

SYLLABUS CURRICULUM

COURSE	Course Name : Materials Handling
	Course Code : TM184843
	Credit : 3 sks
	Semester : Optional

COURSE DESCRIPTION

In this course gives the ability to select the material transferers in accordance with the condition and situation of the location and the ability of the design of the material transfer plane.

LEARNING OUTCOMES

LO8	Able to implement mathematics, science and engineering principles to solve engineering problems in mechanical systems.
LO9	Able to find the source of engineering problems in mechanical system through research that includes identification, formulation, analysis, data interpretation based on engineering principles.
LO10	Able to formulate the solution of engineering problem in mechanical system by considering economy, safety, environment and energy conservation.
LO11	Able to design mechanical system and the necessary components through analytical approach based on science and technology by considering technical standard and reliability.

COURSE LEARNING OUTCOMES

Students can define various kinds of materials and their properties, investigate the most suitable equipment based on the properties and movement of materials handled, analyze the power requirement of material handling equipment, and design a system of material handling based on required output capacity.

MAIN SUBJECT

The focus of this course are as follows:

- Principles of material handling
- Material classification and properties
- Material-handling equipment for unit material and bulk handling, pulley system, hoisting gear, and lifting vehicle.
- Power and capacity analysis

PREREQUISITES

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REFERENCE

1. Raymond A. Kulwiec, "Material Handling Handbook", 2nd Edition, John Wiley and Sons, ASME, USA.
2. Siddhartha Ray, "Introduction to Materials Handling", New Age International Publisher, New Delhi.