

# **Geology Applied to Engineering**

By Terry R. West



### Geology Applied to Engineering By Terry R. West

West purposely developed a versatile text for bridging the gap between geology and civil engineering that can be used in engineering geology courses taught by either geologists or engineers. Mindful that students enrolled in these courses have diverse backgrounds, the author provides basic information on minerals and rocks, geological processes, and geological investigation techniques. He addresses the relationship of physical aspects of geology to engineering construction and explains how to recognize and provide for geologic factors that affect the location, design, construction, and maintenance of engineering projects.

Engineering applications throughout the text emphasize the direct association of geology and engineering, while sufficient depth in geologic subjects provides a working knowledge of applied geology. Exercises at the end of each chapter are designed for chapter review and problem solving. Some of the end-of-chapter exercises form the basis for laboratory studies on minerals, rocks, maps, geologic processes, and applied geology. Additional problem sets give students an opportunity to relate geologic detail to engineering construction. The liberal array of photos, maps, and diagrams provide extra detail to clarify new concepts.

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Appendix A: Identification of Minerals and Rocks

Appendix B: Topographic Maps

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