

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

NPTEL Video Course - Ocean Engineering - NOC:Advanced Design of Steel Structures

Subject Co-ordinator - Prof. Srinivasan Chandrasekaran

Co-ordinating Institute - IIT - Madras

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

Lecture 1 - Form-dominant design - I  
Lecture 2 - Form-dominant design - II  
Lecture 3 - Failure theories - 1  
Lecture 4 - Failure theories - 2  
Lecture 5 - Failure theories - 3  
Lecture 6 - Material properties - 1  
Lecture 7 - Material properties - 2  
Lecture 8 - Material properties - 3  
Lecture 9 - FGM  
Lecture 10 - FGM for marine application - 1  
Lecture 11 - FGM for marine application - 2  
Lecture 12 - Design methods - 1  
Lecture 13 - Design methods - 2  
Lecture 14 - Load combinations  
Lecture 15 - Dynamic material strength  
Lecture 16 - Material properties variations  
Lecture 17 - Plastic design - 1  
Lecture 18 - Plastic design - 2  
Lecture 19 - Plastic design - 3  
Lecture 20 - Shape factor examples  
Lecture 21 - Plastic analysis - 1  
Lecture 22 - Plastic analysis - 2  
Lecture 23 - Plastic design - 1  
Lecture 24 - Plastic design - 2  
Lecture 25 - Plastic design - 2  
Lecture 26 - Structural Stability  
Lecture 27 - Euler's load  
Lecture 28 - Rotation coefficients for stability functions  
Lecture 29 - Stability functions - 1

---

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 - Stability functions - 2
- Lecture 31 - Stability functions - 3
- Lecture 32 - Buckling and stability
- Lecture 33 - Critical buckling load- Numerical examples
- Lecture 34 - Stability problems- numerical examples
- Lecture 35 - Stability of shells
- Lecture 36 - Unsymmetric bending - 1
- Lecture 37 - Unsymmetric bending - example problems
- Lecture 38 - Shear center - 1
- Lecture 39 - Shear center - 2
- Lecture 40 - Shear center - 3
- Lecture 41 - Curved section
- Lecture 42 - Shear center for curved sections
- Lecture 43 - Shear center for unsymmetric section
- Lecture 44 - Curved beam - 1
- Lecture 45 - Curved beam with large curvature - 1
- Lecture 46 - Curved beam with large curvature - 2
- Lecture 47 - Modified area factor for curved section
- Lecture 48 - M factor for curved beams
- Lecture 49 - Crane hook
- Lecture 50 - Thin-walled section
- Lecture 51 - Open thin-walled section
- Lecture 52 - Lateral torsional buckling
- Lecture 53 - Design for LTB-1
- Lecture 54 - Design check for LTB-2
- Lecture 55 - LTB example problem
- Lecture 56 - Ice loads
- Lecture 57 - Ice spectrum
- Lecture 58 - Blast resistant design - 1
- Lecture 59 - Blast resistant design - 2
- Lecture 60 - Blast-resistant design - 3
- Lecture 61 - Blast-resistant design - 4
- Lecture 62 - Fire-resistant design - 1
- Lecture 63 - Fire-resistant design - 2
- Lecture 64 - Analysis under impact loads