

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

NPTEL Video Course - Textile Engineering - Theory of Yarn Structures

Subject Co-ordinator - Prof. Bohuslav Neckar

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Fibers and Yarns  
Lecture 2 - Fibers and Yarns  
Lecture 3 - Compression of Fibrous Assemblies  
Lecture 4 - Compression of Fibrous Assemblies (Continued...)  
Lecture 5 - Pores Among Fibers  
Lecture 6 - Pores Among Fibers (Continued...)  
Lecture 7 - Orientation of Fibers  
Lecture 8 - Orientation of Fibers (Continued...)  
Lecture 9 - Mechanics of Parallel Fiber Bundles  
Lecture 10 - Mechanics of Parallel Fiber Bundles (Continued...)  
Lecture 11 - Modelling of Internal Yarn Geometry  
Lecture 12 - Modelling of Internal Yarn Geometry  
Lecture 13 - Relations Among Yarn Count T, Twist Z, Packing Density, And Diameter D  
Lecture 14 - Relations Among Yarn Count T, Twist Z, Packing Density, And Diameter D (Continued...)  
Lecture 15 - Relations Among Yarn Count T, Twist Z, Packing Density, And Diameter D (Continued...)  
Lecture 16 - Relations Among Yarn Count T, Twist Z, Packing Density, And Diameter D (Continued...)  
Lecture 17 - Bundle Theory of Yarn Unevenness  
Lecture 18 - Bundle Theory of Yarn Unevenness (Continued...)  
Lecture 19 - Yarn Strength as a Stochastic Process  
Lecture 20 - Yarn Strength as a Stochastic Process (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Science of Clothing Comfort

Subject Co-ordinator - Dr. Apurba Das

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Science of Clothing Comfort-Outline  
Lecture 2 - Understanding Clothing and Clothing Comfort  
Lecture 3 - Understanding Clothing and Clothing Comfort (Continued...)  
Lecture 4 - Understanding Clothing and Clothing Comfort (Continued...)  
Lecture 5 - Psychology and Comfort  
Lecture 6 - Psychology and Comfort (Continued...)  
Lecture 7 - Psychology and Comfort (Continued...)  
Lecture 8 - Psychology and Comfort (Continued...)  
Lecture 9 - Neurophysiological Processes in Clothing Comfort  
Lecture 10 - Neurophysiological Processes in Clothing Comfort (Continued...)  
Lecture 11 - Neurophysiological Processes in Clothing Comfort (Continued...)  
Lecture 12 - Neurophysiological Processes in Clothing Comfort (Continued...)  
Lecture 13 - Neurophysiological Processes in Clothing Comfort (Continued...)  
Lecture 14 - Neurophysiological Processes in Clothing Comfort (Continued...)  
Lecture 15 - Tactile Aspects of Clothing Comfort  
Lecture 16 - Tactile Aspects of Clothing Comfort (Continued...)  
Lecture 17 - Tactile Aspects of Clothing Comfort (Continued...)  
Lecture 18 - Tactile Aspects of Clothing Comfort (Continued...)  
Lecture 19 - Understanding Clothing and Clothing Comfort (Continued...)  
Lecture 20 - Tactile Aspects of Clothing Comfort (Continued...)  
Lecture 21 - Tactile Aspects of Clothing Comfort (Continued...)  
Lecture 22 - Clothing Comfort Related to Thermal Transmission  
Lecture 23 - Clothing Comfort Related to Thermal Transmission (Continued...)  
Lecture 24 - Clothing Comfort Related to Thermal Transmission (Continued...)  
Lecture 25 - Clothing Comfort Related to Thermal Transmission (Continued...)  
Lecture 26 - Clothing Comfort Related to Thermal Transmission (Continued...)  
Lecture 27 - Clothing Comfort Related to Thermal Transmission (Continued...)  
Lecture 28 - Clothing Comfort Related to Thermal Transmission (Continued...)  
Lecture 29 - Moisture Transmission and Clothing Comfort

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- Lecture 30 - Moisture Transmission and Clothing Comfort (Continued...)
- Lecture 31 - Moisture Transmission and Clothing Comfort (Continued...)
- Lecture 32 - Moisture Transmission and Clothing Comfort (Continued...)
- Lecture 33 - Moisture Transmission and Clothing Comfort (Continued...)
- Lecture 34 - Moisture Transmission and Clothing Comfort (Continued...)
- Lecture 35 - Moisture Transmission and Clothing Comfort (Continued...)
- Lecture 36 - Combined Heat and Mass Transmission and Clothing Comfort
- Lecture 37 - Combined Heat and Mass Transmission and Clothing Comfort (Continued...)
- Lecture 38 - Thermo-Physiological Comfort of Functional Clothing
- Lecture 39 - Garment Fit and Comfort
- Lecture 40 - Garment Fit and Comfort (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Yarn Manufacture-I: Principle of Carding and Drawing

Subject Co-ordinator - Prof. Ravi Chattopadhyay

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Impurities and Contaminants in Cotton  
Lecture 2 - Opening Principle and Opening Devices  
Lecture 3 - Cleaning Principle  
Lecture 4 - Machines and their Layout  
Lecture 5 - Bale Opening Machines  
Lecture 6 - Machines in Blow Room - Part II  
Lecture 7 - Opening Cleaning Machines - Part II  
Lecture 8 - Mixing/Blending  
Lecture 9 - Transportation of Tuft  
Lecture 10 - Lap formation and Material Flow Regulation  
Lecture 11 - Process Performance  
Lecture 12 - Introduction  
Lecture 13 - Card Feed Zone  
Lecture 14 - Carding Zone  
Lecture 15 - Analysis of flat action  
Lecture 16 - Sliver Formation  
Lecture 17 - Package Formation  
Lecture 18 - Card Clothing  
Lecture 19 - Card Setting, Draft, Production  
Lecture 20 - Fibre Configuration and Neps in Card sliver  
Lecture 21 - Carding Process  
Lecture 22 - Numerical Problems and Solution  
Lecture 23 - Introduction and Drafting principle  
Lecture 24 - Design Features and operating principle of drawframe  
Lecture 25 - Drafting Rolles, Web Condensation and Packaging  
Lecture 26 - Drafting Roller Arrangement  
Lecture 27 - Drafting Theory, Wave Formation and Control  
Lecture 28 - Drafting Force and Roller Slip  
Lecture 29 - Significance of Process Parameters

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

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- Lecture 30 - Draft and production Calculation
- Lecture 31 - Blending on Drawframe
- Lecture 32 - Process Monitoring and Control
- Lecture 33 - Drawframe Autoleveller
- Lecture 34 - Card Autoleveller
- Lecture 35 - Numericals on Drawing

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

NPTEL Video Course - Textile Engineering - NOC:Evaluations of Textile Materials

Subject Co-ordinator - Dr. Apurba Das

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Evaluation of Textile Materials - Outline  
Lecture 2 - Evaluation of Textile Materials - Outline (Continued...)  
Lecture 3 - Sampling Methods and Sample Size  
Lecture 4 - Sampling Methods and Sample Size (Continued...)  
Lecture 5 - Sampling Methods and Sample Size (Continued....)  
Lecture 6 - Sampling Methods and Sample Size  
Lecture 7 - Sampling Methods and Sample Size  
Lecture 8 - Sampling Methods and Sample Size  
Lecture 9 - Evaluation of Fibre Length  
Lecture 10 - Evaluation of Fibre Length (Continued...)  
Lecture 11 - Evaluation of Fibre Length (Continued...)  
Lecture 12 - Evaluation of Fibre Fineness  
Lecture 13 - Evaluation of Fibre Fineness - 1  
Lecture 14 - Evaluation of Cotton Fibre Maturity  
Lecture 15 - Evaluation of Cotton Fibre Properties  
Lecture 16 - Evaluation of Linear Density of Textile Materials  
Lecture 17 - Evaluation of Linear Density of Textile Materials (Continued...)  
Lecture 18 - Evaluation of Tensile Properties of Textile Materials  
Lecture 19 - Evaluation of Tensile Properties of Textile Materials (Continued...)  
Lecture 20 - Evaluation of Tensile Properties of Textile Materials-1 (Continued...)  
Lecture 21 - Evaluation of Tensile Properties of Textile Materials-2 (Continued...)  
Lecture 22 - Evaluation of Tensile Properties of Textile Materials-3 (Continued...)  
Lecture 23 - Evaluation of Tensile Properties of Textile Materials-4 (Continued...)  
Lecture 24 - Evaluation of Tensile Properties of Textile Materials-5 (Continued...)  
Lecture 25 - Evaluation of Yarn and Fabric Hairiness  
Lecture 26 - Evaluation of Yarn and Fabric Hairiness (Continued...)  
Lecture 27 - Evaluation of Yarn Twist  
Lecture 28 - Evaluation of Yarn Twist (Continued...)  
Lecture 29 - Evaluation of Moisture in Textiles

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

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- Lecture 30 - Evaluation of Moisture in Textiles (Continued...)
- Lecture 31 - Evaluation of Yarn Evenness
- Lecture 32 - Evaluation of Yarn Evenness-1 (Continued...)
- Lecture 33 - Evaluation of Yarn Evenness-2 (Continued...)
- Lecture 34 - Evaluation of Yarn Evenness-3 (Continued...)
- Lecture 35 - Evaluation of Yarn Evenness-3 (Continued...)
- Lecture 36 - Evaluation of Yarn Evenness-4 (Continued...)
- Lecture 37 - Evaluation of Bursting and Tear Strength of Fabrics
- Lecture 38 - Evaluation of Pilling and Abrasion Properties of Fabrics
- Lecture 39 - Evaluation of Low Stress Mechanical Properties of Textile Materials
- Lecture 40 - Evaluation of Low Stress Mechanical Properties of Textile Materials (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Testing of Functional and Technical Textiles

Subject Co-ordinator - Dr. Apurba Das

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Testing of Low Stress mechanical Properties of Textile Fabrics  
Lecture 2 - Testing of Low Stress mechanical Properties of Textile Fabrics (Continued...)  
Lecture 3 - Testing of Low Stress mechanical Properties of Textile Fabrics (Continued...)  
Lecture 4 - Testing of Transmission Characteristics of Textile Fabrics  
Lecture 5 - Testing of Transmission Characteristics of Textile Fabrics (Continued...)  
Lecture 6 - Testing of Transmission Characteristics of Textile Fabrics (Continued...)  
Lecture 7 - Testing of Transmission Characteristics of Textile Fabrics (Continued...)  
Lecture 8 - Testing of Transmission Characteristics of Textile Fabrics (Continued...)  
Lecture 9 - Testing of Transmission Characteristics of Textile Fabrics (Continued...)  
Lecture 10 - Testing of Fibre Reinforced Composite Materials  
Lecture 11 - Testing of Fibre Reinforced Composite Materials (Continued...)  
Lecture 12 - Testing of Fibre Reinforced Composite Materials (Continued...)  
Lecture 13 - Testing of Fibre Reinforced Composite Materials (Continued...)  
Lecture 14 - Testing of Fibre Reinforced Composite Materials (Continued...)  
Lecture 15 - Testing of Fibre Fabrics  
Lecture 16 - Testing of Fibre Fabrics (Continued...)  
Lecture 17 - Testing of Fibre Fabrics (Continued...)  
Lecture 18 - Testing of Geotextiles  
Lecture 19 - Testing of Geotextiles (Continued...)  
Lecture 20 - Testing of Geotextiles (Continued...)  
Lecture 21 - Testing of Ballistics Protective Clothing  
Lecture 22 - Testing of UV Radiation Protective Textiles  
Lecture 23 - Testing of Compression Bandages  
Lecture 24 - Testing of Electromagnetic Shielding Textiles

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

NPTEL Video Course - Textile Engineering - NOC:Theory of Yarn Structure

Subject Co-ordinator - Dr. Dipayan Das

Co-ordinating Institute - IIT - Delhi

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

- Lecture 1 - The Building Block of Yarns
- Lecture 2 - The Building Block of Yarns (Continued...)
- Lecture 3 - Basic Characteristics of Yarns
- Lecture 4 - Basic Characteristics of Yarns (Continued...)
- Lecture 5 - Basic Characteristics of Yarns (Continued...)
- Lecture 6 - Relations Among Yarn Count, Twist, and Diameter
- Lecture 7 - Relations Among Yarn Count, Twist, and Diameter (Continued...)
- Lecture 8 - Helical Model of Fibers in Yarns
- Lecture 9 - Helical Model of Fibers in Yarns (Continued...)
- Lecture 10 - Helical Model of Fibers in Yarns (Continued...)
- Lecture 11 - Helical Model of Fibers in Yarns (Continued...)
- Lecture 12 - Mass Irregularity of Yarns
- Lecture 13 - Mass Irregularity of Yarns (Continued...)
- Lecture 14 - Mass Irregularity of Yarns (Continued...)
- Lecture 15 - Mass Irregularity of Yarns (Continued...)
- Lecture 16 - Radial Migration of Fibres in Yarns
- Lecture 17 - Radial Migration of Fibres in Yarns (Continued...)
- Lecture 18 - Radial Migration of Fibres in Yarns (Continued...)
- Lecture 19 - Yarn Shrinkage due to Washing
- Lecture 20 - Tensile Mechanics of Yarns
- Lecture 21 - Tensile Mechanics of Yarns (Continued...)
- Lecture 22 - Tensile Mechanics of Yarns (Continued...)
- Lecture 23 - Tensile Mechanics of Yarns (Continued...)
- Lecture 24 - Tensile Mechanics of Yarns (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Advanced Textile Printing Technology

Subject Co-ordinator - Prof. Kushal Sen

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Conventional Printing  
Lecture 2 - Colourants  
Lecture 3 - Dyes and pigments  
Lecture 4 - Thickeners  
Lecture 5 - Measurement of viscosity  
Lecture 6 - Discharge and resist printing  
Lecture 7 - Transfer Printing  
Lecture 8 - Sublimation Transfer Printing  
Lecture 9 - Sublimation Transfer Printing  
Lecture 10 - Free path length and mechanism of transfer  
Lecture 11 - Transfer Printing Machines and Other Transfer Methods  
Lecture 12 - Introduction to Digital Textile Printing  
Lecture 13 - Revision and Doubt Clarification Session - 1  
Lecture 14 - Digital Textile Printing  
Lecture 15 - Inkjet Technologies  
Lecture 16 - Revision and Doubt Clarification Session - 2  
Lecture 17 - Inkjet Technologies  
Lecture 18 - Inkjet Printing  
Lecture 19 - Printing inks  
Lecture 20 - Water-based inks  
Lecture 21 - Water-based inks (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Textured Yarn Technology

Subject Co-ordinator - Prof. Kushal Sen

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Introduction to texturing  
Lecture 2 - General principles involved in the manufacture of textured yarns  
Lecture 3 - General principles involved in the manufacture of textured yarns (Continued...)  
Lecture 4 - Bulked yarns  
Lecture 5 - Mechanisms of setting and texturing  
Lecture 6 - Thermo-mechanical texturing  
Lecture 7 - Characterization and optimization  
Lecture 8 - Influence of material and process parameters  
Lecture 9 - Influence of process parameters  
Lecture 10 - Influence of process parameters (Continued...)  
Lecture 11 - Revision and clarification of doubts - Session 1  
Lecture 12 - Influence of process parameters (Continued...)  
Lecture 13 - Draw Texturing  
Lecture 14 - Simultaneous draw texturing with POY  
Lecture 15 - Draw Texturing (Continued...)  
Lecture 16 - Draw Texturing Machines and Process Parameters  
Lecture 17 - Draw Texturing  
Lecture 18 - Draw Texturing  
Lecture 19 - Friction Draw Texturing  
Lecture 20 - Friction Draw Texturing (Continued...)  
Lecture 21 - Air-Jet Texturing  
Lecture 22 - Air-Jet Texturing (Continued...)  
Lecture 23 - Air-Jet Texturing (Continued...)  
Lecture 24 - Air-Jet Texturing  
Lecture 25 - Air-Jet Texturing  
Lecture 26 - Air-Texturing Jets  
Lecture 27 - Interlacement  
Lecture 28 - Bulked continuous filament yarns  
Lecture 29 - Hi-bulk yarns

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- Lecture 30 - Revision and Clarification of Doubts Session 2
- Lecture 31 - Hi-bulk yarns (Continued...)
- Lecture 32 - Texturing of spun yarns
- Lecture 33 - Texturing of spun yarns (Continued...)
- Lecture 34 - Solvent texturing

