

## SOLIDWORKS 2017: A Power Guide For Beginners And Intermediate Users

SOLIDWORKS 2017 Basic Tools is the first book in a three part series. It introduces new users to the SOLIDWORKS interface, SOLIDWORKS tools and basic modeling techniques. It provides you with a strong understanding of SOLIDWORKS and covers the creation of parts, assemblies and drawings. Every lesson and exercise in this book was created based on real world projects. Each of these projects have been broken down and developed into easy and comprehensible steps. Furthermore, at the end of every chapter there are self test questionnaires to ensure that you have gained sufficient knowledge from each section before moving on to more advanced lessons. This book takes the approach that in order to understand SOLIDWORKS, inside and out, you should create everything from the beginning and take it step by step.

SOLIDWORKS 2018 Tutorial with video instruction is written to assist students, designers, engineers and professionals who are new to SOLIDWORKS. The text provides a step-by-step, project based learning approach. It also contains information and examples on the five categories, to take and understand the Certified Associate - Mechanical Design (CSWA) exam. The book is divided into four sections. Chapters 1 - 5 explore the SOLIDWORKS User Interface and CommandManager, Document and System properties, simple and complex parts and assemblies, proper design intent, design tables, configurations, multi-sheet, multi-view drawings, BOMs, and Revision tables using basic and advanced features. In chapter 6 you will create the final robot assembly. The physical components and corresponding Science, Technology, Engineering and Math (STEM) curriculum are available from Gears Educational Systems. All assemblies and components for the final robot assembly are provided. Chapters 7 - 10 prepare you for the Certified Associate - Mechanical Design (CSWA) exam. The certification indicates a foundation in and apprentice knowledge of 3D CAD and engineering practices and principles. Chapter 11 covers the benefits of additive manufacturing (3D printing), how it differs from subtractive manufacturing, and its features. You will also learn the terms and technology used in low cost 3D printers. Follow the step-by-step instructions and develop multiple assemblies that combine over 100 extruded machined parts and components. Formulate the skills to create, modify and edit sketches and solid features. Learn the techniques to reuse features, parts and assemblies through symmetry, patterns, copied components, apply proper design intent, design tables and configurations. Learn by doing, not just by reading. Desired outcomes and usage competencies are listed for each chapter. Know your objective up front. Follow the steps in each chapter to achieve your design goals. Work between multiple documents, features, commands, custom properties and document properties that represent how engineers and designers utilize SOLIDWORKS in industry.

AutoCAD 2022: A Power Guide for Beginners and Intermediate Users textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers, designers, and CAD operators interested in learning AutoCAD for creating 2D engineering drawings as well as 3D Models. This textbook is a great help for new AutoCAD users and a great teaching aid for classroom training. This textbook consists of 13 chapters, and a total of 546 pages covering major workspaces of AutoCAD such as Drafting & Annotation and 3D Modeling. This textbook teaches you to use AutoCAD software for creating, editing, plotting, and managing real world 2D engineering drawings and 3D Models. This textbook not only focuses on the usage of the tools/commands of AutoCAD but also on the concept of design. Every chapter of this textbook contains tutorials that provide users with step-by-step instructions on how to create mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the user friendly and powerful capabilities of AutoCAD.

The Official Guide to Certified SOLIDWORKS Associate Exams: CSWA, CSDA, CSWSA-FEA is written to assist the SOLIDWORKS user to pass the associate level exams. Information is provided to aid a person to pass the Certified SOLIDWORKS Associate (CSWA), Certified SOLIDWORKS Sustainable Design Associate (CSDA) and the Certified SOLIDWORKS Simulation Associate Finite Element Analysis (CSWSA FEA) exam. There are three goals for this book. The primary goal is not only to help you pass the CSWA, CSDA and CSWSA-FEA exams, but also to ensure that you understand and comprehend the concepts and implementation details of the three certification processes. The second goal is to provide the most comprehensive coverage of CSWA, CSDA and CSWSA-FEA exam related topics available, without too much coverage of topics not on the exam. The third and ultimate goal is to get you from where you are today to the point that you can confidently pass the CSWA, CSDA and the CSWSA-FEA exam. The Certified SOLIDWORKS Associate (CSWA) certification indicates a foundation in and apprentice knowledge of 3D CAD design and engineering practices and principles. Passing this exam provides students the chance to prove their knowledge and expertise and to be part of a worldwide industry certification standard. The Certified SOLIDWORKS Sustainable Design Associate (CSDA) certification indicates a foundation in and apprentice knowledge of demonstrating an understanding in the principles of environmental assessment and sustainable design. The Certified SOLIDWORKS Simulation Associate - Finite Element Analysis (CSWSA-FEA) certification indicates a foundation in and apprentice knowledge of demonstrating an understanding in the principles of stress analysis and the Finite Element Method (FEM).

Engineering Design with SOLIDWORKS 2017 and Video Instruction

Engineering Design with SOLIDWORKS 2019

AutoCAD 2021 for Architectural Design: A Power Guide for Beginners and Intermediate Users

An Introduction to SOLIDWORKS Flow Simulation 2017

A Comprehensive Guide

Introduction to Mechanism Design

Creo Parametric 7.0: A Power Guide for Beginners and Intermediate Users textbook is designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers interested in learning Creo Parametric for creating 3D mechanical design. This textbook benefits new Creo users and is a great teaching aid in classroom training. It consists of 12 chapters, with a total of 736 pages covering the major modes of Creo Parametric such as the Sketch, Part, Assembly, and Drawing modes. The textbook teaches users to use Creo Parametric mechanical design software for building parametric 3D solid components, assemblies, and 2D drawings. This textbook not only focuses on the usage of the tools/commands of Creo Parametric but also on the concept of design. Each chapter of this textbook contains tutorials which help users to easily operate Creo Parametric step-by-step. Moreover, each chapter ends with hands-on test drives which allow users to experience the user friendly and

technical capabilities of Creo Parametric. Table of Contents: Chapter 1. Introduction to Creo Parametric Chapter 2. Drawing Sketches and Applying Dimensions Chapter 3. Editing and Modifying Sketches Chapter 4. Creating Base Feature of a Solid Model Chapter 5. Creating Datum Geometries Chapter 6. Advanced Modeling - I Chapter 7. Advanced Modeling - II Chapter 8. Patterning and Mirroring Chapter 9. Advanced Modeling - III Chapter 10. Working with Assemblies - I Chapter 11. Working with Assemblies - II Chapter 12. Working with Drawings

