

1. Record Nr.	UNINA9911007455803321
Autore	Asadi Farzin
Titolo	Engineering Mathematics with MATLAB® and Simulink® / / by Farzin Asadi
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-031-85244-3
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (XVI, 491 p. 614 illus., 569 illus. in color.)
Disciplina	620.00151
Soggetti	Engineering mathematics Mathematics Computer simulation Computer-aided engineering Engineering Mathematics Applications of Mathematics Computer Modelling Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Functions -- Chapter 2: Fundamentals of Trigonometry -- Chapter 3: Equations and Linear Algebra -- Chapter 4: Limits, Derivatives, and Integrals -- Chapter 5: Power Series Expansions -- Chapter 6: Interpolation, Extrapolation, and Curve Fitting -- Chapter 7: Partial Fraction Decomposition -- Chapter 8: Complex Analysis -- Chapter 9: Differential Equations -- Chapter 10: The Laplace Transform -- Etc...
Sommario/riassunto	This book summarizes the mathematics used by engineers, with an emphasis on developing practical skills and techniques for solving mathematical problems in forms typical of engineering. In addition to paper-and-pencil techniques, the book demonstrates how to solve engineering mathematics problems using state-of-the-art software packages. Specifically, it: • Offers a large collection of progressively more sophisticated mathematical problems. • Provides a brief review of definitions and formulas at the beginning of each topic. • Includes complete, tutorial-style solutions to all problems. • Presents step-by-

step solutions using state-of-the-art MATLAB® and Simulink® tools.
