



**UNIVERSITI TEKNOLOGI MARA**

**BTP151: SITE PLANNING AND DESIGN PRINCIPLES**

<b>Course Name (English)</b>	SITE PLANNING AND DESIGN PRINCIPLES <b>APPROVED</b>
<b>Course Code</b>	BTP151
<b>MQF Credit</b>	3
<b>Course Description</b>	This course provides theoretical knowledge in the design techniques for the preparation of layout plans for residential, commercial, and industrial. It begins with the introduction of planning for a site, then the processes involved in design, next the standards required in designing, and finally the design techniques.
<b>Transferable Skills</b>	<p>Demonstrate ability to identify and articulate self skills, knowledge and understanding confidently and in a variety of contexts</p> <p>Demonstrate ability to manage personal performance to meet expectations and demonstrate drive, determination, and accountability</p> <p>Demonstrate practical and contemporary knowledge of relevant professional, ethical and legal frameworks</p>
<b>Teaching Methodologies</b>	Lectures, Blended Learning, Field Trip
<b>CLO</b>	<p>CLO1 Able to discuss land use issue and sustainable development</p> <p>CLO2 Able to carry out and conduct site survey</p> <p>CLO3 Able to access land suitability for land development</p> <p>CLO4 Able to evaluate and analyse site feasibility</p> <p>CLO5 Able to synthesize and produce concept and schematic plan</p> <p>CLO6 Able to use and apply the basic design criteria in development of housing, commercial, and industrial</p>
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Introduction</b> 1.1) Planners responsibility	
<b>2. Site Planning Process</b> 2.1) Steps in planning process and methodology	
<b>3. Site Inventory and Analysis</b> 3.1) Locality and Site Feasibility 3.2) Nature and Physical Attribute - Land form, topography (Contour and spot elevation), geology dab soils, water surface and drainage, climate, vegetation and wildlife 3.3) Sensuous Attribute - Visual quality, noise, smells/odors, colours 3.4) Culture Attribute - history, population, land us, movement and circulation, utilities 3.5) Site Potential and constraints- composite map	
<b>4. Synthesis and Design Process</b> 4.1) Design Process philosophy 4.2) Development of concept 4.3) Schematic and master plan	
<b>5. Planning Principles</b> 5.1) Road Design and circulation 5.2) Subdivision 5.3) Zoning 5.4) Densities and scales 5.5) Planning standards; plot ratio; plinth area	

**6. Residential Area Design**

- 6.1) Types of housing
- 6.2) Housing density
- 6.3) Design criteria

**7. Commercial Area Design**

- 7.1) Hierarchy of commercial centres: neighborhood, district, regional
- 7.2) Types of commercial centres: its location factors and trends for local, strip, shopping centres, mixed development, suburban, business park
- 7.3) Design criteria

**8. Industrial Area Design**

- 8.1) Types of industries: light, medium, heavy
- 8.2) Industrial development: industrial estates, individual parks
- 8.3) Location factors and design criteria

Assessment Breakdown	%
Continuous Assessment	40.00%
Final Assessment	60.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	n/a	40%	CLO1 , CLO2 , CLO3 , CLO4 , CLO5 , CLO6

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> <li>• American Planning Association 2006, <i>Planning and Urban Design Standards</i>, , John Wiley &amp; Sons</li> <li>• Bentley, I. et.al 1985, <i>Responsive Environments: A Manual for Designe</i>, Architectural Press, London</li> <li>• Bentley, I., Alcock, A., Murrain, P., McGlynn 1985, <i>Responsive environments: a manual for designe</i>, Architectural Press, London</li> <li>• Biddulph, Mike 2006, <i>Introduction to Residential Layout</i>, , Architectural Press, London</li> <li>• ORourke, Julian 2008, <i>Placemaking</i>, , RUDI, London</li> <li>• De Chiara, J. and Koppleman, 1984, <i>Time Savers Standards for Site Planning</i>, , New York, Mc-Graw Hill Book Co.</li> <li>• Jacobs, Jane 1961, <i>The death and life of great American cities</i>, , (Vintage Book edition, New York 1992)</li> <li>• Jenkins, Eric 2007, <i>To scale: one hundred urban plans</i>, , Routledge,</li> <li>• Jones, P, Boujenko, N, &amp; Marshall, S 2008, <i>Link &amp; Place: A Guide to Street Planning and</i> , Landor Publishing, London</li> <li>• De Chiara, J. and Koppleman, 1982, <i>Urban Planning and Design Criteria</i>, , New York, Van Nostrand Reinhold Co.</li> </ul>

<b>Article/Paper List</b>	This Course does not have any article/paper resources
<b>Other References</b>	This Course does not have any other resources