

Annotation

Book 1 treats the fundamentals of Engineering Surveying – the modern: investment process, normative base, geodetic basis (digital data, plans, maps and control networks), instruments, apparatuses and systems; reference and coordinate systems and surfaces, theoretical bases of geodetic measurement processing, algorithms and software, modern numerical geospatial technologies and their application in Engineering Surveying and related information systems. **The main issues of tracing** are presented: essence, elements, methods, technologies, accuracy, norms and cases; theoretical bases and practice in the control and determination of displacements and investigation of deformations of engineering objects, including in landslides.

In fact the exposition in this part of the book refers to **the theoretical and principal essentials, including systems, methods and technologies. Their specific application is further considered in the design and application of a complex of objects in Book 2 and in the construction of the individual particular objects in Book 3.**

The presentation has an original structure. It corresponds to the current normative regulations and the possibilities afforded by the modern digital devices, instruments, systems and technologies. The book reflects to a large extent the views, long-term research, teaching experience and participation in the construction and investigation of engineering objects, including with original spatial constructive solutions of the authors.

The book can be used by lecturers, students and practitioners in the field of Engineering Surveying and all those who work on the construction and exploitation of engineering objects and their complexes such as architects, civil engineers – constructors, and specialists in the transport and water sector, etc., designers, contractors performing organization and control of construction and installation of technological equipment. Undoubtedly, it is recommended to do this, if necessary, at the same time with the other two books of the authors.

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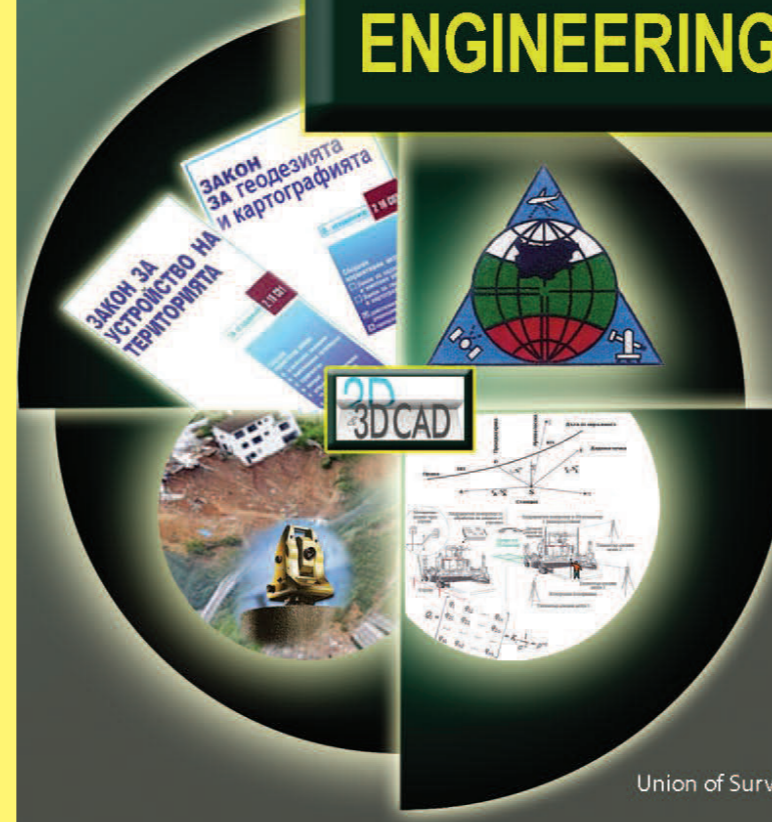
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APPLIED GEODESY
Part 1
ENGINEERING GEODESY

Book 1
**BASICS, SYSTEMS AND
TECHNOLOGIES OF
ENGINEERING SURVEYING**



Union of Surveyors and Land Managers in Bulgaria
Sofia, 2017

Editions of the book

The book “Basics, systems and technologies of engineering surveying” of authors, consisting of three parts

1. Engineering Surveying
2. Application of Geodesy in Earth sciences
3. Non-engineering and natural science aspects of application of geodesy.

The three parts together treat the comprehensive application of Surveying. The book is actually Book 2 of part 1 “Engineering Surveying” which is ready for printing in form of three books:

1. **Basics, systems and technologies of Engineering Surveying;**
2. Design and implementation of structural and master plans;
3. Construction of linear objects buildings, structures, installation of technological equipment. Plans of built complex objects.

Book 1 is in a volume of 498 pages – text, formulas, tables and black – white and colorful figures in a format A4.

It is printed in Publishing house “Avangard” and can be bought in bookstores of the University of Architecture, Civil Engineering and Geodesy, SEC and Shining a torch. In digital form it is uploaded to the server:

<http://biblio.bg>

of the e-bookstore Biblio.bg in pdf format. The book is available up to page 22. The book is edition of the Union of Surveyors and Land Managers in Bulgaria.