This book will provide you with a wealth of information about the three segments of the CSWP CORE exam. The intended audience for this book is a person who has passed the CSWA exam and who has eight or more months of SOLIDWORKS training and usage. This guide is not intended to teach you how to use SOLIDWORKS, but is written to provide you with CSWP exam tips, hints and information on sample questions and categories that are aligned with the exam. This guide is written to help you take and pass the CSWP exam. The book is organized into three chapters. Each chapter is focused on a segment of the CSWP CORE exam. This is not intended to be a step-by-step book. Goals of this book The primary goal is not only to help you pass the CSWP CORE exam, but also to ensure that you understand and comprehend the concepts and implementation details of the process. The second goal is to provide the most comprehensive coverage of CSWP CORE exam related topics available, without too much coverage of topics not on the exam. The third and ultimate goal is to get you from where you are today to the point that you can confidently pass all three segments of the CSWP CORE exam. Who this book is for The intended audience for this book and the CSWP exam is a person who has passed the CSWA exam and who has eight or more months of SOLIDWORKS training and usage. However, passing the CSWA exam is not a prerequisite for taking the CSWP exam if you are a commercial user in industry. For students that take the CSWP exam through their school, you must first pass the CSWA exam.

AutoCAD 2023: A Power Guide for Beginners and Intermediate Users textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers, designers, and CAD operators interested in learning AutoCAD for creating 2D engineering drawings as well as 3D Models. This textbook is a great help for new AutoCAD users and a great teaching aid for classroom training. The textbook consists of 13 chapters, and a total of 548 pages covering major workspaces of AutoCAD such as Drafting & Annotation and 3D Modeling, teaching you to use AutoCAD software for creating, editing, plotting, and managing real world 2D engineering drawings and 3D Models. This textbook not only focuses on the usage of the tools/commands of AutoCAD but also on the concept of design. Every chapter of this textbook contains tutorials that provide users with step-by-step instructions on how to create mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the user friendly and powerful capabilities of AutoCAD. Table of Contents Chapter 1. Introduction to AutoCAD Chapter 2. Creating Drawings - I Chapter 3. Working with Drawing Aids and Layers Chapter 4. Creating Drawings - II Chapter 5. Modifying and Editing Drawings - I Chapter 6. Working with Dimensions and Dimensions Style Chapter 7. Editing Dimensions and Adding Text Chapter 8. Modifying and Editing Drawings - II Chapter 9. Hatching and Gradients Chapter 10. Working with Blocks and Xrefs Chapter 11. Working with Layouts Chapter 12. Printing and Plotting Chapter 13. Introducing 3D Basics and Creating 3D Models Main Features of the Textbook Comprehensive coverage of tools Step-by-step real-world tutorials with every chapter Hands-on test drives to enhance the skills at the end of every chapter Additional notes and tips Customized content for faculty (PowerPoint Presentations) Free learning resources for faculty and students Additional student and faculty projects Technical support for the book by contacting info@cadartifex.com

Solidworks 2017A Power Guide for Beginners and Intermediate Users Createspace Independent Publishing Platform AutoCAD 2021: A Power Guide for Beginners and Intermediate Users

Beginner's Guide to SOLIDWORKS 2017 - Level II

Autodesk Maya 2017

Mastering SolidWorks

Principles, Practice and Economics of Plant and Process Design

Basic Concepts in Turbomachinery

**Autodesk Inventor 2022: A Power Guide for Beginners and Intermediate Users** textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers, interested in learning Autodesk Inventor, to create 3D mechanical designs. This textbook is an excellent guide for new Inventor users and a great teaching aid for classroom training. It consists of 14 chapters and a total of 790 pages covering major environments of Autodesk Inventor such as Sketching environment, Part modeling environment, Assembly environment, Presentation environment, and Drawing environment. The textbook teaches you to use Autodesk Inventor mechanical design software for building parametric 3D solid components and assemblies as well as creating animations and 2D drawings. This textbook not only focuses on the usages of the tools/commands of Autodesk Inventor but also on the concept of design. Every chapter in this textbook contains Tutorials that provide users with step-by-step instructions for creating mechanical designs and drawings with ease. Moreover, every chapter ends with Hands-on Test Drives that allow users to experience for themselves the user friendly and powerful capacities of Autodesk Inventor.

**AutoCAD 2021 for Architectural Design: A Power Guide for Beginners and Intermediate Users** textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help architects, designers, and CAD operators interested in learning AutoCAD for creating 2D architectural drawings. This textbook is a great help for new AutoCAD users and a great teaching aid for classroom training. This textbook consists of 12 chapters, and a total of 488 pages covering tools and commands of the Drafting & Annotation workspace of

**AutoCAD.** The textbook teaches you to use AutoCAD software for creating, editing, plotting, and managing real world 2D architectural drawings. Table of Contents: Chapter 1. Introduction to AutoCAD Chapter 2. Creating Drawings - I Chapter 3. Working with Drawing Aids and Layers Chapter 4. Creating Drawings - II Chapter 5. Modifying and Editing Drawings - I Chapter 6. Working with Blocks and Xrefs Chapter 7. Working with Dimensions and Dimensions Style Chapter 8. Editing Dimensions and Adding Text Chapter 9. Modifying and Editing Drawings - II Chapter 10. Hatching and Gradients Chapter 11. Working with Layouts Chapter 12. Printing and Plotting

**An Introduction to SOLIDWORKS Flow Simulation 2017** takes you through the steps of creating the SOLIDWORKS part for the simulation followed by the setup and calculation of the SOLIDWORKS Flow Simulation project. The results from calculations are visualized and compared with theoretical solutions and empirical data. Each chapter starts with the objectives and a description of the specific problems that are studied. End of chapter exercises are included for reinforcement and practice of what has been learned. The fourteen chapters of this book are directed towards first-time to intermediate level users of SOLIDWORKS Flow Simulation. It is intended to be a supplement to undergraduate Fluid Mechanics and Heat Transfer related courses. This book can also be used to show students the capabilities of fluid flow and heat transfer simulations in freshman and sophomore courses such as Introduction to Engineering. Both internal and external flow problems are covered and compared with experimental results and analytical solutions. Covered topics include airfoil flow, boundary layers, flow meters, heat exchanger, natural and forced convection, pipe flow, rotating flow, tube bank flow and valve flow.

