

Module I

Chapter 1 : Design Considerations and Engineering Materials	1-1 to 1-36
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Syllabus : Mechanical Engineering Design, Design Methods, Aesthetic and Ergonomics Consideration in Design, Material Properties and their Uses in Design, Manufacturing Consideration in Design, Design Consideration of Casting and Forging, Basic Principle of Machine Design, Modes of Failures, Factor of Safety, Design Stresses, Standards, I.S. Codes, Preferred Series and Numbers

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Keys : Types of Keys and their selection based on shafting condition.

Couplings : Classification of coupling, Design of Flange couplings, Bush pin type flexible couplings

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