



UNIVERSITI TEKNOLOGI MARA

AAR551: CONSTRUCTION TECHNOLOGY III

Course Name (English)	CONSTRUCTION TECHNOLOGY III APPROVED
Course Code	AAR551
MQF Credit	3
Course Description	A study on the principles of reinforced concrete frame construction for small to medium scaled buildings. Aspects encompass the construction for sub-structure, roof, wall, stairs and external works. Also included is the study of production, process, properties, characteristics, application and performance of concrete, cement, ceramic and their products.
Transferable Skills	Ethically and Socially Sensitive Tech-Savvy
Teaching Methodologies	Lectures, Lab Work, Field Trip
CLO	CLO1 Illustrate basic understanding of the construction process and materials involved in a typical reinforced concrete building project. CLO2 Discuss the compliances of reinforced concrete structures in accordance to the UBBL requirements. CLO3 Explain the constructional methods and usage of reinforced concrete building materials that relate to small and medium scaled buildings.
Pre-Requisite Courses	No course recommendations
Topics	
1. RC Construction - Substructure 1.1) N/A	
2. RC Construction - Superstructure 2.1) N/A	
3. RC Construction - Aspects as Building Materials 3.1) N/A	
4. RC Construction - In Accordance to UBBL 1984 4.1) N/A	
5. RC Construction - Computer Softwares for Structural Analysis 5.1) N/A	
6. RC Construction - Staircase 6.1) N/A	
7. Studies on Concrete, Cement, and Ceramic Products 7.1) N/A	
8. External Works - Fencing, Drain, Pavement, Road and Retaining Wall 8.1) 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 compliances of reinforced concrete structures in accordance to the UBBL requirements.	20%	CLO2
	Assignment	Assessment on the understanding of the constructional methods and usage of reinforced concrete building materials that relate to small and medium scaled buildings. (To be integrated with studio project)	20%	CLO3

Reading List	Reference Book Resources	<ul style="list-style-type: none"> • Nawy, E.G. 2009, <i>Reinforced Concrete : A fundamental approach</i>, N.J, Prentice hall • Mailer, Y. 1992, <i>High Performance Concrete, From Material To S</i>, London, E. & F.N. Spoon • Spiegel, L. 2003, <i>Reinforced Concrete Design</i>, N.J, Prentice hall • R. Chudrey, R. Greeno 2006, <i>Advance Construction Technology</i>, Pearson Education
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	