**AutoCAD 2021: A Power Guide for Beginners and Intermediate Users** textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers, designers, and CAD operators interested in learning AutoCAD for creating 2D engineering drawings as well as 3D Models. This textbook is a great help for new AutoCAD users and a great teaching aid for classroom training. This textbook consists of 13 chapters, and a total of 556 pages covering major workspaces of AutoCAD such as Drafting & Annotation and 3D Modeling. This textbook teaches you to use AutoCAD software for creating, editing, plotting, and managing real world 2D engineering drawings and 3D Models. This textbook not only focuses on the usage of the tools/commands of AutoCAD but also on the concept of design. Every chapter of this textbook contains tutorials that provide users with step-by-step instructions on how to create mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the user friendly and powerful capabilities of AutoCAD. Table of Contents: Chapter 1. Introduction to AutoCAD Chapter 2. Creating Drawings - I Chapter 3. Working with Drawing Aids and Layers Chapter 4. Creating Drawings - II Chapter 5. Modifying and Editing Drawings - I Chapter 6. Working with Dimensions and Dimensions Style Chapter 7. Editing Dimensions and Adding Text Chapter 8. Modifying and Editing Drawings - II Chapter 9. Hatching and Gradients Chapter 10. Working with Blocks and Xrefs Chapter 11. Working with Layouts Chapter 12. Printing and Plotting Chapter 13. Introducing 3D Basics and Creating 3D Models

**Beginner's Guide to SOLIDWORKS 2020 - Level II**

**SOLIDWORKS Sheet Metal Design 2021**

**Autodesk Fusion 360: A Power Guide for Beginners and Intermediate Users (4th Edition)**

**Creo Parametric 7.0: A Power Guide for Beginners and Intermediate Users**

**Getting started with Parts, Assemblies and Drawings**

**AutoCAD 2019**

**AutoCAD 2019: A Power Guide for Beginners and Intermediate Users** textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers, designers, and CAD operators interested in learning AutoCAD for creating engineering and architectural 2D drawings as well as 3D Models. This textbook is a great help for new AutoCAD users and a great teaching aid in a classroom setting. This textbook consists of 13 chapters, total 554 pages covering major workspaces of AutoCAD such as Drafting & Annotation and 3D Modeling. This textbook teaches you how to use AutoCAD software to create, edit, plot, and manage real world engineering and architectural 2D drawings as well as 3D Models. This textbook not only focuses on the usage of the tools/commands of AutoCAD but also on the concept of design. Every chapter of this book contains tutorials that instruct users step-by-step how to create mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives that allow the users of this textbook to experience themselves the ease-of-use and powerful capabilities of AutoCAD. Table of Contents: Chapter 1. Introduction to AutoCAD Chapter 2. Creating Drawings - I Chapter 3. Working with Drawing Aids and Layers Chapter 4. Creating Drawings - II Chapter 5. Modifying and Editing Drawings - I Chapter 6. Working with Dimensions and Dimensions Style Chapter 7. Editing Dimensions and Adding Text Chapter 8. Modifying and Editing Drawings - II Chapter 9. Hatching and Gradients Chapter 10. Working with Blocks and Xrefs Chapter 11. Working with Layouts Chapter 12. Printing and Plotting Chapter 13. Introducing 3D Basics and Creating 3D Models

**Engineering Design with SOLIDWORKS 2019** is written to assist students, designers, engineers and professionals. The book provides a solid foundation in SOLIDWORKS by utilizing projects with step-by-step instructions for the beginner to intermediate SOLIDWORKS user featuring machined, plastic and sheet metal components. Desired outcomes and usage competencies are listed for each project. The book is divided into five sections with 11 projects. Project 1 - Project 6: Explore the SOLIDWORKS User Interface and CommandManager, Document and System properties, simple and complex parts and assemblies, proper design intent, design tables, configurations, multi-sheet, multi-view drawings, BOMs, and Revision tables using basic and advanced features. Additional techniques include the edit and reuse of features, parts, and assemblies through symmetry, patterns, configurations, SOLIDWORKS 3D ContentCentral and the SOLIDWORKS Toolbox. Project 7: Understand Top-Down assembly modeling and Sheet Metal parts. Develop components In-Context with InPlace Mates, along with the ability to import parts using the Top-Down assembly method. Convert a solid part into a Sheet Metal

part and insert and apply various Sheet Metal features. Project 8 - Project 9: Recognize SOLIDWORKS Simulation and Intelligent Modeling techniques. Understand a general overview of SOLIDWORKS Simulation and the type of questions that are on the SOLIDWORKS Simulation Associate - Finite Element Analysis (CSWSA-FEA) exam. Apply design intent and intelligent modeling techniques in a sketch, feature, part, plane, assembly and drawing. Project 10: Comprehend the differences between additive and subtractive manufacturing. Understand 3D printer terminology along with a working knowledge of preparing, saving, and printing CAD models on a low cost printer. Project 11: Review the Certified SOLIDWORKS Associate (CSWA) program. Understand the curriculum and categories of the CSWA exam and the required model knowledge needed to successfully take the exam. The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. These professionals are directly involved with SOLIDWORKS every day. Their responsibilities go far beyond the creation of just a 3D model.

Welcome to the world of Autodesk Maya 2017. Autodesk Maya 2017 is a powerful, integrated 3D modeling, animation, visual effects, and rendering software developed by Autodesk Inc. This integrated node based 3D software finds its application in the development of films, games, and design projects. A wide range of 3D visual effects, computer graphics, and character animation tools make it an ideal platform for 3D artists. The intuitive user interface and workflow tools of Maya 2017 have made the job of design visualization specialists a lot easier. Autodesk Maya 2017: A Comprehensive Guide textbook covers all features of Autodesk Maya 2017 in a simple, lucid, and comprehensive manner. It aims at harnessing the power of Autodesk Maya 2017 for 3D and visual effects artists, and designers. This textbook will help you transform your imagination into reality with ease. Also, it will unleash your creativity, thus helping you create realistic 3D models, animation, and visual effects. It caters to the needs of both the novice and advanced users of Maya 2017 and is ideally suited for learning at your convenience and at your pace.

SOLIDWORKS Sheet Metal Design 2022 for Beginners and Intermediate Users textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating real-world sheet metal components. This textbook is a great help for SOLIDWORKS users new to sheet metal design. It consists of total 132 pages covering the sheet metal design environment of SOLIDWORKS. It teaches users to use SOLIDWORKS mechanical design software for creating parametric 3D sheet metal components. This textbook not only focuses on the usage of the tools and commands of SOLIDWORKS for creating sheet metal components but also on the concept of design. It contains Tutorials followed by theory that provide users with step-by-step instructions for creating sheet metal components. Moreover, it ends with Hands-on Test Drives which allow users to experience the user friendly and technical capabilities of SOLIDWORKS.

