

The background of the book cover is a photograph of a deep rock cut. Two steep, light-colored rock walls rise from a body of water. A large steel truss bridge spans the width of the cut in the distance. The sky is clear and blue.

# Rock Mechanics

AN INTRODUCTION

Nagaratnam Sivakugan  
Sanjay Kumar Shukla  
and Braja M. Das



CRC Press  
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## Preface

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Rock mechanics is a subject that is not commonly present in most undergraduate civil engineering curriculums worldwide. It is sometimes taught as an elective subject in the final year of the bachelor's degree program or as a postgraduate subject. Nevertheless, civil and mining engineers and academicians would agree on the usefulness and the value of some exposure to rock mechanics at the undergraduate level. Ideally speaking, engineering geology and rock mechanics are the two areas that should always be included in a comprehensive civil engineering curriculum. A good understanding of engineering geology and rock mechanics enables future practitioners to get a broader picture in many field situations. They are often the weakest links for many geotechnical/civil engineering professionals.

The main objective of this book is to present the fundamentals of rock mechanics with a geological base in their simplest form to civil engineering students who have no prior knowledge of these areas. There are also geological engineering degree programs that are offered in many universities that would find the book attractive.

This book is authored by three academicians who have written several books in geotechnical engineering and related areas and have proven track records in successful teaching. We thank all those who have assisted in preparing the manuscripts and reviewing the drafts, as well as all those who provided constructive feedback. The support from Simon Bates of the Taylor & Francis Group during the last two years is gratefully acknowledged.

Nagaratnam Sivakugan, Sanjay Kumar Shukla and Braja M. Das



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