

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

NPTEL Video Course - Civil Engineering - NOC:Introduction to Engineering Seismology

Subject Co-ordinator - Dr. P. Anbazhagan

Co-ordinating Institute - IISc - Bangalore

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

- Lecture 1 - Introduction
- Lecture 2 - Earthquake hazard
- Lecture 3 - Different Earthquake Hazards
- Lecture 4 - Different Earthquake Hazards (Continued...)
- Lecture 5 - Earthquake Terminologies
- Lecture 6 - Plate Tectonics
- Lecture 7 - Faults; Seismic Sources
- Lecture 8 - Types of Earthquakes; Causes of Earthquakes
- Lecture 9 - Introduction to Wave Propagation
- Lecture 10 - Seismic Wave propagation;
- Lecture 11 - Instrumentation to record Earthquake
- Lecture 12 - Seismic Sensors
- Lecture 13 - Seismic Instrumentation in India
- Lecture 14 - Seismic Instrumentation in India (Continued...)
- Lecture 15 - Intensity scales of Earthquake
- Lecture 16 - Road Damage Intensity Scale; and Seismic Vulnerability assessment
- Lecture 17 - Quantification of Earthquake (magnitude)
- Lecture 18 - Energy released due to earthquakes
- Lecture 19 - Interpretation of Earthquake records; Baseline correction
- Lecture 20 - Interpretation of Earthquake records (Continued...); Time Domain Parameters
- Lecture 21 - Time Domain Parameters (Continued...)
- Lecture 22 - Duration parameters; Duration Prediction Equations
- Lecture 23 - Frequency Domain Characteristics; Response Spectrum
- Lecture 24 - Fourier Spectrum
- Lecture 25 - Seismic Source Parameters;
- Lecture 26 - Time history; response Spectra (design); Stochastic models
- Lecture 27 - Ground Motion Simulation models
- Lecture 28 - Prediction Relationships
- Lecture 29 - Recapitulation - 1

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

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- Lecture 30 - Recapitulation - 2
- Lecture 31 - Recapitulation - 3
- Lecture 32 - Recapitulation - 4
- Lecture 33 - Recapitulation - 5
- Lecture 34 - Recapitulation - 6
- Lecture 35 - Recapitulation - 7
- Lecture 36 - Recapitulation - 8
- Lecture 37 - Earthquake Prediction
- Lecture 38 - Earthquake prediction (Continued...)
- Lecture 39 - Seismic Gap
- Lecture 40 - Earthquake Prediction (some Precautions)
- Lecture 41 - Seismic zonation and microzonation
- Lecture 42 - Seismic zonation and microzonation (Continued...)
- Lecture 43 - Seismic microzonation of various Indian cities
- Lecture 44 - Seismic microzonation of various Indian cities (Continued...)
- Lecture 45 - Global Equation model
- Lecture 46 - Global Earthquake risk map
- Lecture 47 - Seismic Microzonation of Bangalore
- Lecture 48 - Seismic Microzonation of Bangalore
- Lecture 49 - Seismic zonation of India
- Lecture 50 - IS 1893 version 2002 and 2016 explained
- Lecture 51 - Zonation Map of India
- Lecture 52 - Seismicity of India
- Lecture 53 - Seismicity of India
- Lecture 54 - SeismoTectonics of India - 1
- Lecture 55 - SeismoTectonics of India - 2
- Lecture 56 - SeismoTectonics of India - 3
- Lecture 57 - Seismic Hazard Analysis - Introduction
- Lecture 58 - SHA (Continued...) - Seismic Study area and Seismotectonic Map
- Lecture 59 - SHA (Continued...) - Seismic Data Collection
- Lecture 60 - SHA (Continued...) - Maximum Magnitude Estimation
- Lecture 61 - SHA - Source and Source-Site Distance
- Lecture 62 - SHA - Prediction Equation for India
- Lecture 63 - SHA - Selection of GMPE
- Lecture 64 - SHA - Estimation of Hazard