



**UNIVERSITI TEKNOLOGI MARA**

**BCT623: IBS SUPPLY CHAIN & CONSTRUCTION MANAGEMENT**

<b>Course Name (English)</b>	IBS SUPPLY CHAIN & CONSTRUCTION MANAGEMENT <b>APPROVED</b>
<b>Course Code</b>	BCT623
<b>MQF Credit</b>	3
<b>Course Description</b>	In this course, various fundamentals and basics of organization and management are discussed through the perspective of the construction industry. The course will examine how management principles of IBS supply chain were theorized and formulated as well as an analysis on the different elements which are evident in the organizational context. The course will delve on the basic planning, monitoring and control methods used in project management using IBS system and also stress on production yard organization. Proper management and organization of the key elements in project management, namely time, cost and quality will be the underlying tone throughout the course. Effective application and implementation of management techniques specifically on the IBS construction industry will be the ultimate emphasis of the course.
<b>Transferable Skills</b>	construction management
<b>Teaching Methodologies</b>	Lectures, Demonstrations, Case Study, Tutorial, Collaborative Learning
<b>CLO</b>	<p>CLO1 Explain the basic concepts of IBS supply chain management in the construction industry.</p> <p>CLO2 Demonstrate the ability to write a project quality plan for IBS project.</p> <p>CLO3 Demonstrate the ability to retrieve and manage information relating to financial planning of IBS supply chain management in the construction industry.</p>
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<p><b>1. Introduction to IBS supply chain in conjunction with construction management</b></p> <p>1.1) • Introduction to IBS supply chain management</p> <p>1.2) • Attributes of IBS Construction Projects</p> <p>1.3) • Goal &amp; Objectives of Construction Project</p> <p>1.4) • Management Techniques to Achieve Project Goals and Objective</p> <p>1.5) • Production Yard Organization</p>	
<p><b>2. The Project Team</b></p> <p>2.1) • Roles, Responsibilities, and Authority of Project Participant</p> <p>2.2) • The Traditional Contract Delivery System (Owner-Architect- Contractor)</p> <p>2.3) • The Construction Management (CM) Delivery System</p>	
<p><b>3. Project Organizational Behaviors</b></p> <p>3.1) • Identify leadership styles of project managers.</p> <p>3.2) • Describe techniques used to manage groups and individuals in order to increase the effectiveness of working on a project team.</p> <p>3.3) • Motivation and Communication</p>	
<p><b>4. Feasibility Study of IBS Project</b></p> <p>4.1) • Market Feasibility</p> <p>4.2) • Technical Feasibility</p> <p>4.3) • Financial Feasibility</p>	

<p><b>5. Site Layout and Control</b></p> <p>5.1) • Material Handling  5.2) • Labor Productivity  5.3) • Equipment Constraints  5.4) • Site Constraints  5.5) • Element of Site Layout Plan  5.6) • Site Security  5.7) • Organizing Site Layout</p>
<p><b>6. Project Planning and Scheduling (IBS Project – PM tools)</b></p> <p>6.1) • Produce a Gantt chart, to schedule the completion of all work elements.  6.2) • Produce a critical path method (CPM) schedule of all work elements.  6.3) • Time and Cost Control of the project</p>
<p><b>7. Total Quality Management of Project</b></p> <p>7.1) • Defining Quality  7.2) • Total Quality Management  7.3) • Implementing a Quality Plan. Including QA, QC and QMS during IBS construction/installation.</p>
<p><b>8. Changes and Claims</b></p> <p>8.1) • Changes in Construction Project.  8.2) • The Change Order Process.</p>
<p><b>9. Progress Payments</b></p> <p>9.1) • Unit Price Contracts  9.2) • Project Cash Flow Projections  9.3) • Progress Payment procedures  9.4) • Payment Processing</p>
<p><b>10. Project Closeout</b></p> <p>10.1) • The Closeout Process  10.2) • Financial Resolution of the Project</p>
<p><b>11. Study Week</b></p> <p>11.1) N/A</p>

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Final Test	Online Test	30%	CLO1
	Presentation	Online presentation	10%	CLO3
	Written Report	Individual Written Report	25%	CLO3
	Written Report	Written report - group	35%	CLO2

Reading List	Recommended Text
	<ul style="list-style-type: none"> <li>• Pryke, S. 2009, <i>Construction Supply Chain Management Concept and Case Study</i>, Wiley-Blackwell. United Kingdom.</li> <li>• CIDB-UUM 2010, <i>Draft Final Report on Supply Chain in the Malaysian Construction Industry</i>, CIDB of Malaysia. Kuala Lumpur.</li> <li>• Frederick, E., G., &amp; Nancy, E., J. , 2009, <i>Construction Project Management</i>, 3rd Edition Ed., Prentice Hall. Upper Saddle River New Jersey.</li> <li>• Kerzner, H. 2009, <i>Project Management : A System Approach to Planning, Scheduling &amp; Controlling</i>, 10th Edition Ed., John Wiley &amp; Sons Inc. Hoboken New Jersey.</li> <li>• William, M. 2008, <i>The Principle of Project Management</i>, Site Point Pennsylvania State University.</li> <li>• Wysocki, R., K. 2009, <i>Effective Project Management</i>, 5th Edition Ed., Wiley Publishing Inc.</li> </ul>

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