



**Introduction to Solid Modeling Using SolidWorks® 2012**presents "keystroke-level" tutorials, providing users new to the SolidWorks® program with all the detail they need to become confident using the software. Topics are illustrated and infused with examples from the real world such as flanges, brackets, helical springs, and more. Additionally, this easy-to-use guide has modular chapters, allowing for flexible organization of a course or self-study. Accessible and updated for the newest version of software, **Introduction to Solid Modeling Using SolidWorks® 2012** by Howard and Musto relates solid modeling exercises to engineering concepts in a way that introduces the engineering design process while simultaneously building student proficiency with a state-of-the-art software tool. The Student Design Kit is no longer available as a download. Instructors can receive free 1 year copies of SolidWorks for their students by going to [www.solidworks.com/studentaccess](http://www.solidworks.com/studentaccess). Schools must be on subscription to receive free student software.

**Motion Simulation and Mechanism Design Using SolidWorks Motion 2011**

**Engineering and Computer Graphics Workbook Using SolidWorks 2012**

**An Introduction to SolidWorks Flow Simulation 2012**

**Official Guide to Certified SolidWorks Associate Exams - CSWA, CSDA, CSWSA-FEA SolidWorks 2015, 2014, 2013, and 2012**

**Learning SolidWorks 2012**

*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.*

*SolidWorks 2012 Part 1 - Basic Tools introduces new users to the SolidWorks interface, SolidWorks tools and basic modeling techniques. It provides readers 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 for the reader. Furthermore, at the end of every chapter there are self test questionnaires to ensure that the reader has 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, the reader should create everything from the beginning and take it step by step.*

*"In this Solidworks 2012 training video, you will learn how to utilize the tools and techniques in this software to create 3D CAD models and assemblies. This training course is designed for the beginner, you do not have to have any previous experience with SolidWorks in order to learn from this tutorial video. Starting with the basics, you will tour the interface, and learn how to customize it to work efficiently within SolidWorks. Next, you will learn how to sketch your designs, before you proceed right into creating models. Each topic builds on the last, and you start creating a model of a bracket. Next, you will learn the tools and techniques to design a plastic housing, and then a more complex topic, creating a sheet metal enclosure. You not only learn the tools, but how to apply them efficiently, in real modelling examples. Other topics covered include, sweeps, creating part drawings, editing techniques, and visualization techniques. You will conclude with how to assemble and output your creations. By the conclusion of this computer based training course for SolidWorks 2012, you will be fully capable of creating your own 3D CAD models and assemblies, using this popular software. The author has included working files with this training course, to allow you to follow alongside as he covers each of the topics."--Resource description page.*

*Engineering Graphics with SolidWorks 2012 and Video Instruction DVD is written to assist technical school, two year college, four year university instructor/student or industry professional that is a beginner or intermediate SolidWorks user. The book combines the fundamentals of engineering graphics and dimensioning practices with a step-by-step project based approach to learning SolidWorks with the enclosed 1.5 hour Video Instruction DVD. Learn by doing, not just by reading! The book is divided into two parts: Engineering Graphics and SolidWorks 3D CAD software. In Chapter 1 through Chapter 3, you explore the history of engineering graphics, manual sketching techniques, orthographic projection, isometric projection, multi-view drawings, dimensioning practices and the history of CAD leading to the development of SolidWorks. In Chapter 4 through Chapter 8, you apply engineering graphics fundamentals and learn the SolidWorks User Interface, Document and System properties, simple parts, simple and complex assemblies, design tables, configurations, multi-sheet, multi-view drawings, Bill of Materials, Revision tables, basic and advanced features. Follow the step-by-step instructions in over 70 activities to develop eight parts, four sub-assemblies, three drawings, and six document templates. Formulate the skills to create and modify solid features to model a 3D FLASHLIGHT assembly. Chapter 9 provides a bonus section on the Certified SolidWorks Associate CSWA program with sample exam questions and initial and final SolidWorks models. Passing the CSWA exam proves to employers that you have the necessary fundamental engineering graphics and SolidWorks competencies. Review individual features, commands, and tools for each project with the book's 1.5 hour Video Instruction DVD and SolidWorks Help. The chapter exercises analyze and examine usage competencies based on the project objectives. The book is designed to compliment the SolidWorks Tutorials located in the SolidWorks Help menu. Each section explores the SolidWorks Online User's Guide to build your working knowledge of SolidWorks. Desired outcomes and usage competencies are listed for each project. Know your objectives up front. Follow the step-by-step procedures to achieve your design goals. Work between multiple documents, features, commands, and properties that represent how engineers and designers utilize SolidWorks in industry. The authors developed the industry scenarios by combining their own industry experience with the knowledge of engineers, department managers, vendors, and manufacturers. These professionals are directly involved with SolidWorks everyday. Their responsibilities go far beyond the creation of just a 3D model.*

