

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Mechanical Engineering - NOC:Mechanics of Fiber Reinforced Polymer Composite Structures

Subject Co-ordinator - Prof. Debabrata Chakraborty

Co-ordinating Institute - IIT - Guwahati

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

- Lecture 1 - Composite Materials - Introduction
- Lecture 2 - Composite Materials - Classification
- Lecture 3 - Anisotropic Elasticity
- Lecture 4 - Orthotropic Materials
- Lecture 5 - Hooke's Law for 2D Lamina
- Lecture 6 - Engineering Constants for 2D Lamina
- Lecture 7 - Strength Failure Criteria - Part I
- Lecture 8 - Strength Failure Criteria - Part II
- Lecture 9 - Hygrothermal Behavior of Lamina
- Lecture 10 - Introduction and Terminologies
- Lecture 11 - Evaluation of Elastic Moduli
- Lecture 12 - Evaluation of Longitudinal Strength
- Lecture 13 - Evaluation of Transverse and Shear Strengths
- Lecture 14 - Evaluation of Hygrothermal Properties
- Lecture 15 - Elasticity Approach
- Lecture 16 - Experimental Evaluation
- Lecture 17 - Laminate - Introduction
- Lecture 18 - Classical Lamination Theory - Part I
- Lecture 19 - Classical Lamination Theory - Part II
- Lecture 20 - Response of Laminate - Significance of ABBD
- Lecture 21 - Special Classes of Laminates
- Lecture 22 - Engineering Constants of Laminates
- Lecture 23 - Hygrothermal Behaviour of Laminates
- Lecture 24 - Analysis of Laminates
- Lecture 25 - Failure of Laminates
- Lecture 26 - Failure Analysis under Combined Loading
- Lecture 27 - Design Example - I
- Lecture 28 - Design Example - II
- Lecture 29 - Interlaminar Stresses- Delamination

Get DIGIMAT For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

<http://www.digimat.in>

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

- Lecture 30 - Prediction of Delamination
- Lecture 31 - Transverse Deflection
- Lecture 32 - Buckling and Free Vibration