



**UNIVERSITI TEKNOLOGI MARA**

**BCT654: INNOVATION PROJECT II**

<b>Course Name (English)</b>	INNOVATION PROJECT II <b>APPROVED</b>
<b>Course Code</b>	BCT654
<b>MQF Credit</b>	4
<b>Course Description</b>	This course is the continuation of an Innovative Project I. It will be focusing on the simulation or lab testing works to determine the workability of methodology, which has been proposed in the previous study. Students' understanding of construction development and evolution are important for the prediction of the appropriate method to solve any problems or issues associated in this field. Students are required to further their investigation based on the outline proposed in Innovative Project I. It will enhance their understanding level on the proposed design theory and issues that they plan to deal with (Innovative Project I). Site and agency visit might be required for some specific assignment. Students will produce a final report, simulation and prototype model of their innovation projects.
<b>Transferable Skills</b>	A student will expose to practical and entrepreneurial skill during the course
<b>Teaching Methodologies</b>	Lab Work, Supervision
<b>CLO</b>	<p>CLO1 Assemble the prototype from improvised design framework on the sustainable built environment</p> <p>CLO2 Demonstrate the performance of the innovation prototype for sustainable built environment</p> <p>CLO3 Demonstrate an entrepreneurial skill in proposing the innovation prototype which can be marketable in the sustainable built environment.</p>
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<p><b>1. Reporting the construction processes of the proposed innovation project related to the construction technology into an initial report</b></p> <p>1.1) Overview of the innovation project proposal</p> <p>1.2) Details of the methodology adopted for the project</p>	
<p><b>2. Preparation of an interim report for the proposed innovation project related to the construction technology</b></p> <p>2.1) Detail explanation on the assembling process or development of the proposed innovation project</p>	
<p><b>3. Producing a final report for the proposed innovation project related to the construction technology</b></p> <p>3.1) A final report containing the introduction of the proposed innovation project until the contribution of the project to the construction industry</p>	

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Presentation	Individual final presentation to propose the innovation prototype into sustainable built environment market	10%	CLO3
	Presentation	Individual demonstration of the performance of innovation prototype in the sustainable built environment	20%	CLO2
	Presentation	Individual presentation of the prototype from improvised design framework on the sustainable built environment	20%	CLO1
	Written Report	Produce an individual initial written report of the prototype from improvised design framework on the sustainable built environment	10%	CLO1
	Written Report	Produce an individual interim written report of the performance of innovation prototype in the sustainable built environment	20%	CLO2
	Written Report	Produce an individual final written report to propose the innovation prototype into sustainable built environment market	20%	CLO3

Reading List	Reference Book Resources	<ul style="list-style-type: none"> <li>• Andrew Watts 2016, <i>Modern Construction Case Studies: Emerging Innovation in Building Techniques</i>, Birkhauser Basel [ISBN: 978-303561095]</li> <li>• Andrew Watts 2016, <i>Modern Construction Handbook</i>, 4th Ed., Birkhauser Architecture Basel [ISBN: 978-303560959]</li> <li>• Finn Orstavik, Andrew R. J. Dainty &amp; Carl Abbott 2015, <i>Construction Innovation (Innovation in the Built Environment)</i>, 1 Ed., Wiley-Blackwell New Jersey [ISBN: 978-111865553]</li> <li>• Thomas Bock &amp; Thomas Linner 2015, <i>Robot-Oriented Design: Design and Management Tools for the Deployment of Automation and Robotics in Construction (The Cambridge Handbooks in Construction Robotics)</i>, 1 Ed., Cambridge University Press; New York [ISBN: 978-11070763]</li> <li>• V.K. Narayanan 2011, <i>Managing Technology and Innovation for Competitive Advantage</i>, Pearson India Chennai [ISBN: 978-817758645]</li> <li>• James M Sinopoli 2010, <i>Smart Buildings Systems for Architects, Owners and Builders</i>, 1st Ed., Butterworth-Heinemann Oxford [ISBN: 978-185617653]</li> <li>• Sam Kubba 2010, <i>Construction Project Management and Cost Oversight</i>, Butterworth-Heinemann Oxford [ISBN: 978-185617676]</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	