



## UNIVERSITI TEKNOLOGI MARA

### AAR501: CONSTRUCTION TECHNOLOGY II

<b>Course Name (English)</b>	CONSTRUCTION TECHNOLOGY II <b>APPROVED</b>
<b>Course Code</b>	AAR501
<b>MQF Credit</b>	3
<b>Course Description</b>	This course is the study on the principles, components and assembly of the various types of timber construction commonly used for small to medium scaled buildings up to 2-storeys in height. Aspects encompass elements of buildings from ground to roof. Also included is the study of timber as building materials and timber by-products. A study will be done on buildings that relate to the design task of design II and marked independently under this course.
<b>Transferable Skills</b>	Reflective Learner Creative & Innovative
<b>Teaching Methodologies</b>	Lectures, Field Trip, Case Study, Tutorial, Workshop
<b>CLO</b>	CLO1 Illustrate basic understanding of the construction process involved in a typical timber building project. CLO2 Discuss the roles of various building trades in promoting sustainable timber materials. CLO3 Explain the constructional methods and usage of timber building materials that relate to small and medium scaled buildings.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Skeletal Structures in Timber</b> 1.1) N/A	
<b>2. Timber Construction for Small &amp; Medium Scaled Building - Roof</b> 2.1) N/A	
<b>3. Timber Construction for Small &amp; Medium Scaled Building - Wall</b> 3.1) N/A	
<b>4. Timber Construction for Small &amp; Medium Scaled Building - Major Elements and Components</b> 4.1) N/A	
<b>5. Framed Wall Construction</b> 5.1) N/A	
<b>6. Aspects of Timber as Building Materials</b> 6.1) N/A	
<b>7. Structural Timber in Accordance With UBBL 1984</b> 7.1) N/A	
<b>8. Energy Consciousness in Timber Design</b> 8.1) N/A	
<b>9. Technical Study on Selected Timber Structure or Building</b> 9.1) N/A	

Assessment Breakdown	%
Continuous Assessment	40.00%
Final Assessment	60.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assessment on the understanding of the roles of various building trades in promoting sustainable timber materials.	10%	CLO2
	Assignment	Assessment on the understanding of constructional methods and usage of timber building materials that relate to small and medium scaled buildings (to be integrated with design).	30%	CLO3

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> <li>• K.W Harvey, 2009, <i>Fundamentals Building Materials</i>, Ed., , Universal-Publishers [ISBN: ]</li> <li>• Hugues, T 2004, <i>Timber Construction : detailed products case</i> , Ed., , Birkhauser, Basel [ISBN: ]</li> <li>• J.Kolb 2008, <i>Systems in Timber Engineering: Loadbearing St</i>, Ed., , Springer [ISBN: ]</li> <li>• R. Chudrey, R. Greeno 2008, <i>Building construction handbook</i>, Ed., , Butterworth-Heinemann [ISBN: ]</li> <li>• Zulkifli Hanafi, <i>Pembinaan Bangunan Tradisional Melayu</i>, Amber Solara Penang</li> <li>• Foster, J.S., <i>Structure and Fabric, Part I</i>, Batsford London</li> <li>• Ching, D.K., <i>Building Construction Illustrated</i>, V.N.R. California</li> </ul>
Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources