

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

NPTEL Video Course - Ocean Engineering - NOC:Risk and Reliability of offshore structures

Subject Co-ordinator - Dr. Srinivasan Chandrasekaran

Co-ordinating Institute - IIT - Madras

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

Lecture 1 - Introduction  
Lecture 2 - Uncertainties  
Lecture 3 - Uncertainties - II  
Lecture 4 - Probability and Plausibility  
Lecture 5 - Rules of Probability  
Lecture 6 - Plausible Reasoning - I  
Lecture 7 - Plausible Reasoning - Quantitative rules  
Lecture 8 - Quantitative Rules  
Lecture 9 - Probability Distribution  
Lecture 10 - Random Variables  
Lecture 11 - Random Variables - II  
Lecture 12 - Sampling Estimates  
Lecture 13 - Modelling of Environmental Loads  
Lecture 14 - Exercises - I  
Lecture 15 - Introduction  
Lecture 16 - Components of Reliability analysis  
Lecture 17 - Levels of Reliability  
Lecture 18 - Error Estimation  
Lecture 19 - Reliability methods - I  
Lecture 20 - Reliability methods - II  
Lecture 21 - Reliability methods - III  
Lecture 22 - Reliability methods - IV  
Lecture 23 - System Reliability - I  
Lecture 24 - System Reliability - II  
Lecture 25 - System Reliability - III  
Lecture 26 - Failure domains  
Lecture 27 - Failure domains II  
Lecture 28 - Application Problem - I  
Lecture 29 - Application Problem - I (Continued...)

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- Lecture 30 - Application Problem II
- Lecture 31 - Application Problem II (Continued...)
- Lecture 32 - Application Problem II (Continued...)
- Lecture 33 - Risk and Reliability
- Lecture 34 - Reliability analysis of structural systems
- Lecture 35 - Codes on structural reliability
- Lecture 36 - Variables in Reliability analysis
- Lecture 37 - Mechanical models in Reliability analysis
- Lecture 38 - Mechanical modes in Reliability analysis - II
- Lecture 39 - Stochastic Process - I
- Lecture 40 - Stochastic Process - II
- Lecture 41 - Fatigue Reliability
- Lecture 42 - Design SN curve
- Lecture 43 - Simplified Fatigue Assessment
- Lecture 44 - Short term fatigue damage
- Lecture 45 - Behaviour of tubular joints
- Lecture 46 - Tubular Joints - Experimental studies on T-Joints
- Lecture 47 - Risk Assessment
- Lecture 48 - Logical Risk analysis
- Lecture 49 - Risk analysis of Mechanical Systems
- Lecture 50 - FMEA II
- Lecture 51 - Design FMEA for Offshore Triceratops
- Lecture 52 - Fault Tree Analysis
- Lecture 53 - Event Tree Analysis
- Lecture 54 - Consequence Analysis
- Lecture 55 - Risk Acceptability
- Lecture 56 - Risk and Hazard assessment
- Lecture 57 - Risk Picture
- Lecture 58 - Risk Management