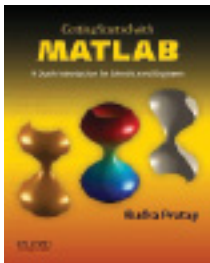


MATLAB and Simulink Based Books - Teaching MATLAB Programming to First-Year Students

“Learning MATLAB changed the meaning of scientific computing for me. I used to think in terms of machine-specific compilers and tables of numbers as output. Now, I expect and enjoy interactive calculation, programming, graphics, animation, and complete portability across platforms—all under one roof.”

—Rudra Pratap, Indian Institute of Science

First-year science and engineering students who have a solid grasp of MATLAB[®] programming are well prepared to tackle upper-level courses and projects. MATLAB is widely used in many industries for algorithm development, data visualization, data analysis, and numeric computation. For this reason, universities worldwide have chosen to teach MATLAB early in the curriculum to prepare student for careers in industry and academia. Recent textbooks based on MATLAB include:



[Getting Started with MATLAB: A Quick Introduction for Scientists and Engineers](#)

By Rudra Pratap

Oxford University Press

Language: English

[Essentials of MATLAB Programming, 2e](#)

By Stephen J. Chapman, Cengage Learning

Language: English

[MATLAB 7 für Ingenieure: Grundlagen und Programmierbeispiele, 5e \(MATLAB 7 for Engineers: Basics and Programming Examples, 5e\)](#)

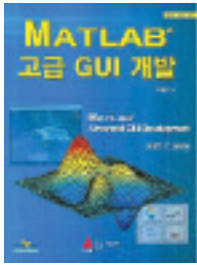
By Florian and Frieder Grupp, Oldenbourg-Verlag

Language: German

[MATLAB高效编程技巧与应用:25个案例分析 \(Efficient Programming Techniques and Applications in MATLAB: 25 Case Studies\)](#)

By Wu Peng, BUAA Press

Language: Chinese



MATLAB 고급 GUI 개발 (MATLAB: Advanced GUI Development)

By Scott T. Smith

A-Jin Publishing Co., Ltd.

Language: Korean

使える！ MATLAB/Simulinkプログラミング (Ready to Use! MATLAB/Simulink Programming)

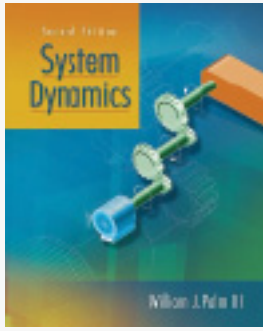
By Takanobu Aoyama, Kodansha Scientific

Language: Japanese

ABC de MATLAB y Simulink para Ciencias Aplicadas e Ingeniería (ABCs of MATLAB and Simulink for Applied Sciences and Engineering)

By Gustavo Damián Gil, Editorial C.E.I.T.

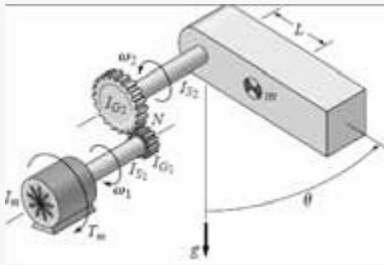
Language: Spanish



System Dynamics Curriculum Materials

With an emphasis on mathematical modeling and simulation, system dynamics is a multidomain discipline used in many fields, including engineering, biology, and the social sciences. MathWorks has collaborated with McGraw-Hill to develop a set of curriculum materials to support this core undergraduate course. The materials use industry-standard software tools to model thermal, hydraulic, and electromechanical systems.

Based on the textbook *System Dynamics, 2e* by William Palm III, they include models developed using Simulink[®] and Simscape™, five sets of lecture slides that provide a step-by-step guide to creating each model, and more than 40 MATLAB and Simulink examples illustrating concepts from the text. An instructor evaluation copy of the textbook is available upon request.



[Download the materials](#)

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- [1400+ MATLAB and Simulink Based Books](#)

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