



(The contents and other related details in this form is used for publication purpose only. Training module will be given to participants upon registration)

Course Title: BILLS OF MATERIALS AND MATERIAL REQUIREMENT PLANNING (BOM AND MRP)

Course Code : QA 106 (T)

Course Background/Summary :

A bill of materials (sometimes bill of material or BOM) is a list of the raw materials, sub-assemblies, intermediate assemblies, sub-components, parts and the quantities of each needed to manufacture an end product. No physical dimension is described in a BOM. It may be used for communication between manufacturing partners, or confined to a single manufacturing plant. A BOM can define products as they are designed (engineering bill of materials), as they are ordered (sales bill of materials), as they are built (manufacturing bill of materials), or as they are maintained (service bill of materials). The different types of BOMs depend on the business need and use for which they are intended. In process industries, the BOM is also known as the formula, recipe, or the ingredients list. In electronics, the BOM represents the list of components used on the printed wiring board or printed circuit board. Once the design of the circuit is completed, the BOM list is passed on to the PCB layout engineer as well as a component engineer who will procure the components required for the design. BOMs are hierarchical in nature with the top level representing the finished product which may be a sub-assembly or a completed item. BOMs that describe the sub-assemblies are referred to as modular BOMs. An example of this is the NAAMS BOM that is used in the automotive industry to list all the components in an assembly line. The structure of the NAAMS BOM is System, Line, Tool, Unit and Detail.

Material requirements planning (MRP) is a production planning and inventory control system used to manage manufacturing processes. Most MRP systems are software-based, while it is possible to conduct MRP by hand as well. An MRP system is intended to simultaneously meet three objectives:

1. Ensure materials are available for production and products are available for delivery to customers.
2. Maintain the lowest possible material and product levels in store
3. Plan manufacturing activities, delivery schedules and purchasing activities.

UniKL MSI can also customize existing short courses and develop new courses to meet your personal training needs and requirements. The course duration serves as a guideline for your reference.

Please forward enquiries to Centre for Advancement & Continuing Education (ACE), University Kuala Lumpur (Malaysian Spanish Institute), Kulim Hi-Tech Park, 09000 Kulim, Kedah or via fax to:04-4032539 or email to syazrah@unikl.edu.my or call 04-4035199 / 200 (ext:112 / 185)



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Course Objectives:	
The Workshop illustrates the basic skills involved in BOM and MRP. This group training exercise is designed to proceed understand the structure of the BOM and MRP. The main objectives are:	
<ul style="list-style-type: none">• Describe the characteristics, benefits and importance of BOM and MRP• Understand the structure of BOM• Understand the concept of MRP• Apply the benefit of BOM and MRP into the organization	
Target Audience:	
<ul style="list-style-type: none">• Machines Operators & Machines Suppliers• Teaching staffs (including vocational & technical teachers)• Industrial workers	
Course Duration	: 2 days
Course Contents	:
No	TOPICS
1.	Introduction to Bill of Material (BOM)
2.	Structure of the Bill of Material (BOM)
3.	Child part of BOM structure
4.	Introduction of Material Requirement Planning (MRP)
5.	Structure of Material Requirement Planning (MRP)
6.	Integration Bill of Material (BOM) and Material Requirement Planning (MRP)
7.	Applying the concept into the organization
COURSE STRUCTURE:	
Theory / Lab Works	: 100%

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