Silence

Official Guide to Certified SOLIDWORKS Associate Exams: CSWA, CSWA-SD, CSWSA-FEA, CSWA-AM (2017-2019)

Introduction to SolidWorks

SOLIDWORKS 2018 Basic Tools

Beginner's Guide to SOLIDWORKS 2021 - Level I

AutoCAD 2023: A Power Guide for Beginners and Intermediate Users

**SOLIDWORKS 2018 Basic Tools is the first book in a three part series. It introduces new users to the SOLIDWORKS interface, SOLIDWORKS tools and basic modeling techniques. It provides you with a strong understanding of SOLIDWORKS and covers the creation of parts, assemblies and drawings. Every lesson and exercise in this book was created based on real world projects. Each of these projects has been broken down and developed into easy and comprehensible steps. Furthermore, at the end of every chapter there are self test questionnaires to ensure that you have gained sufficient knowledge from each section before moving on to more advanced lessons. This book takes the approach that in order to understand SOLIDWORKS, inside and out, you should create everything from the beginning and take it step by step.**

**Geometrical tolerancing is used to specify and control the form, location and orientation of the features of components and manufactured parts. This book presents the state of the art of geometrical tolerancing, covers the latest ISO and ANSI/ASME standards and is a comprehensive reference and guide for all professional engineers, designers, CAD users, quality managers and anyone involved in the creation or interpretation of CAD plans or engineering designs and specifications. \* For all design and manufacturing engineers working with these internationally required design standards \* Covers ISO and ANSI geometrical tolerance standards, including the 2005 revisions to the ISO standard \* Geometrical tolerancing is used in the preparation and interpretation of the design for any manufactured component or item: essential information for designers, engineers and CAD professionals**

**This book is written to assist you with passing the SOLIDWORKS associate level exams. It provides you with detailed information and exercises that will aid you in passing the following exams: Certified SOLIDWORKS Associate (CSWA), Certified SOLIDWORKS Associate Sustainable Design (CSWA-SD), Certified SOLIDWORKS Simulation Associate Finite Element Analysis (CSWSA-FEA) and the Certified SOLIDWORKS Associate Additive Manufacturing (CSWA-AM) exam. There are three goals for this book. The primary goal of this book is not only to help you pass the CSWA, CSWA-SD, CSWSA-FEA and CSWA-AM exams, but also to ensure that you understand and comprehend the concepts and implementation details of the four certification processes. The second goal is to provide the most comprehensive coverage of CSWA, CSWA-SD, CSWSA-FEA and CSWA-AM exam related topics available, without too much coverage of topics not on the exam. The third and ultimate goal is to get you from where**

you are today to the point that you can confidently pass the CSWA, CSWA-SD, CSWSA-FEA and CSWA-AM exams.

**SOLIDWORKS 2017: A Power Guide for Beginners and Intermediate User** textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating 3D mechanical design. Taken together, this textbook can be a great starting point for new SOLIDWORKS users and a great teaching aid in classroom training. This textbook consists of 14 chapters, total 768 pages covering major environments of SOLIDWORKS: Sketching environment, Part modeling environment, Assembly environment, and Drawing environment, which teach you how to use the SOLIDWORKS mechanical design software to build parametric models and assemblies, and how to make drawings of those parts and assemblies. Moreover, this textbook includes the topic of Configurations. This textbook not only focuses on the usages of the tools/commands of SOLIDWORKS but also on the concept of design. Every chapter of this textbook contains tutorials which instruct users how things can be done in SOLIDWORKS step by step. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the ease-of-use and powerful capabilities of SOLIDWORKS. Table of Contents: Chapter 1. Introduction to SOLIDWORKS Chapter 2. Drawing Sketches with SOLIDWORKS Chapter 3. Editing and Modifying Sketches Chapter 4. Applying Geometric Relations and Dimensions Chapter 5. Creating First/Base Feature of Solid Models Chapter 6. Creating Reference Geometries Chapter 7. Advanced Modeling - I Chapter 8. Advanced Modeling - II Chapter 9. Patterning and Mirroring Chapter 10. Advanced Modeling - III Chapter 11. Working with Configurations Chapter 12. Working with Assemblies - I Chapter 13. Working with Assemblies - II Chapter 14. Working with Drawings Main Features of the Textbook Comprehensive coverage of tools Step-by-step real-world tutorials with every chapter Hands-on test drives to enhance the skills at the end of every chapter Additional notes and tips Customized content for faculty (PowerPoint Presentations) Free learning resources for faculty and students Additional student and faculty projects Technical support for the book: [info@cadartifex.com](mailto:info@cadartifex.com)

**Autodesk Fusion 360**

**SOLIDWORKS Exercises - Learn by Practicing (3rd Edition)**

**A Power Guide for Beginners and Intermediate Users (2nd Edition)**

**SOLIDWORKS 2017 Basic Tools**

**SOLIDWORKS Surface Design 2021 for Beginners and Intermediate Users**

**A Power Guide for Beginners and Intermediate Users**

Engineering Design and Graphics with SolidWorks 2016 shows students how to use SolidWorks to create engineering drawings and designs. The textbook has been updated to cover the new features in SolidWorks 2016. It focuses on the creation of engineering drawings, including dimensions and tolerances and the use of standard parts and tools. Each chapter contains step-by-step sample problems that show students how to apply the concepts presented in the chapter. Effective pedagogy throughout the text helps students learn and retain concepts: Objectives: Each chapter begins with objectives and an introduction to the material. Summaries: Each chapter concludes with a summary and exercise problems. Numerous illustrations: The multitude of illustrations, accompanied by explanatory captions, present a visual approach to learning. Students see in the text what they see on the screen with the addition of explanatory text. Practical application: The text provides hundreds of exercise projects of varying difficulty (far more than any other computer graphics text). These exercises reinforce each chapter's content and help students learn by doing. Flexibility: With the hundreds of problems presented in the book, instructors can assign different problems within the same class and from year to year without repeating problems for students. Meets standards: The text teaches ANSI standards for dimensions and tolerances. This helps students understand how their designs are defined for production and the importance of proper tolerancing. Step-by-step approach: In presenting the fundamentals of engineering drawing using SolidWorks, the text uses a step-by-step approach that allows students to work and learn at their own pace.

This book is intended to help new users learn the basic concepts of SOLIDWORKS and good solid modeling techniques in an easy to follow guide that includes video instruction. It is a great starting point for those new to SOLIDWORKS or as a teaching aid in classroom training to become familiar with the software's interface, basic commands and strategies as users complete a series of models while learning different ways to accomplish a particular task. At the end of this book, you will have a fairly good understanding of the SOLIDWORKS interface and the most commonly used commands for part modeling, assembly and detailing after completing a series of components and their 2D drawings complete with Bill of Materials. The book focuses on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. The author strived hard to include the commands required in the Certified SOLIDWORKS Associate and Certified SOLIDWORKS Professional Exams as listed on the SOLIDWORKS website. SOLIDWORKS is an easy to use CAD software that includes many time saving tools that will enable new and experienced users to complete design tasks faster than before. Most commands covered in this book have advanced options, which may not be covered in this book. This is meant to be a starting point to help new users to learn the basic and most frequently used commands. Includes Video Instruction Each copy of this book includes access to video instruction. In these videos the author provides a visual presentation of tutorials found in the book. The videos reinforce the steps described in the book by allowing you to watch the exact steps the author uses to complete the exercises.

