

4 <sup>th</sup> semester	21MBA402K	Material Handling in Logistics	L-T-P 3-0-0	3 credits	35 Hours
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**Course objective:**

- It should be able determine appropriate distance to be covered in logistics .
- To Facilitate the reduction in material damage as to improve quality.
- To know how to reduce overall manufacturing time by designing efficient material movement.

**MODULE-I**

**History of Materials Handling** – Need of Materials Handling – Importance of Materials Handling – Advantages of Materials Handling – Disadvantages of Materials Handling – Functions involved in Material Handling – Types of Layout & Performance of Layout.

**MODULE-II**

**Principles and their Uses** – Preliminary Considerations – Principles of Material Handling Equipment – Factors in Selection of Material Handling Equipment – Materials Handling and Role of Management  
**Selection of Materials Handling Equipment** – Economics of Material Handling Equipment – Cost Considerations – Cost Analysis – Cost Account and Material Handling – Cost Indices

**MODULE-III**

**Hoisting Machinery** – Elevating Equipment – Cranes – Important Parts of cranes – Types of cranes – Rotatory or Revolving Cranes – Bridge & Mobile Cranes.

**Conveying Equipment** – Traction Type Conveyors – Traction less Type Conveyors – Surface Tension Equipment – Narrow gauge equipment – Cross Holding Equipment – ODC Material Handling.

**Books:**

- 1) R.B.Choudary & G.R.N.Tagore, Plant Layout, and Material Handling, Khanna Publishers.
- 2) Jacob Fruchtbaum, Bulk Materials Handling Hand Book, CBS Publishers & Distributors.
- 3) Dr.K.C.Arora, Vikas V.Shinde, Aspects of Material Handling, Laxmi Publications (p) Ltd.

  
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