

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

NPTEL Video Course - Mechanical Engineering - NOC:Processing of Polymers and Polymer Composites

Subject Co-ordinator - Dr. Inderdeep Singh

Co-ordinating Institute - IIT - Roorkee

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

- Lecture 1 - Introduction to course
- Lecture 2 - Engineering materials and processing techniques
- Lecture 3 - Thermoplastics and thermosets
- Lecture 4 - Processing of polymers
- Lecture 5 - Thermoforming processes
- Lecture 6 - Extrusion - I
- Lecture 7 - Extrusion - II
- Lecture 8 - Compression molding
- Lecture 9 - Injection molding - I
- Lecture 10 - injection molding - II
- Lecture 11 - Transfer molding
- Lecture 12 - Rotational molding
- Lecture 13 - Blow molding
- Lecture 14 - Composite materials
- Lecture 15 - Classification of composite materials
- Lecture 16 - Processing of polymer composites
- Lecture 17 - Hand lay-up
- Lecture 18 - Spray lay-up
- Lecture 19 - Compression molding
- Lecture 20 - Injection molding
- Lecture 21 - Reaction injection molding
- Lecture 22 - Autoclave molding
- Lecture 23 - Resin transfer molding
- Lecture 24 - Filament winding
- Lecture 25 - Pultrusion process
- Lecture 26 - Sheet molding
- Lecture 27 - Pre-pregging and challenges in primary processing of composites
- Lecture 28 - Secondary processing of polymer composites
- Lecture 29 - Joining of polymer composites

---

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

[www.digimat.in](http://www.digimat.in)

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

---

- Lecture 30 - Adhesive joining
- Lecture 31 - Mechanical joining
- Lecture 32 - Microwave joining
- Lecture 33 - Induction and resistance welding
- Lecture 34 - Drilling of polymer matrix composites - I
- Lecture 35 - Drilling of polymer matrix composites - II
- Lecture 36 - Methods to prevent drilling induced damage
- Lecture 37 - Non-conventional drilling
- Lecture 38 - Process simulation of secondary processing
- Lecture 39 - Intelligent drilling of polymer matrix composites
- Lecture 40 - Web based tools for polymer matrix composites