Introduction to Mechanism Design: with Computer Applications provides an updated approach to undergraduate Mechanism Design and Kinematics courses/modules for engineering students. The use of web-based simulations, solid modeling, and software such as MATLAB and Excel is employed to link the design process with the latest software tools for the design and analysis of mechanisms and machines. While a mechanical engineer might brainstorm with a pencil and sketch pad, the final result is developed and communicated through CAD and computational visualizations. This modern approach to mechanical design processes has not been fully integrated in most books, as it is in this new text.

This senior undergraduate level textbook is written for Advanced Manufacturing, Additive Manufacturing, as well as CAD/CAM courses. Its goal is to assist students in colleges and universities, designers, engineers, and professionals interested in using SolidWorks as the design and 3D printing tool for emerging manufacturing technology for practical applications. This textbook will bring a new dimension to SolidWorks by introducing readers to the role of SolidWorks in the relatively new manufacturing paradigm shift, known as 3D-Printing which is based on Additive Manufacturing (AM) technology. This new textbook: Features modeling of complex parts and surfaces Provides a step-by-step tutorial type approach with pictures showing how to model

using SolidWorks Offers a user-Friendly approach for the design of parts, assemblies, and drawings, motion-analysis, and FEA topics Includes clarification of connections between SolidWorks and 3D-Printing based on Additive Manufacturing Discusses a clear presentation of Additive Manufacturing for Designers using SolidWorks CAD software "Introduction to SolidWorks: A Comprehensive Guide with Applications in 3D Printing" is written using a hands-on approach which includes a significant number of pictorial descriptions of the steps that a student should follow to model parts, assemble parts, and produce drawings.

Supplemented with Video Instructions

SOLIDWORKS 2018 Tutorial with Video Instruction

Full Color Edition

AutoCAD 2022: A Power Guide for Beginners and Intermediate Users

with Computer Applications

Beginner's Guide to SOLIDWORKS 2018 - Level I

Chemical Engineering Design, Second Edition, deals with the application of chemical engineering principles to the design of chemical processes and equipment. Revised throughout, this edition has been specifically developed for the U.S. market. It provides the latest US codes and standards, including API, ASME and ISA design codes and ANSI standards. It contains new discussions of conceptual plant design, flowsheet development, and revamp design; extended coverage of capital cost estimation, process costing, and economics; and new chapters on equipment selection, reactor design, and solids handling processes. A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data, and Excel spreadsheet calculations, plus over 150 Patent References for downloading from the companion website. Extensive instructor resources, including 1170 lecture slides and a fully worked solutions manual are available to adopting instructors. This text is designed for chemical and biochemical engineering students (senior undergraduate year, plus appropriate for capstone design courses where taken, plus graduates) and lecturers/tutors, and professionals in industry (chemical process, biochemical, pharmaceutical, petrochemical sectors). New to this edition: Revised organization into Part I: Process Design, and Part II: Plant Design. The broad themes of Part I are flowsheet development, economic analysis, safety and environmental impact and optimization. Part II contains chapters on equipment design and selection that can be used as supplements to a lecture course or as essential references for students or practicing engineers working on design projects. New discussion of conceptual plant design, flowsheet development and revamp design Significantly increased coverage of capital cost estimation, process costing and economics New chapters on equipment selection, reactor design and solids handling processes New sections on fermentation, adsorption, membrane separations, ion exchange and chromatography Increased coverage of batch processing, food, pharmaceutical and biological processes All equipment chapters in Part II revised and updated with current information Updated throughout for latest US codes and standards, including API, ASME and ISA design codes and ANSI standards Additional worked examples and homework problems The most complete and up to date coverage of equipment selection 108 realistic commercial design projects from diverse industries A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data and Excel spreadsheet calculations plus over 150 Patent References, for downloading from the companion website Extensive instructor resources: 1170 lecture slides plus fully worked solutions manual available to adopting instructors

Autodesk Fusion 360: A Power Guide for Beginners and Intermediate Users (2nd Edition) textbook has been designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers and designers, interested in learning Fusion 360, to create 3D mechanical designs. This textbook is a great help for new Fusion 360 users and a great teaching aid for classroom training. This textbook consists of 14 chapters, total 734 pages covering major workspaces of Fusion 360 such as MODEL, ANIMATION, and DRAWING. The textbook teaches you to use Fusion 360 mechanical design software for building parametric 3D solid components and assemblies as well as creating animations and 2D drawings. This textbook has been developed using software version: 2.0.5519. This textbook not only focuses on the usages of the tools/commands of Fusion 360 but also on the concept of design. Every chapter in this textbook contains tutorials that provide users with step-by-step instructions for creating mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives which allow users to experience the user friendly and technical capabilities of Fusion 360. Table of Contents: Chapter 1.

Introducing Fusion 360 Chapter 2. Drawing Sketches with Autodesk Fusion 360 Chapter 3. Editing and Modifying Sketches Chapter 4. Applying Constraints and Dimensions Chapter 5. Creating Base Feature of Solid Models Chapter 6. Creating Construction Geometries Chapter 7. Advanced Modeling - I Chapter 8. Advanced Modeling - II Chapter 9. Patterning and Mirroring Chapter 10. Editing and Modifying 3D Models Chapter 11. Working with Assemblies - I Chapter 12. Working with Assemblies - II Chapter 13. Creating Animation of a Design Chapter 14. Working with Drawings Main Features of the Textbook Comprehensive coverage of tools Step-by-step real-world tutorials with every chapter Hands-on test drives to enhance the skills at the end of every chapter Additional notes and tips Customized content for faculty (PowerPoint Presentations) Free learning resources for faculty and students Additional student and faculty projects Technical support for the book by contacting [info@cadartifex.com](mailto:info@cadartifex.com)