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

NPTEL Video Course - Textile Engineering - NOC:Textile Finishing

Subject Co-ordinator - Prof. Kushal Sen

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Introduction to Finishing  
Lecture 2 - Wrinkle Resistant Finishing  
Lecture 3 - Wrinkle Resistant Finishing (Continued...)  
Lecture 4 - Wrinkle Resistant Finishing  
Lecture 5 - Catalysis and Catalysts  
Lecture 6 - Other Crosslinking agents  
Lecture 7 - Non-nitrogenous Agents  
Lecture 8 - Control of Formaldehyde Release  
Lecture 9 - Stiff and Soft Finishing  
Lecture 10 - Soft Finishing (Continued...)  
Lecture 11 - Soft Finishing (Continued...)  
Lecture 12 - Emulsion Softeners  
Lecture 13 - Water Proofing and Water Repellency  
Lecture 14 - Water Repellency (Continued...)  
Lecture 15 - Water Repellency (Continued...)  
Lecture 16 - Waterproof Breathable Textiles  
Lecture 17 - Soil Repellency and Soil Release  
Lecture 18 - Soil Release Finishing  
Lecture 19 - Fire Retardant Finishing  
Lecture 20 - Chemistry of Flame Retardants  
Lecture 21 - More Flame retardants and evaluation of fire retardancy  
Lecture 22 - Antimicrobial Finishing  
Lecture 23 - Finishing of Wool  
Lecture 24 - Shrink Resistant Wool  
Lecture 25 - Wool Setting  
Lecture 26 - Mothproofing of Wool  
Lecture 27 - Biopolishing  
Lecture 28 - Finishing of synthetics  
Lecture 29 - Finishing of synthetics

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

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- Lecture 30 - Low Liquor Application
- Lecture 31 - Waste heat recovery
- Lecture 32 - Principles of some Finishing machines

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

NPTEL Video Course - Textile Engineering - NOC:Principles of Combing, Roving preparation and Ring spinning

Subject Co-ordinator - Prof. Ravi Chattopadhyay

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Pre-combing operation - Part 1  
Lecture 2 - Pre-combing operation - Part 2  
Lecture 3 - Introduction to Comber - Part 1  
Lecture 4 - Introduction to Comber - Part 2  
Lecture 5 - Sequence of Operation  
Lecture 6 - Combing Mechanism  
Lecture 7 - Timing Diagram  
Lecture 8 - Sliver Formation  
Lecture 9 - Theoretical Aspects in Combing - Part 1  
Lecture 10 - Theoretical Aspects in Combing - Part 2  
Lecture 11 - Parameters Influencing Combing Performance  
Lecture 12 - Analysis of Drive  
Lecture 13 - Calculation of Process Performance Parameters  
Lecture 14 - Introduction, Working Principle and Creel  
Lecture 15 - DxDrafting Unit - Part 1  
Lecture 16 - DxDrafting Unit - Part 2  
Lecture 17 - Flyer Twisting  
Lecture 18 - Package Formation  
Lecture 19 - Bobbin Speed Regulation  
Lecture 20 - Building Motion and Drive Analysis  
Lecture 21 - Calculation for Change Gears and Production  
Lecture 22 - Introduction and Working Principle  
Lecture 23 - Creel and Drafting Unit  
Lecture 24 - Twisting Process and Twisting Elements  
Lecture 25 - Bobbin Building  
Lecture 26 - Spinning Geometry  
Lecture 27 - Analysis of Forces on Traveller  
Lecture 28 - Analysis of Forces on Ballon  
Lecture 29 - Analysis of Drive, Production Calculation

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Lecture 30 - End Breaks



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

NPTEL Video Course - Textile Engineering - NOC:Science and Technology of Weft and Warp Knitting

Subject Co-ordinator - Prof. Bipin Kumar

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Introduction to Knitting  
Lecture 2 - Knitting Glossary  
Lecture 3 - Loop Formation in Weft Knitting  
Lecture 4 - Lab Demo 1  
Lecture 5 - Automation in Loop Formation  
Lecture 6 - Flat Bed Machine Needle/Cam Interaction  
Lecture 7 - Circular Knitting  
Lecture 8 - Single Bed Weft Knitting-Flat and Circular M/C  
Lecture 9 - Lab Demo 2  
Lecture 10 - Lab Demo 3  
Lecture 11 - Single Bed Weft Knitting Fabric Curling  
Lecture 12 - Weft Knitting Double Flat Beds  
Lecture 13 - Weft Knitting Double Circular Beds  
Lecture 14 - Weft Knitting V-Bed Machine  
Lecture 15 - Analysis of a Double Jersey Fabric  
Lecture 16 - Single and Double Jersey Construction  
Lecture 17 - Weft Knit Stitches - Loop, Tuck and Float  
Lecture 18 - Lab Demo 6 (Part 1) Knitting Notations  
Lecture 19 - Lab Demo 6 (Part 2) Knitting Notations  
Lecture 20 - Fabric Analysis - Influence of Loop Length  
Lecture 21 - Fabric Design - Float and Tuck Formation  
Lecture 22 - Fabric Analysis - Influence of Float and Tuck Stitches  
Lecture 23 - Fabric Analysis - Shrinkage (Relaxation)  
Lecture 24 - Fabric Analysis - Extensibility and Recovery  
Lecture 25 - Knitting Calculation - Yarn Selection  
Lecture 26 - Knitting Calculation - Production (Circular)  
Lecture 27 - Knitting Calculation - Production (Flat)  
Lecture 28 - Knitting Calculation - Fabric Calculations  
Lecture 29 - Knitting Calculation - Geometrical Modeling

