

Bibliographic Reference: Papaioannou, S., & Vogiatzi, D. (2015). Mathematics I [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-568

Abstract

The book contains the whole set of Mathematics modules taught in the first semester of the Civil Engineering departments in TEI (mainly) and Engineering Schools (Linear Algebra - Functions of a real variable - Differential and Integral Calculus - Applications in the Science of Civil Engineering). It tries to treat this subject in a way that is strongly didactic, oriented to the needs of these departments, trying to highlight mainly the analysis part of

the subject under consideration, avoiding (where possible) axiomatic foundations and proofs that are not considered necessary. Instead, it puts its emphasis on the understanding of these objects by constantly referring to issues that have already been addressed many times by the students of this semester. After all, mathematics at this level usually corresponds to basic concepts of everyday life (motion, speed, average speed, slope, summation, etc.).



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