SOLIDWORKS Surface Design 2021 for Beginners and Intermediate Users textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and

designers interested in learning SOLIDWORKS for creating real-world surface models. This textbook is a great help for SOLIDWORKS users new to surface design. It consists of total 106 pages covering the surface design environment of SOLIDWORKS. It teaches users to use SOLIDWORKS mechanical design software for creating parametric complex shape surface models that are not possible to create with solid modeling due to its limitations. This textbook not only focuses on the usage of the tools and commands of SOLIDWORKS for creating surface models but also on the concept of design. It contains Tutorials followed by theory that provide users with step-by-step instructions for creating surface designs. Moreover, it ends with Hands-on Test Drives which allow users to experience the user friendly and technical capabilities of SOLIDWORKS. Main Features of the Textbook: • Comprehensive coverage of tools • Step-by-step real-world tutorials with every chapter • Hands-on test drives to enhance the skills at the end of every chapter • Additional notes and tips • Customized content for faculty (PowerPoint Presentations) • Free learning resources for faculty and students • Technical support for the book by contacting [info@cadartifex.com](mailto:info@cadartifex.com)

Engineering Design with SOLIDWORKS 2018 and video instruction is written to assist students, designers, engineers and professionals. The book provides a solid foundation in SOLIDWORKS by utilizing projects with step-by-step instructions for the beginner to intermediate SOLIDWORKS user featuring machined, plastic and sheet metal components. Desired outcomes and usage competencies are listed for each project. The book is divided into five sections with 11 projects. Project 1 - Project 6: Explore the SOLIDWORKS User Interface and CommandManager, Document and System properties, simple and complex parts and assemblies, proper design intent, design tables, configurations, multi-sheet, multi-view drawings, BOMs, and Revision tables using basic and advanced features. Additional techniques include the edit and reuse of features, parts, and assemblies through symmetry, patterns, configurations, SOLIDWORKS 3D ContentCentral and the SOLIDWORKS Toolbox. Project 7: Understand Top-Down assembly modeling and Sheet Metal parts. Develop components In-Context with InPlace Mates, along with the ability to import parts using the Top-Down assembly method. Convert a solid part into a Sheet Metal part and insert and apply various Sheet Metal features. Project 8 - Project 9: Recognize SOLIDWORKS Simulation and Intelligent Modeling techniques. Understand a general overview of SOLIDWORKS Simulation and the type of questions that are on the SOLIDWORKS Simulation Associate - Finite Element Analysis (CSWSA-FEA) exam. Apply design intent and intelligent modeling techniques in a sketch, feature, part, plane, assembly and drawing. Project 10: Comprehend the differences between additive and subtractive manufacturing. Understand 3D printer terminology along with a working knowledge of preparing, saving, and printing CAD models on a low cost printer. Project 11: Review the Certified Associate - Mechanical Design (CSWA) program. Understand the curriculum and categories of the CSWA exam and the required model knowledge needed to successfully take the exam. The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. These professionals are directly involved with SOLIDWORKS every day. Their responsibilities go far beyond the creation of just a 3D model.

A Handbook for Geometrical Product Specification using ISO and ASME standards

Official Certified SOLIDWORKS Professional Certification Guide (SOLIDWORKS 2015 - 2017)

Autodesk Inventor 2022: A Power Guide for Beginners and Intermediate Users

Geometrical Dimensioning and Tolerancing for Design, Manufacturing and Inspection

Official Guide to Certified SOLIDWORKS Associate Exams: CSWA, CSDA, CSWSA-FEA (SOLIDWORKS 2015 - 2017)

Full Color edition SOLIDWORKS Simulation 2019: A Power Guide for Beginners and Intermediate Users textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers and designers interested in learning finite element analysis (FEA) using SOLIDWORKS Simulation. This textbook benefits new SOLIDWORKS Simulation users and is a great teaching aid in classroom training. It consists of 10 chapters, total 394 pages covering various types of finite element analysis (FEA) such as Linear Static Analysis, Buckling Analysis, Fatigue Analysis, Frequency Analysis, Drop Test Analysis, and Non-linear Static Analysis. This textbook covers important concepts and methods used in finite element analysis (FEA) such as Preparing Geometry, Boundary Conditions (load and fixture), Element Types, Contacts, Connectors, Meshing, Mesh Controls, Mesh Quality Check (Jacobian Check and Aspect Ratio), Adaptive Meshing (H-Adaptive and P-Adaptive), Iterative Methods (Newton-Raphson Scheme and Modified Newton-Raphson Scheme), Incremental Methods (Force, Displacement, or Arc Length), and so on. This textbook not only focuses on the usages of the tools of SOLIDWORKS Simulation but also on the fundamentals of finite element analysis (FEA) through various real-world case studies. The case studies used in this textbook allow users to solve various real-world engineering problems, step-by-step. Moreover, the Hands-on test drives are given at the end of the chapters which allow users to experience the user friendly and technical capabilities of SOLIDWORKS Simulation. Every chapter begins with learning objectives related to the topics covered in that chapter. Moreover, every chapter ends with a summary which lists the topics learned in that chapter followed by questions to assess the knowledge. Table of Contents: Chapter 1. Introduction to FEA and SOLIDWORKS Simulation Chapter 2. Introduction to Analysis Tools and Static Analysis Chapter 3. Case Studies of Static Analysis Chapter 4. Contacts and Connectors Chapter 5. Adaptive Mesh Methods Chapter 6. Buckling Analysis Chapter 7. Fatigue Analysis Chapter 8. Frequency Analysis Chapter 9. Drop Test Analysis Chapter 10. Non-Linear Static Analysis Main Features of the Textbook Comprehensive coverage of tools Step-by-step real-world case studies Hands-on test drives to enhance the skills at the end of chapters Additional notes and tips Customized content for faculty (PowerPoint Presentations) Free learning resources for students and faculty Technical support for the book: [info@cadartifex.com](mailto:info@cadartifex.com)

The SOLIDWORKS 2017 Reference Guide is a comprehensive reference book written to assist the beginner to intermediate user of SOLIDWORKS 2017. SOLIDWORKS is an immense software package, and no one book can cover all topics for all users. This book provides a centralized reference location to address many of the tools, features and techniques of SOLIDWORKS 2017. This book covers the following:

System and Document properties FeatureManagers PropertyManagers ConfigurationManagers RenderManagers 2D and 3D Sketch tools Sketch entities 3D Feature tools Motion Study Sheet Metal Motion Study SOLIDWORKS Simulation PhotoView 360 Pack and Go 3D PDFs Intelligent Modeling techniques 3D printing terminology and more Chapter 1 provides a basic overview of the concepts and terminology used throughout this book using SOLIDWORKS 2017 software. If you are completely new to SOLIDWORKS, you should read Chapter 1 in detail and complete Lesson 1, Lesson 2 and Lesson 3 in the SOLIDWORKS Tutorials. If you are familiar with an earlier release of SOLIDWORKS, you still might want to skim Chapter 1 to become acquainted with some of the commands, menus and features that you have not used; or you can simply jump to any section in any chapter. Each chapter provides detailed PropertyManager information on key topics with individual stand-alone short tutorials to reinforce and demonstrate the functionality and ease of the SOLIDWORKS tool or feature. The book provides access to over 250 models, their solutions and additional support materials. Learn by doing, not just by reading. Formulate the skills to create, modify and edit sketches and solid features. Learn the techniques to reuse features, parts and assemblies through symmetry, patterns, copied components, design tables, configurations and more. The book is designed to compliment the Online Tutorials and Online Help contained in SolidWorks 2017. The goal is to illustrate how multiple design situations and systematic steps combine to produce successful designs. The author developed the tutorials by combining his own industry experience with the knowledge of engineers, department managers, professors, vendors and manufacturers. He is directly involved with SOLIDWORKS every day and his responsibilities go far beyond the creation of just a 3D model.

Autodesk Fusion 360: A Power Guide for Beginners and Intermediate Users (4th Edition) textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers, interested in learning Fusion 360, to create 3D mechanical designs. This textbook is a great help for new Fusion 360 users and a great teaching aid for classroom training. This textbook consists of 14 chapters, a total of 750 pages covering major workspaces of Fusion 360 such as DESIGN, ANIMATION, and DRAWING. The textbook teaches you to use Fusion 360 mechanical design software for building parametric 3D solid components and assemblies as well as creating animations and 2D drawings. This edition of textbook has been developed using Autodesk Fusion 360 software version: 2.0.9313 (November 2020 Product Update). This textbook not only focuses on the usages of the tools/commands of Fusion 360 but also on the concept of design. Every chapter in this textbook contains tutorials that provide users with step-by-step instructions for creating mechanical designs and drawings with ease. Moreover, every chapter ends with hands-on test drives that allow users to experience for themselves the user friendly and powerful capacities of Fusion 360. Table of Contents: Chapter 1. Introducing Fusion 360 Chapter 2. Drawing Sketches with Autodesk Fusion 360 Chapter 3. Editing and Modifying Sketches Chapter 4. Applying Constraints and Dimensions Chapter 5. Creating Base Feature of Solid Models Chapter 6. Creating Construction Geometries Chapter 7. Advanced Modeling - I Chapter 8. Advanced Modeling - II Chapter 9. Patterning and Mirroring Chapter 10. Editing and Modifying 3D Models Chapter 11. Working with Assemblies - I Chapter 12. Working with Assemblies - II Chapter 13. Creating Animation of a Design Chapter 14. Working with Drawings

SOLIDWORKS Sheet Metal Design 2021 textbook has been designed for instructor-led courses as well as self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating real-world sheet metal components. This textbook is a great help for SOLIDWORKS users new to sheet metal design. It consists of total 132 pages covering the sheet metal design environment of SOLIDWORKS. It teaches users to use SOLIDWORKS mechanical design software for creating parametric 3D sheet metal components. This textbook not only focuses on the usage of the tools and commands of SOLIDWORKS for creating sheet metal components but also on the concept of design. It contains Tutorials followed by theory that provide users with step-by-step instructions for creating sheet metal components. Moreover, it ends with Hands-on Test Drives which allow users to experience the user friendly and technical capabilities of SOLIDWORKS. Engineering Design with SOLIDWORKS 2018 and Video Instruction

Solidworks 2017

SOLIDWORKS 2017 Reference Guide

Solidworks 2018

SOLIDWORKS Sheet Metal Design 2022 for Beginners and Intermediate Users

SOLIDWORKS Simulation 2019: a Power Guide for Beginners and Intermediate Users

After having overcome tremendous challenges to save a love that transcends the boundary between heaven and earth, Nora and Patch must face an adversary with the power to destroy all that they have worked for.

SOLIDWORKS 2018: A Power Guide for Beginners and Intermediate User textbook is designed for instructor-led courses as well as for self-paced learning. It is intended to help engineers and designers interested in learning SOLIDWORKS for creating 3D mechanical design. This textbook is a great help for new SOLIDWORKS users and a great teaching aid in classroom training. This textbook consists of 14 chapters, total 782 pages covering major environments of SOLIDWORKS: Sketching environment, Part modeling environment, Assembly environment, and Drawing environment, which teach you how to use the SOLIDWORKS mechanical design software to build parametric models and assemblies, and how to make drawings of those parts and assemblies. This textbook also includes a chapter on creating multiple configurations of a design. This textbook not only focuses on the usages of the tools/commands of SOLIDWORKS but also on the concept of design. Every chapter of this textbook contains tutorials which instruct users how things can be done in SOLIDWORKS step by step. Moreover, every chapter ends with hands-on test drives which allow users to experience themselves the ease-of-use and powerful capabilities of SOLIDWORKS. Table of Contents: Chapter 1. Introduction to SOLIDWORKS Chapter 2. Drawing Sketches with SOLIDWORKS Chapter 3. Editing and Modifying Sketches Chapter 4. Applying Geometric Relations and Dimensions Chapter 5. Creating First/Base Feature of Solid Models Chapter 6. Creating Reference Geometries Chapter 7. Advanced Modeling - I Chapter 8. Advanced Modeling - II Chapter 9. Patterning and Mirroring Chapter 10. Advanced Modeling - III Chapter 11. Working with Configurations Chapter 12. Working with Assemblies - I Chapter 13. Working with Assemblies - II Chapter 14. Working with Drawings Main Features of the Textbook Comprehensive coverage of tools Step-by-step real-world tutorials with every chapter Hands-on test drives to enhance the skills at the end of every chapter Additional notes and tips Customized content for faculty (PowerPoint Presentations) Free learning resources for faculty and students Additional student and faculty projects Technical support for the book by

contacting [info@cadartifex.com](mailto:info@cadartifex.com)

Beginner's Guide to SOLIDWORKS 2020 – Level II starts where Beginner's Guide – Level I ends, following the same easy to read style and companion videoinstruction, but this time covering advanced topics and techniques. The purpose of this book is to teach advanced techniques including sheet metal, surfacing, how to create components in the context of an assembly and reference other components (Top-down design), propagate design changes with SOLIDWORKS' parametric capabilities, mold design, welded structures and more while explaining the basic concepts of each trade to allow you to understand the how and why of each operation. The author uses simple examples to allow you to better understand each command and environment, as well as to make it easier to explain the purpose of each step, maximizing the learning time by focusing on one task at a time. This book is focused on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. At the end of this book, you will have acquired enough skills to be highly competitive when it comes to designing with SOLIDWORKS, and while there are many less frequently used commands and options available that will not be covered in this book, rest assured that those covered are most of the commands used every day by SOLIDWORKS designers. The author strived hard to include many of the commands required in the Certified SOLIDWORKS Professional Advanced and Expert exams as listed on the SOLIDWORKS website.

