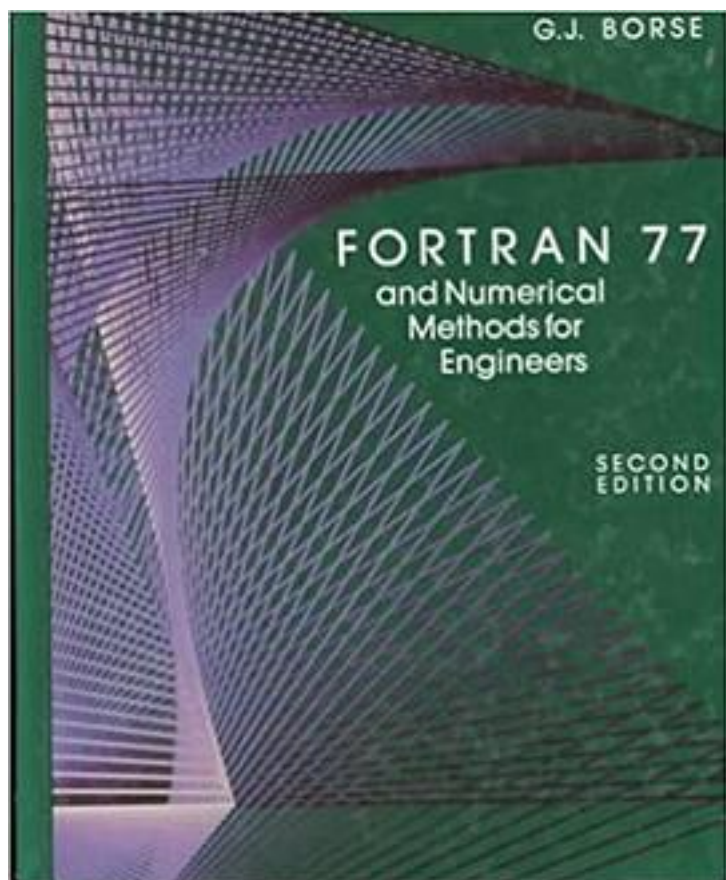


# FORTRAN 77 and Numerical Methods for Engineers



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This book introduces the beginner to FORTRAN. To help the reader develop analysis skills while learning programming, engineering computations are incorporated with sound programming practices. Eight major Programming Assignments sections, each

with a sample and solved model, illustrate the methods of preceding chapters, as well as introduce discussions concerning engineering orientation. This second edition successfully integrates numerous advanced topics in numerical methods as they relate to computational procedures in order to reinforce their application in other courses such as calculus and physics. Topics especially tailored to the beginning user include matrix equations, root of functions, curve-fitting, series expansions, integration and differentiation, and differential equations.

## 作者介绍:

Dr. Garold (Gary) Joseph Borse (1940-2019) was born in Detroit, Michigan, and graduated from St. Rita's High School in 1958. Gary received his B.S. in Physics and Mathematics in 1962. Gary attended the University of Virginia on a National Defense Scholarship and received his M.S. in Physics in 1964 and Ph.D. in Physics in 1966. Gary began his career at Lehigh University as an assistant professor of physics in 1966 and spent the summer of 1967 and 1968 as a visiting scientist in the Department of Physics at Case Western Reserve University. He was promoted to associate professor at Lehigh University in 1971 and to full professor in 1976. He served as associate chairman and chairman of the department during his long tenure. Gary was a lifelong learner and had a passion for teaching. He delivered guest lectures at his children's schools and various other organizations sharing his love of the sciences. Gary always sought out adventure and was nominated by the National Academy of Sciences to the Czechoslovak Academy of Sciences as an exchange scientist from 1972 to 1973. He spent much of that year at the SAV Nuclear Research Institute at e (near Prague). Gary was a member of the American Physical Society and a contributing editor to PWS Publishing Company. He started his research career in theoretical structure of the nuclei and later developed an expertise in the area of mathematical and computational physics. He expanded his interests into computer programming and wrote several texts books about FORTRAN 77 and MATLAB. Gary was a contributing author to at least 25 research articles.

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