



UNIVERSITI TEKNOLOGI MARA

BCT442: CONSTRUCTIONS INFORMATION TECHNOLOGY

Course Name (English)	CONSTRUCTIONS INFORMATION TECHNOLOGY APPROVED
Course Code	BCT442
MQF Credit	2
Course Description	This course provides students with some knowledge and hands-on experience in information technology (IT) and how they may be applied in the construction industry. The course also introduces the use of AutoCAD system in producing working and detail drawings
Transferable Skills	Enhance application of computer aided learning in project planning and design
Teaching Methodologies	Lectures, Simulation Activity, Presentation, Computer Aided Learning
CLO	<p>CLO1 Explain the fundamental knowledge of Microsoft Project and CAD application in construction project.</p> <p>CLO2 Perform skills in using Microsoft Project and CAD application in construction project.</p> <p>CLO3 Report verbally and in writing a simulation project by using Microsoft Project and CAD application in construction project.</p>
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Microsoft Project 1.1) Application of MS Project	
2. Project Planning 2.1) Project Planning process 2.2) Project Planning Tools and Techniques 2.3) Developing the Network Planning	
3. Scheduling: Critical Path Method 3.1) CPM network 3.2) Monitoring progress	
4. Scheduling: Bar Chart & Gantt Chart 4.1) Preparing project scheduling	
5. Introduction to the AutoCAD System 5.1) How to use the Software for drawing 5.2) Understand the command window and the used of graphic tools	
6. Introduction to the AutoCAD System 6.1) Creating and Controlling Selection Sets (select, move etc.) 6.2) Filtering Objects and Layers 6.3) Controlling the AutoCAD Environment 6.4) Creating and Controlling Blocks and Attributes (cut, paste etc.) 6.5) Managing External References 6.6) Raster Images 6.7) AutoCAD Drawing Environments 6.8) Plotting 6.9) Dimension styles 6.10) Text files used by AutoCAD	
7. Architectural Drawings 7.1) Layout plans, sections, elevations and details of the building and other important features, the used of space and materials for a floor, wall ceiling, roof and stairs. 7.2) Produce a drawing using AutoCAD	

Assessment Breakdown		%	
Continuous Assessment		100.00%	

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Group Project	Simulation project	20%	CLO3
	Presentation	Communication skill and developing self confident	20%	CLO3
	Test	Knowledge and Understanding	20%	CLO1
	Written Report	Lab report	40%	CLO2

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> • Kay Dora, A., G 2007, <i>Basic Engineering Drawing: Hands on Work Book</i>, Unit Penerbitan Universiti (UPENA), UiTM. Shah Alam, Malaysia • Sawyer, S., William, B., & Hutchinson, S. 1997, <i>Using Information Technology: A Practical Introduction to Computers and Communications</i>, Irwin Chicago. • Stover, S., T., Biafore, B., Marinescu, A 2011, <i>Microsoft Project 2010 Inside Out</i>, O'Reilly Media USA • Happy, R. 2010, <i>Microsoft Project 2010: Project Management</i>, Wiley Publishing California • Newitt, J., S. 2008, <i>Construction Scheduling: Principles and Practices</i>, 2nd Ed., Prentice Hall New Jersey • Harris, P., E. 2010, <i>Planning and Scheduling Using Microsoft Project 2010</i>, Eastwood Harris Australia • Yarwood, A. 2010, <i>Introduction to AutoCAD 2011: 2D and 3D Design</i>, Elsevier United Kingdom
Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources