



UNIVERSITI TEKNOLOGI MARA

AAR655: INTRODUCTION TO BUILDING INFORMATION MODELING

Course Name (English)	INTRODUCTION TO BUILDING INFORMATION MODELING APPROVED
Course Code	AAR655
MQF Credit	2
Course Description	A brief history of Building Information Modelling (BIM) implementation in the architectural profession. Understanding the user interface of common BIM software packages with focus on the existing BIM package provided by the University. Usage of BIM for the production of drawings. Leveraging BIM software families for parametric design, and usage of parameters and data flow families for all aspects of 2D documentation.
Transferable Skills	Reflective Learner Tech-savvy
Teaching Methodologies	Lectures, Lab Work
CLO	CLO1 Manipulate the ability to use related tools and softwares in document management. CLO2 Demonstrate effective presentations documents and diagrams.
Pre-Requisite Courses	No course recommendations
Topics	
1. Concepts of BIM and Integrated design. 1.1) Introduction to User interface	
2. Introduction to User interface 2.1) N/A	
3. Basics of the BIM software (provided by the University), fundamentals of Massing and Modeling 3.1) N/A	
4. Site and topography 4.1) N/A	
5. Creating building via components 5.1) N/A	
6. Level and grid settings setting 6.1) N/A	
7. Ctreating a basic floor plan, creating and modifying walls 7.1) N/A	
8. Working with compound and vertical walls; Doors and windows 8.1) N/A	
9. Creating views (elevations, section, 3D view and perspective); Creating interiors 9.1) N/A	
10. View properties and settings 10.1) N/A	
11. Creating Families, Families and object modelling components 11.1) N/A	
12. Schedules, Legends, detailing; Presentation views & Design options 12.1) N/A	
13. Detailing and drafting 13.1) N/A	

14. Rendering; Walkthrough, Solar studies & Project setting and locations
14.1) N/A

Assessment Breakdown		%		
Continuous Assessment		100.00%		
Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assessment on the ability to demonstrate effective presentations documents and diagrams.	30%	CLO2
	Assignment	Assessment on the ability to use related tools and softwares in document management. Specifically on BIM.	70%	CLO1
Reading List	Reference Book Resources	<ul style="list-style-type: none"> • Eastman, C. Teicholz P. Sacks R. and Liston, 2008, <i>BIM Handbook, A Guide to Building Information</i>, Wiley • Hardin, Brad 2009, <i>BIM and Construction Management: proven tools</i> • Krygiel E. and Nies B. Green, <i>BIM ; Succesful Sustainable Design with Build</i> • Kelvin, G 2007, <i>Integtrated Practices in Architecture: Master</i> 		
Article/Paper List	This Course does not have any article/paper resources			
Other References	This Course does not have any other resources			