

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Semester: III

Mechanical(Machine Design)

Subject Name: **DESIGN OF MATERIAL HANDLING EQUIPMENT**
(Major Elective– IV)

Sr.No	Course content
1.	Objectives of material handling systems; basic principles, classification and selection of material handling equipment, Characteristics and applications, parameters affecting service; Packaging and storage of materials and their relation with material handling; Design of various component parts of material handling systems.
2.	Kinematic and dynamic analysis of various types of cranes and elevators; stability and structural analysis, fault finding and failure analysis, system design and economics.

References:

1. Materials Handling Equipments by N. Rudenko - Peace Publishers
2. Conveyors and Related Equipments by Spivakowsky - Peace Publishers
3. Conveying Machines by Spivakowsky and V. Dyachke - MIR Publishers
4. Belt Conveyors for Bulk Materials (2nd Ed) by Conveyor Equipment Manufacturers Association