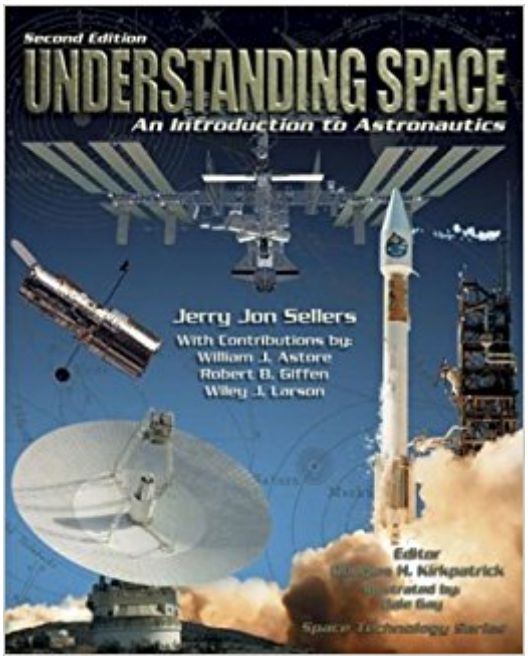
Understanding Space : An Introduction To Astronautics



Synopsis

This is an introductory text in astronautics. It contains historical background and a discussion of space missions, space environment, orbits, atmospheric entry, spacecraft design, spacecraft subsystems, and space operations. It features section reviews summarizing key concepts, terms, and equations, and is extensively illustrated with many photos, figures, and examples Space law, politics, and economics This is a truly user-friendly, full-color text focused on understanding concepts and practical applications but written in a down-to-earth, engaging manner that painlessly helps you understand complex topics. It is laid out with multi-color highlights for key terms and ideas, reinforced with detailed example problems, and supported by detailed section reviews summarizing key concepts, terms, and equations.

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Customer Reviews

An excellent primer for the serious space enthusiast. The reader will need more than a passing familiarity with algebraic concepts, but this book is written in textbook format -- what the heck, it IS a textbook! If anyone ever planned to launch a satellite from their own backyard, this is the book that will guide them. Want to be an engineer-physicist? Want to be an astronaut? This is the book for you

Inside this new second edition, you'll find: Space missions History of space Orbits and interplanetary trajectories Atmospheric re-entry Space system engineering Spacecraft subsystems Space

operations and support Economics of space Satellite communications Space law, politics,and economics This is a truly user-friendly, full-color text focused on understanding concepts and practical applications but written in a down-to-earth, engaging manner that painlessly helps you understand complex topics. It is laid out with multi-color highlights for key terms and ideas, reinforced with detailed example problems, and supported by detailed section reviews summarizing key concepts, terms, and equations.

This book was last published in 2005. Thus, it does not include space missions and advances in astronautics of the last decade. However, the fundamentals of the field and the breadth of topics provide an excellent foundation in the science, technology, and management of astronautics. I recommend this work for any beginning student in astronautics and as a reference for those already in the field.

Good book - set as a text for a course I’m studying. It gives a good introduction into the topic, including the physics involved. Some may consider this tough going, but it’s worth sticking with it.

This book is really easy to read. The author has done a great job at presenting the history, the risks and the technologies that have allowed us to have missions in space. It provides a good understanding of issues that have to be resolved for a mission in space, such as near-zero gravity issues (problems such as outgassing), radiation (single event phenomena), heat transfer, etc. It also provides benefits of space missions, discusses different types of orbits, etc. Overall, this is a great book to give you a good understanding of space, space vehicles (i.e. satellites) and the issues encountered and the way we have or currently are addressing them as well as challenges for the future.

I got this book for a master’s class at Embry Riddle. After reading it at work, others recognized the book from their masters and bachelors classes at other universities. This book is an absolute must have if you want to learn about space history, space exploration, space travel, orbits, space environment, spacecraft systems, and much much more. The reading is very easy and the book is heavy on the math side. I would say a college level understanding of algebra is helpful to understand the math equations. Each section has a review portion, reference page, and problem exercises. It’s a great book to understand space.

Perfect

I read through this book during another class and so I was pleasantly surprised that I got to re-use the same book. It is a great book for understanding space launch and operations concepts without going into too much detail. I almost don't want to sell it at the end of class so that my son can keep it to read in a couple of years.

I've been in the aerospace career field for ten years as a Satellite Operator. I wanted to learn more about orbital mechanics and picked up this book. It breaks down everything in easy to understand terms and the next thing you know you just worked out a massive math problem.

It is very informative and helps me to understand the reason behind space exploration.