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- Lecture 30 - Knitting Calculation - Fabric Spirality in Single Jersey (Tubular)
- Lecture 31 - Advancement in Knitting Technology
- Lecture 32 - Knitting Designs Possibilities
- Lecture 33 - Knitting Designs Possibilities - 1
- Lecture 34 - Design Software
- Lecture 35 - Weft Knitting- Revision
- Lecture 36 - Introduction to Warp Knitting
- Lecture 37 - Warp Knitting Technology- Loop Formation
- Lecture 38 - Swinging and Shogging Motions (Overlap and Underlap)
- Lecture 39 - Warp Knit - Structural Identification
- Lecture 40 - Warp Knit Fabric Notation - Lapping Diagram and Lapping Plan
- Lecture 41 - Warp Knit Structure - Design Principles
- Lecture 42 - Single Bar Warp Knit Constructions
- Lecture 43 - Double Bar Warp Knit Constructions
- Lecture 44 - Lapping Plan Execution - Pattern Disc and Pattern Drum
- Lecture 45 - Chain Links Arrangement - Single and Double Bar Constructions
- Lecture 46 - Warp Knits
- Lecture 47 - Warp Knits
- Lecture 48 - Weft and Warp Knitting - Summary
- Lecture 49 - Technical Applications of Knitting
- Lecture 50 - Technical Applications of Knitting (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Technical Textiles

Subject Co-ordinator - Dr. Apurba Das

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - Introduction to Technical Textiles  
Lecture 2 - Introduction to Technical Textiles (Continued...)  
Lecture 3 - Textile Reinforced Composites  
Lecture 4 - Textile Reinforced Composites (Continued...)  
Lecture 5 - Textile Reinforced Composites (Continued...)  
Lecture 6 - Textile Reinforced Composites (Continued...)  
Lecture 7 - Textile Reinforced Composites (Continued...)  
Lecture 8 - Textile Reinforced Composites (Continued...)  
Lecture 9 - Textile Reinforced Composites (Continued...)  
Lecture 10 - Textile Reinforced Composites (Continued...)  
Lecture 11 - Textile Reinforced Composites (Continued...)  
Lecture 12 - Textile Reinforced Composites (Continued...)  
Lecture 13 - Filter Fabrics  
Lecture 14 - Filter Fabrics (Continued...)  
Lecture 15 - Filter Fabrics (Continued...)  
Lecture 16 - Geotextiles  
Lecture 17 - Geotextiles (Continued...)  
Lecture 18 - Geotextiles (Continued...)  
Lecture 19 - Geotextiles (Continued...)  
Lecture 20 - Extreme Cold Protective Clothing  
Lecture 21 - Extreme Cold Protective Clothing (Continued...)  
Lecture 22 - Extreme Heat Protective Clothing  
Lecture 23 - Extreme Heat Protective Clothing (Continued...)  
Lecture 24 - Sports Textiles  
Lecture 25 - Sports Textiles (Continued...)  
Lecture 26 - Sports Textiles (Continued...)  
Lecture 27 - Ultraviolet Protective Textiles  
Lecture 28 - Ultraviolet Protective Textiles (Continued...)  
Lecture 29 - Ultraviolet Protective Textiles (Continued...)

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- Lecture 30 - Ballistic Protective Textiles
- Lecture 31 - Compression Bandage
- Lecture 32 - Compression Bandage (Continued...)
- Lecture 33 - Compression Bandage (Continued...)
- Lecture 34 - Automotive Textiles
- Lecture 35 - Textiles in Hygiene
- Lecture 36 - Additional Lecture on Geotextiles
- Lecture 37 - Additional Lecture on Geotextiles (Continued...)
- Lecture 38 - Additional Lecture on Composites
- Lecture 39 - Additional Lecture on Composites (Continued...)
- Lecture 40 - Additional Lecture on Composites (Continued...)

