NPTEL Video Course - Civil Engineering - NOC:Rock Engineering

Subject Co-ordinator - Prof. Priti Maheshwari

Co-ordinating Institute - IIT - Roorkee

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

Lecture 30 - Concept of Instantaneous c and Ï : Balmer Approach
Lecture 31 - Empirical Failure Criteria: Basics of Regression Analysis
Lecture 32 - Hoek and Brown Criterion (1980)
Lecture 33 - Parameters of Failure Criteria
Lecture 34 - Failure Criteria for Rock Mass
Lecture 35 - Tunneling: Underground Excavations
Lecture 36 - Tunneling: Ground Conditions
Lecture 37 - Elastic Stress Distribution Around Circular Tunnels - 1
Lecture 38 - Elastic Stress Distribution Around Circular Tunnels - 2
Lecture 39 - Elastic Analysis of Circular Tunnels - Displacements
Lecture 40 - Thick Wall Cylinder in Biaxial Stress Field
Lecture 41 - Elasto-Plastic Stress Distribution Around Circular Tunnel
Lecture 42 - Underground Excavation Failure Mechanisms
Lecture 43 - Structurally Controlled Failure: Roof Failure
Lecture 44 - Structurally Controlled Failure: Sidewall Failures - 1
Lecture 45 - Structurally Controlled Failure: Sidewall Failures - 2
Lecture 46 - Rock Mass Support Interaction Analysis - 1
Lecture 47 - Rock Mass Support Interaction Analysis - 2
Lecture 48 - Rock Slope Stability
Lecture 49 - Rock Slope Stability - Plane Failure
Lecture 50 - Rock Slope Stability - Wedge Failure
Lecture 51 - Rock Slope Stability - Circular Failure
Lecture 52 - Rock Slope Stability - Toppling Failure - 1
Lecture 53 - Rock Slope Stability - Toppling Failure - 2
Lecture 54 - Rock Slope Stability - Toppling Failure - 3
Lecture 55 - Rock Slope Stabilization
Lecture 56 - Foundations on Weak Rocks
Lecture 57 - Ultimate Bearing Capacity Using Bellâ  s Approach
Lecture 58 - Bearing Capacity from Classification Approaches and Based on UCS
Lecture 59 - Bearing Capacity Based on Plate Load test; Treatment of Foundations
Lecture 60 - Dam Foundation Problems