Record Nr. UNINA9910821386403321 Autore Chowdhury Robin Titolo Geotechnical slope analysis / / Robin Chowdhury; other contributors, Phil Flentje, Gautam Bhattacharya Boca Raton:,: CRC Press,, 2010 Pubbl/distr/stampa **ISBN** 1-135-19207-3 1-135-19210-3 1-282-50388-X 9786612503887 0-203-86420-4 Edizione [1st ed.] Descrizione fisica 1 online resource (774 p.) Altri autori (Persone) FlentiePhil BhattacharyaGautam Disciplina 624.1/51363 624.151363 Soggetti Slopes (Soil mechanics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Aims and overview: slopes, geology, and materials -- Basic geotechnical concepts -- Performance indicators and basic probability concepts -- Limit equilibrium methods I: planar failure surfaces --Limit equilibrium methods II: slip surfaces and beyond critical equilibrium -- Stress-deformation analyses and their role in slope analysis -- Natural slope analysis considering initial stresses --Plasticity and shear band analyses: a brief review -- Earthquake effects and seismic slope analysis -- Probabilistic approaches and reliability analyses -- Case study of urban slope stability -- Summing up. Freshly updated and extended version of Slope Analysis (Chowdhury, Sommario/riassunto Elsevier, 1978). This reference book gives a complete overview of the developments in slope engineering in the last 30 years. Its multidisciplinary, critical approach and the chapters devoted to seismic effects and probabilistic approaches and reliability analyses, reflect the distinctive style of the original. Subjects discussed are: the understanding of slope performance, mechanisms of instability,

requirements for modeling and analysis, and new techniques for

observation and modeling. Special attention is paid to the relati