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

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NPTEL Video Course - Civil Engineering - Pre-stressed Concrete Structures
Subject Co-ordinator - Prof. Devdas Menon, Dr. Amlan Kumar Sengupta
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Prestressing System
Lecture 2 - Types of Prestressing
Lecture 3 - Prestressing System and Devices (Pre-Tensioning)
Lecture 4 - Prestressing System and Devices (Post-Tensioning)
Lecture 5 - Concrete - Part-1
Lecture 6 - Concrete, Grout - Part-2
Lecture 7 - Prestressing Steel
Lecture 8 - Losses in Prestress
Lecture 9 - Friction & Anchorage Slip
Lecture 10 - Creep, Shrinkage & Relaxation Losses
Lecture 11 - Analysis of Members
Lecture 12 - Analysis of Members Under Flexure
Lecture 13 - Cracking Moment, Kern Point and Pressure Line
Lecture 14 - Analysis of Rectangular sections
Lecture 15 - Analysis of Flanged Sections
Lecture 16 - Analysis of Partially Prestressed Section
Lecture 17 - Design of Members
Lecture 18 - Design of Members for Flexure (Typel Members)
Lecture 19 - Design of Members for Flexure (Type1 & Type3)
Lecture 20 - Choice of Sections and Determination of Limiting
Lecture 21 - Magnel's Graphical Method
Lecture 22 - Detailing Requirements
Lecture 23 - Analysis and Design for Shear and Torsion
Lecture 24 - Design for Shear - Part-1
Lecture 25 - Design for Shear - Part-2
Lecture 26 - Analysis of Torsion
Lecture 27 - Analysis of Torsion - Part-1
Lecture 28 - Analysis of Torsion - Part-2
Lecture 29 - Calculations of Deflection and Crack Width
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Lecture 30 - Transmission of Prestress
Lecture 31 - Post-tensioned Members
Lecture 32 - Cantilever Beams
Lecture 33 - Continuous Beams - Part-1
Lecture 34 - Continuous Beams - Part-2
Lecture 35 - Composite Sections
Lecture 36 - One-Way Slabs
Lecture 37 - Two-Way Slabs - Part-1
Lecture 38 - Two-Way Slabs - Part-2
Lecture 39 - compression Members
Lecture 40 - Circular Prestressing, Conclusion
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