



UNIVERSITI TEKNOLOGI MARA

BSS401: ENVIRONMENTAL SCIENCE AND SERVICES I

<b>Course Name (English)</b>	ENVIRONMENTAL SCIENCE AND SERVICES I <b>APPROVED</b>
<b>Course Code</b>	BSS401
<b>MQF Credit</b>	3
<b>Course Description</b>	The subject focused on (i) Environmental Sciences: Climatic influence on living comfort and the built environment. (ii) Services: Essential utilities; water supply and sanitation systems.
<b>Transferable Skills</b>	Environmental Science in building & Services in building
<b>Teaching Methodologies</b>	Lectures, Blended Learning
<b>CLO</b>	CLO1 understand the environmental influences, engineering services and building function in traditional and modern buildings. CLO2 acquire the knowledge, skill and techniques used in the design, installation and operation of environmental engineering services to create a comfortable living condition. CLO3 apply and integrate the relationship between engineering services and environmental science and their influences in the design and construction of building.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Introduction to Environment</b> 1.1) n/a	
<b>2. Bioclimatic Architecture</b> 2.1) n/a	
<b>3. Nature of Heat</b> 3.1) n/a	
<b>4. Thermal Conductivity</b> 4.1) n/a	
<b>5. Thermal Comfort</b> 5.1) n/a	
<b>6. Ventilation, Humidity &amp; Condensation</b> 6.1) n/a	
<b>7. Introduction to services</b> 7.1) n/a	
<b>8. Water Services</b> 8.1) n/a	
<b>9. Water Distribution</b> 9.1) n/a	
<b>10. Cold Water Supply to the Building</b> 10.1) n/a	
<b>11. Hot Water Supply</b> 11.1) n/a	
<b>12. Drainage System</b> 12.1) n/a	

Assessment Breakdown	%
Continuous Assessment	30.00%
Final Assessment	70.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	n/a	20%	CLO2
	Test	n/a	10%	CLO3

Reading List	Recommended Text	<ul style="list-style-type: none"> <li>• Blower G.J 2002, <i>Plumbing Mechanical Services</i>, Prentice Hall United Kingdom.</li> <li>• Hall F 1998, <i>Building Services &amp; Equipment</i>, Longman UK</li> <li>• Binggeli C 2003, <i>Building Systems for Interior Designer</i>, John Wiley &amp; Sons. Inc. USA</li> <li>• Robert K. Kaufmann, Cutler J. Cleveland 2008, <i>Environmental Science</i>, McGraw-Hill Higher Education Boston</li> </ul>
	Reference Book Resources	<ul style="list-style-type: none"> <li>• Greeno, R 1997, <i>Building Services, Technology &amp; Design</i>, Longman &amp; CIOB, London., London</li> <li>• Hall, FE 1995, <i>Essential Building Services &amp; Equipment</i>, BH Newnes London</li> <li>• Olgay, V 1992, <i>Design With Climate</i>, Van Nostrand Reinhold New York</li> <li>• Burberry, P 200, <i>Environment &amp; Services</i>, 8th Edition Ed., Longman London</li> <li>• Mc Mullan, R, 2002, <i>Environmental Science in</i>, 5th Edition Ed., Mac Millan London</li> <li>• Kut 1992, <i>Illustrated Encyclopaedia of Building Services</i>, Mac Millan London</li> <li>• V.K. Ahluwalia, Sunita Malhotra 2008, <i>Environmental Science</i>, Bota Raton: CRC Press.</li> <li>• Fred Hall, Roger Greenor 2007, <i>Building Services Handbook</i>, 4th Edition Ed., Butterworth-Heinemann</li> <li>• David V. Chadderton 2007, <i>Building Services Engineering</i>, 5th Edition Ed., Taylor &amp; Francis.</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	