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

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NPTEL Video Course - Ocean Engineering - Advanced Marine Structures
Subject Co-ordinator - Dr. Srinivasan Chandrasekaran
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction and Scope
Lecture 2 - Fixed type structures
Lecture 3 - Compliant type structures
Lecture 4 - New generation marine structures
Lecture 5 - Environmental loads - I
Lecture 6 - Environmental loads - II
Lecture 7 - Environmental loads - III
Lecture 8 - Environmental loads - IV
Lecture 9 - Other loads - I
Lecture 10 - Other loads - II
Lecture 11 - Ultimate load design principles - I
Lecture 12 - Ultimate Limit State - I
Lecture 13 - Ultimate Limit State - II
Lecture 14 - Ultimate Limit State - III
Lecture 15 - Partial safety factor
Lecture 16 - Plastic design - I
Lecture 17 - Plastic design - II
Lecture 18 - Plastic design - III
Lecture 19 - Plastic design - IV - Example problems - I
Lecture 20 - Plastic analysis - Example problems - II
Lecture 21 - Plastic analysis - Example problems - III
Lecture 22 - Theories of failure - I
Lecture 23 - Theories of failure - II
Lecture 24 - Theories of failure - III
Lecture 25 - Theories of failure - IV
Lecture 26 - Shear centre - I
Lecture 27 - Shear centre - II - Examples
Lecture 28 - Plastic capacity of sections under combined loads - I
Lecture 29 - Plastic capacity of sections under combined loads - II
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Lecture 30 - Impact analysis- fundamentals - I
Lecture 31 - Impact analysis- fundamentals - II
Lecture 32 - Ultimate capacity of tubular joints
Lecture 33 - Fluid structure interaction - I
Lecture 34 - Fluid structure interaction - II
Lecture 35 - Fluid induced vibration - I
Lecture 36 - Fluid induced vibration - II
Lecture 37 - Flow through perforated members - I
Lecture 38 - Flow through perforated members - numerical studies - II
Lecture 39 - Flow through perforated members - III - Analytical studies
Lecture 40 - Introduction to Reliability - I
Lecture 41 - Introduction to Reliability - II
Lecture 42 - Introduction to Reliability - III
Lecture 43 - Reliability framework in Marine structures
Lecture 44 - Ultimate Limit state and Reliability approach - I
Lecture 45 - Ultimate limit state and Reliability approach - II
Lecture 46 - Levels of Reliability
Lecture 47 - FOSM and AFOSM methods of Reliability
Lecture 48 - Fracture and Fatique
Lecture 49 - Fatique failure
Lecture 50 - Fatigue loading and fatigue analysis
Lecture 51 - Deterministic fatique analysis
Lecture 52 - Spectral fatique analysis
Lecture 53 - Stress concentration and fatigue analysis
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