

Subject Description Form

Subject Code	BSE5518
Subject Title	Sustainability and the Built Environment
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	<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>
Intended Learning Outcomes	<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>
Subject Synopsis/	This course is intended to provide an overview on the issues of sustainability

Indicative Syllabus	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.																																																											
Teaching/Learning Methodology	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.																																																											
Assessment Methods in Alignment with Intended Learning Outcomes	<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 1110 593">a.</th> <th data-bbox="1110 535 1182 593">b.</th> <th data-bbox="1182 535 1254 593">c.</th> <th data-bbox="1254 535 1326 593">d.</th> <th data-bbox="1326 535 1398 593">e.</th> <th data-bbox="1398 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 1110 660">√</td> <td data-bbox="1110 602 1182 660">√</td> <td data-bbox="1182 602 1254 660">√</td> <td data-bbox="1254 602 1326 660">√</td> <td data-bbox="1326 602 1398 660"></td> <td data-bbox="1398 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 1110 728"></td> <td data-bbox="1110 669 1182 728">√</td> <td data-bbox="1182 669 1254 728"></td> <td data-bbox="1254 669 1326 728">√</td> <td data-bbox="1326 669 1398 728">√</td> <td data-bbox="1398 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 1110 795">√</td> <td data-bbox="1110 736 1182 795">√</td> <td data-bbox="1182 736 1254 795">√</td> <td data-bbox="1254 736 1326 795">√</td> <td data-bbox="1326 736 1398 795">√</td> <td data-bbox="1398 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 1110 862">√</td> <td data-bbox="1110 804 1182 862">√</td> <td data-bbox="1182 804 1254 862">√</td> <td data-bbox="1254 804 1326 862">√</td> <td data-bbox="1326 804 1398 862">√</td> <td data-bbox="1398 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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Reading List and References	<p>Emmott, B. (2004). <i>The Lessons of the 20th Century for the 21st</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>																																																											