



Space Vehicle Dynamics and Control

By Bong Wie

American Institute of Aeronautics & Astronautics. Hardback. Book Condition: new. BRAND NEW, Space Vehicle Dynamics and Control, Bong Wie, "Space Vehicle Dynamics and Control" provides a solid foundation in mathematics modelling analysis and control of space vehicles. More than 200 figures, photographs and tables are featured in detailed sections covering the fundamentals of orbital, attitude and structural motions of space vehicles. The textbook highlights a range of orbital manoeuvring issues: orbital transfer, rendezvous, orbit control and halo orbit determination. Rotational manoeuvre and attitude control of rigid spacecraft under the influence of reaction jet firings, internal energy dissipation and robotic manipulators in the presence of structural modelling uncertainties are also discussed. At the end of each chapter, Dr. Wie includes a helpful list of references for graduate students and working professionals studying spacecraft design. "Space Vehicle Dynamics and Control" requires a thorough knowledge of vector and matrix algebra, calculus, ordinary differential equations, linear system dynamics and engineering mechanics. Some familiarity with structural dynamics and partial differential equations is presumed, and because some problems may require the use of software for the analysis control design and numerical simulation, readers should have access to computational software (ie MATLAB) on a personal computer.



Reviews

This is basically the very best publication i actually have go through until now. It really is loaded with knowledge and wisdom I realized this publication from my i and dad encouraged this publication to discover.

-- Bryana Klocko III

I actually started reading this publication. It is full of knowledge and wisdom You wont sense monotony at at any time of your respective time (that's what catalogs are for relating to should you check with me).

-- Vilma Bayer III