data-bbox="440 392 874 593" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="880 392 1040 593" rowspan="2">% weighting</th> <th colspan="6" data-bbox="1046 392 1461 526">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="1046 535 1114 593">a.</th> <th data-bbox="1120 535 1187 593">b.</th> <th data-bbox="1193 535 1260 593">c.</th> <th data-bbox="1267 535 1334 593">d.</th> <th data-bbox="1340 535 1407 593">e.</th> <th data-bbox="1414 535 1461 593">f.</th> </tr> </thead> <tbody> <tr> <td data-bbox="440 602 874 660">1. Continuous Assessment I</td> <td data-bbox="880 602 1040 660">25%</td> <td data-bbox="1046 602 1114 660">√</td> <td data-bbox="1120 602 1187 660">√</td> <td data-bbox="1193 602 1260 660">√</td> <td data-bbox="1267 602 1334 660">√</td> <td data-bbox="1340 602 1407 660"></td> <td data-bbox="1414 602 1461 660"></td> </tr> <tr> <td data-bbox="440 669 874 728">2. Continuous Assessment II</td> <td data-bbox="880 669 1040 728">25%</td> <td data-bbox="1046 669 1114 728"></td> <td data-bbox="1120 669 1187 728">√</td> <td data-bbox="1193 669 1260 728"></td> <td data-bbox="1267 669 1334 728">√</td> <td data-bbox="1340 669 1407 728">√</td> <td data-bbox="1414 669 1461 728"></td> </tr> <tr> <td data-bbox="440 736 874 795">3. Individual/Group Projects</td> <td data-bbox="880 736 1040 795">10%</td> <td data-bbox="1046 736 1114 795">√</td> <td data-bbox="1120 736 1187 795">√</td> <td data-bbox="1193 736 1260 795">√</td> <td data-bbox="1267 736 1334 795">√</td> <td data-bbox="1340 736 1407 795">√</td> <td data-bbox="1414 736 1461 795">√</td> </tr> <tr> <td data-bbox="440 804 874 862">4. Final Examination</td> <td data-bbox="880 804 1040 862">40%</td> <td data-bbox="1046 804 1114 862">√</td> <td data-bbox="1120 804 1187 862">√</td> <td data-bbox="1193 804 1260 862">√</td> <td data-bbox="1267 804 1334 862">√</td> <td data-bbox="1340 804 1407 862">√</td> <td data-bbox="1414 804 1461 862">√</td> </tr> <tr> <td data-bbox="440 871 874 929">Total</td> <td data-bbox="880 871 1040 929">100%</td> <td colspan="6" data-bbox="1046 871 1461 929"></td> </tr> </tbody> </table>						Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a.	b.	c.	d.	e.	f.	1. Continuous Assessment I	25%	√	√	√	√			2. Continuous Assessment II	25%		√		√	√		3. Individual/Group Projects	10%	√	√	√	√	√	√	4. Final Examination	40%	√	√	√	√	√	√	Total	100%						
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<b>Reading List and References</b>	<p>Emmott, B. (2004). <i>The Lessons of the 20<sup>th</sup> Century for the 21<sup>st</sup></i>, 20:21 Vision, Penguin, (Chapter 11).</p> <p>IPCC (2018). <i>Global Warming of 1.5°C, Summary for Policymakers</i>.</p> <p>Jacobs, J. (1992). <i>The Death and Life of Great American Cities</i>, Vintage Books.</p> <p>Tientenberg, T. and Lewis, L. (2014). <i>Environmental and Natural Resource Economics</i>, Tenth Edition, Pearson.</p> <p>Wright, R.T. and Nebel, B.J. (2017). <i>Environmental Science, Toward a Sustainable Future</i>, 13th Edition, Pearson.</p>																																																											