Engineering Design with SOLIDWORKS 2017 and video instruction is written to assist students, designers, engineers and professionals. The book provides a solid foundation in SOLIDWORKS by utilizing projects with step-by-step instructions for the beginner to intermediate SOLIDWORKS user. Explore the user interface, CommandManager, menus, toolbars and modeling techniques to create parts, assemblies and drawings in an engineering environment. Follow the step-by-step instructions and develop multiple parts and assemblies that combine machined, plastic and sheet metal components. Formulate the skills to create, modify and edit sketches and solid features. Learn the techniques to reuse features, parts and assemblies through symmetry, patterns, copied components, Design Tables, Bills of Materials, Custom Properties and Configurations. Address various SOLIDWORKS analysis tools and Intelligent Modeling techniques along with Additive Manufacturing (3D printing). Learn by doing not just by reading. Desired outcomes and usage competencies are listed for each project. Know your objective up front. Follow the steps in Projects 1 - 9 to achieve the design goals. Review Project 10 on Additive Manufacturing (3D printing) and its benefits and features. Understand the terms and technology used in low cost 3D printers. Work between multiple documents, features, commands and custom properties that represent how engineers and designers utilize SOLIDWORKS in industry. Review individual features, commands and tools with the video instruction. The projects contain exercises. The exercises analyze and examine usage competencies. Collaborate with leading industry suppliers such as SMC Corporation of America, Boston Gear and 80/20 Inc. Collaborative information translates into numerous formats such as paper drawings, electronic files, rendered images and animations. On-line intelligent catalogs guide designers to the product that meets both their geometric requirements and performance functionality. The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. He is directly involved with SOLIDWORKS every day. His responsibilities go far beyond the creation of just a 3D model. The book is designed to complement the SOLIDWORKS Tutorials contained in SOLIDWORKS 2017.

Chemical Engineering Design

A Comprehensive Guide with Applications in 3D Printing

Engineering Design and Graphics with Solidworks 2016

The complete SolidWorks reference-tutorial for beginner to advanced techniques Mastering SolidWorks is the reference-tutorial for all users. Packed with step-by-step instructions, video tutorials for over 40 chapters, and coverage of little-known techniques, this book takes you from novice to power user with clear instruction that goes beyond the basics. Fundamental techniques are detailed with real-world examples for hands-on learning, and the companion website provides tutorial files for all exercises. Even veteran users will find value in new techniques that make familiar tasks faster, easier, and more organized, including advanced file management tools that simplify and streamline pre-flight checks. SolidWorks is the leading 3D CAD program, and is an essential tool for engineers, mechanical designers, industrial designers, and drafters around the world. User friendly features such as drag-and-drop, point-and-click, and cut-and-paste tools belie the software's powerful capabilities that can help you create cleaner, more precise, more polished designs in a fraction of the time. This book is the comprehensive reference every SolidWorks user needs, with tutorials, background, and more for beginner to advanced techniques. Get a grasp on fundamental SolidWorks 2D and 3D tasks using realistic examples with text-based tutorials Delve into advanced functionality and capabilities not commonly covered by how-to guides Incorporate improved search, Pack-and-Go and other file management tools into your workflow Adopt best practices and exclusive techniques you won't find anywhere else Work through this book

beginning-to-end as a complete SolidWorks course, or dip in as needed to learn new techniques and time-saving tricks on-demand. Organized for efficiency and designed for practicality, these tips will remain useful at any stage of expertise. With exclusive coverage and informative detail, Mastering SolidWorks is the tutorial-reference for users at every level of expertise.

Beginner's Guide to SOLIDWORKS 2017 - Level II starts where Beginner's Guide - Level I ends, following the same easy to read style and companion video instruction, but this time covering advanced topics and techniques. The purpose of this book is to teach advanced techniques including sheet metal, surfacing, how to create components in the context of an assembly and reference other components (Top-down design), propagate design changes with SOLIDWORKS' parametric capabilities, mold design, welded structures and more while explaining the basic concepts of each trade to allow you to understand the how and why of each operation. The author uses simple examples to allow you to better understand each command and environment, as well as to make it easier to explain the purpose of each step, maximizing the learning time by focusing on one task at a time. This book is focused on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. At the end of this book, you will have acquired enough skills to be highly competitive when it comes to designing with SOLIDWORKS, and while there are many less frequently used commands and options available that will not be covered in this book, rest assured that those covered are most of the commands used every day by SOLIDWORKS designers. The author strived hard to include many of the commands required in the Certified SOLIDWORKS Professional Advanced and Expert exams as listed on the SOLIDWORKS website.

This book is intended to help new users learn the basic concepts of SOLIDWORKS and good solid modeling techniques in an easy to follow guide that includes video instruction. It is a great starting point for those new to SOLIDWORKS or as a teaching aid in classroom training to become familiar with the software's interface, basic commands and strategies as users complete a series of models while learning different ways to accomplish a particular task. At the end of this book, you will have a fairly good understanding of the SOLIDWORKS interface and the most commonly used commands for part modeling, assembly and detailing after completing a series of components and their 2D drawings complete with Bill of Materials. The book focuses on the processes to complete the modeling of a part, instead of focusing on individual software commands or operations, which are generally simple enough to learn. Throughout this book the author introduces you to new commands that are required to pass the Certified SOLIDWORKS Associate exam, as listed on the SOLIDWORKS website. A dedicated chapter provides you with details about the exam, as well as a practice test to help you prepare for the actual exam. SOLIDWORKS is an easy to use CAD software that includes many time saving tools that will enable new and experienced users to complete design tasks faster than before. Most commands covered in this book have advanced options, which may not be covered in this book. This is meant to be a starting point to help new users to learn the basic and most frequently used commands. SOLIDWORKS Exercises - Learn by Practicing (3rd Edition) book is designed to help engineers and designers interested in learning SOLIDWORKS by practicing 100 real-world mechanical models. This book does not simply provide step-by-step instructions to design 3D models, instead it is a practice book that challenges users to first analyze the drawings and then create the models using the powerful toolset of SOLIDWORKS. This approach helps users to enhance their design skills and take it to the next level. You can also access the video instruction for creating each exercise of the book. This book is written with a wide range of SOLIDWORKS users in mind, varying from beginners to advanced users. In addition to SOLIDWORKS, each exercise of this book can also be designed on any other CAD software such as CATIA, Creo Parametric, NX, Autodesk Inventor, and Solid Edge. NOTE: The exercises/models available for download are created in SOLIDWORKS 2021 and cannot be opened in the lower version of SOLIDWORKS.