



UNIVERSITI TEKNOLOGI MARA

BCT563: MODULAR COORDINATION & STANDARDISATIONS

Course Name (English)	MODULAR COORDINATION & STANDARDISATIONS APPROVED
Course Code	BCT563
MQF Credit	3
Course Description	Student enrolled for this course will learn in general the construction terminology, materials, machinery & equipment and installing sequences of construction process. Student will be given a project and they will be required to propose a suitable method of constructions and prepare the construction methods for that particular project by using the latest technology available in construction industry. It will cover areas of open/close system and tolerances in Malaysia Standard etc.
Transferable Skills	At the end of this course, the students will be able to:- CLO 1 : Explain the principles of modular coordination and standard used in Industrialised Building System (IBS) CLO 2: Analyse the rules and standard of Modular Coordination in building component design for Industrialised Building System (IBS) CLO 3 :Demonstrate the ability to sustain information management in developing Modular Coordinated manufacturing drawing from conventional to Industrialised Building System (IBS) component design
Teaching Methodologies	Lectures, Tutorial, Presentation, Small Group Sessions
CLO	CLO1 Explain the principles of modular coordination and standard used in Industrialised Building System (IBS) CLO2 Analyse the rules and standard of Modular Coordination in building component design for Industrialised Building System (IBS) CLO3 Demonstrate information management in Modular Coordinated and Standardisation.
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction 1.1) 1. Introduction 1.2) 2. Scope of Study 1.3) 3. Methodology 1.4) 4. Fundamentals 1.5) 5. Terms and References	
2. Definition and Concept 2.1) 1. Basic Terminology 2.2) 2. Building Reference System 2.3) 3. Modular Coordination Concepts	
3. The used of modules (basic modules and multi-modules) 3.1) 1. Basic Modules 3.2) 2. Multi Modules	
4. A reference system to define coordinating spaces and zones for building elements and for the components. 4.1) 1. Reference System 4.2) 2. Coordinating and Modularisation 4.3) 3. Space and zones 4.4) 4. Building Elements and Components	

5. Rules for locating building elements within the reference system

- 5.1) 1. General Design Rules
- 5.2) 2. Modularisation Rules

6. Rules for sizing building components in order to determine their work size

- 6.1) 1. General Rules
- 6.2) 2. Sizing and Dimension
- 6.3) 3. Components and Elements
- 6.4) 4. Working Size

7. Rules for defining preferred sizes for building components and coordinating dimensions for building

- 7.1) 1. Preferred Size
- 7.2) 2. Recommended Preferred Size for Building Materials
- 7.3) 3. Recommended Preferred Size for Building Components and Elements

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Written Assignment	30%	CLO3
	Assignment	Written Assignment	30%	CLO2
	Online Quiz	Online or Written Test	20%	CLO1
	Test	Online Test	20%	CLO2

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> • Lembaga Pembangunan Industri Pembinaan Malaysia (CIDB) 2000, <i>Modular Design Guide</i>, 3rd Edition Ed., Perpustakaan Negara Malaysia Kuala Lumpur [ISBN: 983-40002-4-3] • CIDB 1998, <i>Standard Industri Pembinaan</i>, CIDB Kuala Lumpur • CIDB 2008, <i>Catalogue of IBS Components</i>, CIDB Kuala Lumpur • CIDB 2009, <i>Katalog IBS (Bagi Projek Bangunan IBS)</i>, CIDB Kuala Lumpur • Ministry of Works (JKR) Malaysia 2010, <i>Roadmap for Industrialised Building System (IBS) in Malaysia 2011-2015</i>, CIDB Kuala Lumpur • Department of Standard Malaysia 2001, <i>Guide to Modular Coordination in Building: MS1064 : Part 1 - 10</i>, SIRIM Shah Alam • Chudley, R., & Greeno, R 2006, <i>Advanced Construction Technology (4th Edition)</i>, 4th Ed., Pearson Education Limited London • Chudley, R., & Greeno, R 2008, <i>Building Construction Handbook</i>, 7th Ed., Butterworth Heinemann Publication. London • Foster, J., S., & Harington, R. 2007, <i>Structure and Fabric 1& 2</i>, 7th Ed., Longman. London • Bryan, T 2010, <i>Construction Technology: Analysis and Choice</i>, Blackwell Oxford • CIDB 2006, <i>Industrialised Building System In Malaysia, Construction Technology Development Division</i>, CIDB Kuala Lumpur

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