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

NPTEL Video Course - Textile Engineering - NOC:Textile Product Design and Development

Subject Co-ordinator - Prof. R Chattopadhyay

Co-ordinating Institute - IIT - Delhi

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

Lecture 1  
Lecture 2  
Lecture 3  
Lecture 4  
Lecture 5  
Lecture 6  
Lecture 7  
Lecture 8  
Lecture 9  
Lecture 10  
Lecture 11  
Lecture 12  
Lecture 13  
Lecture 14  
Lecture 15  
Lecture 16  
Lecture 17  
Lecture 18  
Lecture 19  
Lecture 20  
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Lecture 25  
Lecture 26  
Lecture 27  
Lecture 28  
Lecture 29

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

NPTEL Video Course - Textile Engineering - NOC:New Spinning Technologies

Subject Co-ordinator - Prof. R Chattopadhyay

Co-ordinating Institute - IIT - Delhi

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

Lecture 1 - New Spinning Technology  
Lecture 2 - Sliver Feed Arrangement  
Lecture 3 - Principle of Yarn Formation  
Lecture 4 - Twist Equation  
Lecture 5 - Rotor: Construction, Geometry and Drive  
Lecture 6 - Package Formation  
Lecture 7 - Significance of Fibre and Process Parameters  
Lecture 8 - Rotor Selection  
Lecture 9 - Spinning Tension  
Lecture 10 - Production and Energy Consumption Calculation  
Lecture 11 - Rotor Yarn: Structure, Properties and Application  
Lecture 12 - Air Jet Spinning: Introduction  
Lecture 13 - High Draft System  
Lecture 14 - Yarn Formation Mechanism  
Lecture 15 - Structure and Characteristics of Air-Jet Yarn  
Lecture 16 - Material and Process Parameters  
Lecture 17 - Friction Spinning: Dref-2  
Lecture 18 - Dref-3 Friction Spinning  
Lecture 19 - Yarn Formation, Structure and Applications  
Lecture 20 - Vortex Spinning  
Lecture 21 - Influence of Machine and Process Parameters  
Lecture 22 - Wrap Spinning  
Lecture 23 - Wrap Spinning (Continued...)  
Lecture 24 - SIRO Spinning  
Lecture 25 - Compact Spinning  
Lecture 26 - Spinning by Adhesive and Felting Process  
Lecture 27 - Self Twist Spinning  
Lecture 28 - Comparative Analysis Between Spinning Technologies  
Lecture 29 - Productivity Enhancement: Limitations

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

NPTEL Video Course - Textile Engineering - Natural Dyes

Subject Co-ordinator - Dr. Padma S Vankar

Co-ordinating Institute - IIT - Kanpur

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

Lecture 1 - Natural Dyes  
Lecture 2 - Natural Dyes  
Lecture 3 - Natural Dyes  
Lecture 4 - Natural Dyes  
Lecture 5 - Natural Dyes  
Lecture 6 - Natural Dyes  
Lecture 7 - Natural Dyes  
Lecture 8 - Natural Dyes  
Lecture 9 - Natural Dyes  
Lecture 10 - Natural Dyes  
Lecture 11 - Natural Dyes  
Lecture 12 - Natural Dyes  
Lecture 13 - Natural Dyes  
Lecture 14 - Natural Dyes  
Lecture 15 - Natural Dyes  
Lecture 16 - Natural Dyes  
Lecture 17 - Natural Dyes  
Lecture 18 - Natural Dyes  
Lecture 19 - Natural Dyes  
Lecture 20 - Natural Dyes  
Lecture 21 - Natural Dyes  
Lecture 22 - Natural Dyes  
Lecture 23 - Natural Dyes  
Lecture 24 - Natural Dyes  
Lecture 25 - Natural Dyes  
Lecture 26 - Natural Dyes  
Lecture 27 - Natural Dyes  
Lecture 28 - Natural Dyes  
Lecture 29 - Natural Dyes

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Lecture 30 - Natural Dyes  
Lecture 31 - Natural Dyes  
Lecture 32 - Natural Dyes  
Lecture 33 - Natural Dyes  
Lecture 34 - Natural Dyes  
Lecture 35 - Natural Dyes  
Lecture 36 - Natural Dyes  
Lecture 37 - Natural Dyes  
Lecture 38 - Natural Dyes  
Lecture 39 - Natural Dyes  
Lecture 40 - Natural Dyes