

Βιβλία βοηθήματα για το μάθημα

1. Περιγραφή και τεχνική συμπεριφορά γεωλογικών σχηματισμών

Goodman R.E. 1993. Engineering Geology: Rock in engineering construction. John Wiley & Sons

- Shales, sandstones and associated rocks (ch. 4)
- Soluble rocks: Limestone, dolomite and evaporates (ch.5)
- Plutonic igneous rocks (ch.6)
- Volcanism and volcanic rocks (ch.7)
- Metamorphic rocks (ch.8)

2. Βράχος (αντοχή, παραμορφωσιμότητα, κριτήρια θραύσης)

Goodman R.E. 1989. Introduction to Rock Mechanics. John Wiley & Sons (2nd edition)

- Rock strength and failure criteria (ch.3)

Hudson. J. A. and Harrison J.P. 1997. Engineering Rock Mechanics. An Introduction to the Principles, Pergamon (1st Edition)

- Intact Rock (ch. 6)
- Testing Techniques (ch.11)

Attewell P.B. & Farmer I. W. 1979 Principles of Engineering Geology. John Wiley & Sons Inc. (2nd edition)

- Rock as a Material (ch. 4)

3. Ασυνέχειες

Goodman R.E. 1989. Introduction to Rock Mechanics. John Wiley & Sons (2nd edition)

- Planes of weakness in rocks (ch. 5)

Hudson. J. A. and Harrison J.P. 1997. Engineering Rock Mechanics. An Introduction to the Principles, Pergamon (1st Edition)

- Discontinuities (ch.7)

Hoek E. Practical Rock Engineering. (2000 edition)

- Shear Strength of discontinuities (ch.4)

Hoek E. & Bray J. 1981. Rock Slope Engineering, E& FN Spon

- Shear strength of rock (ch.5)

4. Βραχομάζα

Hudson. J. A. and Harrison J.P. 1997. Engineering Rock Mechanics. An Introduction to the Principles, Pergamon (1st Edition)

- Rock Masses (ch.8)
- Rock Mass Classification (ch.12)

Hoek E. 200. Practical Rock Engineering. (www.rocscience.com) (Ηλεκτρονικό βιβλίο με ελεύθερη πρόσβαση - ανάκτηση και πολύ χρήσιμο)

- Rock Mass Classification (ch.3)
- Rock Mass Properties (ch.9)

5. Φράγματα

Bell F. 1993. Engineering Geology, Blackwell Science Ltd. (2nd Edition)

- Reservoirs (ch. 9.5)
- Dams and Dam sites (ch. 9.6)

Walters R.C. S. (1971) Dam Geology. Butterworths, London (2nd Edition)

- The topographical and geological conditions for different types of dams (Part 1.3)

Attewell P.B. & Farmer I. W. 1979 Principles of Engineering Geology. John Wiley & Sons Inc. (2nd edition)

- Water Resources, Reservoirs and Dams (ch. 12)

6. Σήραγγες

Hoek E. Practical Rock Engineering. (2000 edition)

- Structurally controlled instability in tunnels (ch.5)

Bell F. 1993. Engineering Geology, Blackwell Science Ltd. (2nd Edition)

- Tunnels and Tunnelling (ch. 9.2)

Goodman R.E. 1989. Introduction to Rock Mechanics. John Wiley & Sons (2nd edition)

- Application of rock mechanics in engineering for underground openings (ch. 8)

7. Πρανή – Προβολή ασυνεχειών – δυνητικές ολισθήσεις

Goodman R.E. 1989. Introduction to Rock Mechanics. John Wiley & Sons (2nd edition)

- Application of rock mechanics to rock slope engineering (ch. 8)

Attewell P.B. & Farmer I. W. 1979 Principles of Engineering Geology. John Wiley & Sons Inc. (2nd edition)

- Rock Discontinuity Analysis (ch. 6)
- Rock Slope Stability (ch. 10)

Hoek E. & Bray J. 1981. Rock Slope Engineering, E& FN Spon

- Graphical presentation of geological data (ch.3)
- Plane failure (ch. 7)
- Wedge failure (ch. 8)
- Toppling failure (ch. 10)