

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

NPTEL Video Course - Architecture - NOC:Structural System in Architecture

Subject Co-ordinator - Prof. Sankha Pratim Bhattacharya

Co-ordinating Institute - IIT - Kharagpur

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

Lecture 1 - Introduction to Structural System  
Lecture 2 - Force System  
Lecture 3 - Moment, Couple and Static Equilibrium  
Lecture 4 - Supports and Reactions  
Lecture 5 - Structural Loading and Support Reactions  
Lecture 6 - Theory of Elasticity - 1  
Lecture 7 - Theory of Elasticity - 2  
Lecture 8 - Shear Force Diagram  
Lecture 9 - Bending Moment Diagram  
Lecture 10 - SFD and BMD  
Lecture 11 - Bending Stress in Beam - I  
Lecture 12 - Bending Stress in Beam - II  
Lecture 13 - Bending Stress in Beam - III  
Lecture 14 - Shear Stress in Beam  
Lecture 15 - Theory of Column  
Lecture 16 - Deflection of Beams  
Lecture 17 - Indeterminate Beams  
Lecture 18 - Analysis of Fixed Beam, BMD and Deflected Shape, Portal Frame  
Lecture 19 - Structural Grid and Framing  
Lecture 20 - Structural Design  
Lecture 21 - Introduction to Truss  
Lecture 22 - Analysis of Truss - 1  
Lecture 23 - Analysis of Truss - 2  
Lecture 24 - Application of Truss in Architecture  
Lecture 25 - Space Frame Structures  
Lecture 26 - Introduction to Arch  
Lecture 27 - Structural Principle and Application of Arch  
Lecture 28 - Shell Structures  
Lecture 29 - Application of Arch and Shell in Architecture

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

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- Lecture 30 - Structural Concept and Application of Dome in Architecture
- Lecture 31 - Cable Supported Structures
- Lecture 32 - Membrane Structures
- Lecture 33 - Application of Tensile Structures in Architecture
- Lecture 34 - Flat Plate and Flate Slab Structures
- Lecture 35 - Waffle Slab and Folded Plate Structures
- Lecture 36 - Temporary Structures
- Lecture 37 - Building Foundation
- Lecture 38 - Structural System for High-rise Buildings - I
- Lecture 39 - Structural System for High-rise Buildings - II
- Lecture 40 - Structural Detailing