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| Autore | Walker John |
| Titolo | Surveying for Civil and Mine Engineers : Theory, Workshops, and Practicals // by John Walker, Joseph L. Awange |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018 |
| ISBN | 3-319-53129-8 |
| Edizione | [1st ed. 2018.] |
| Descrizione fisica | 1 online resource (271 pages) |
| Disciplina | 622.14 |
| Soggetti | Civil engineering Geotechnical engineering Mineral resources Remote sensing Environmental monitoring Civil Engineering Geotechnical Engineering & Applied Earth Sciences Mineral Resources Remote Sensing/Photogrammetry Monitoring/Environmental Analysis |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters and index. |
| Nota di contenuto | Fundamental Surveying -- Levelling -- Relief and vertical Sections -- Total Station: Measurements and Computations -- Traversing -- Total Station differential Levelling -- Strike and Dip to an embedded Plane -- Circular Curves -- Vertical Curves -- Global Navigation Satellite System -- Setting out of Engineering Structures -- Coordinate Transformation. |
| Sommario/riassunto | "Indeed, the most important part of engineering work—and also of other scientific work—is the determination of the method of attacking the problem, whatever it may be, whether an experimental investigation, or a theoretical calculation. ... It is by the choice of a suitable method of attack, that intricate problems are reduced to simple phenomena, and then easily solved." Charles Proteus Steinmetz. The structure of this book is to provide a sequence of theory, |

workshops and practical field sessions that mimic a simple survey project, designed for civil and mining engineers. The format of the book is based on a number of years of experience gained in presenting the course at undergraduate and post graduate levels. The course is designed to guide engineers through survey tasks that the engineering industry feels is necessary for them to have a demonstrated competency in surveying techniques, data gathering and reduction, and report presentation. The course is not designed to make engineers become surveyors. It is designed to allow an appreciation of the civil and mine engineering surveyor's job. There are many excellent text books available on the subject of engineering surveying, but they address the surveyor, not the engineer. Hopefully this book will distil many parts of the standard text book. A lot of the material presented is scattered through very disparate sources and has been gathered into this book to show what techniques lie behind a surveyor's repertoire of observational and computational skills, and provide an understanding of the decisions made in terms of the presentation of results. The course has been designed to run over about 6 weeks of a semester, providing a half unit load which complements a computer aided design (CAD) based design project. .