*Package Structure and Mechanom Design Using SolidWorks 2012*

*Product Design Modeling using CAD/CAE*

*Assembly Modeling with SolidWorks 2012*

*SOLIDWORKS 2011 Tutorial*

*SOLIDWORKS 2018 Tutorial with Video Instruction*

Analysis of Machine Elements Using SolidWorks Simulation 2012 is written primarily for first-time SolidWorks Simulation 2012 users who wish to understand finite element analysis capabilities applicable to stress analysis of mechanical elements. The focus of examples is on problems commonly found in an introductory, undergraduate, Design of Machine Elements or similarly named courses. In order to be compatible with most machine design textbooks, this text begins with problems that can be solved with a basic understanding of mechanics of materials. Progressing to a design of mechanical elements course. Paralleling this progression of problem types, each chapter introduces new software concepts and capabilities. Many examples are accompanied by problem solutions based on use of classical equations for stress determination. Unlike many step-by-step user guides that only list a succession of steps, which if followed correctly lead to successful solution of a problem, this text attempts to provide insight into why each step is performed. This approach amplifies two fundamental tenets of this text: The first is that the user should understand the underlying theory of the problem. The second is that the user should be able to apply the theory to a wide range of problems. 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 the principles of stress analysis and the Finite Element Method (FEM).

The Commands Guide Tutorial for SolidWorks 2012 is a comprehensive reference book written to assist the beginner to intermediate user of SolidWorks 2012. SolidWorks is an immense software package, and no one book can cover all topics for all users. The book provides a centralized reference location to address many of the tools, features and techniques of SolidWorks 2012. This book covers the following: System and Document properties FeatureManagers PropertyManagers ConfigurationManagers RenderManagers 2D and 3D Sketch tools Sketch entities FlowXpress PhotoView 360 Pack and Go Intelligent Modeling techniques and more. Chapter 1 provides a basic overview of the concepts and terminology used throughout this book using SolidWorks® 2012 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 used infrequently. Chapter 2 provides a detailed overview of the 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. All models for the 240 plus tutorials are located on the enclosed book CD with their solution (initial and final). 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 illustrate how multiple design situations and systematic steps combine to produce successful designs. The authors developed the tutorials by combining their own industry experience with the knowledge of engineers, department managers, professors, vendors and manufacturers. These professionals are directly involved with SolidWorks everyday. Their responsibilities go far beyond the creation of just a 3D model.

*SolidWorks 2012 Tutorial*SDC Publications

*An Introduction to SolidWorks Flow Simulation 2012 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 thirteen chapters of this book are directed to 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 airflow flow, boundary layers, flow meters, heat exchanger, natural and forced convection, pipe flow, rotating flow, tube bank flow and valve flow.*

*Drawing and Detailing with SOLIDWORKS 2022*

*No Experience Required*

*Computer-Aided Engineering Design*

*SolidWorks 2012 Tutor*

*The Computer Aided Engineering Design Series*

*Drawing and Detailing with SolidWorks 2012 is written to educate and assist students, designers, engineers, and professionals in the drawing and detailing tools of SolidWorks. Explore the learning process through a series of design situations, industry scenarios, projects, and objectives target towards the beginning to intermediate SolidWorks user. Work through numerous activities to create multiple-view, multiple-sheet, detailed drawings, and assembly drawings. Develop Drawing templates, Sheet formats, and Custom configurations, assembly configurations, and design tables with equations. Manipulate annotations in parts, drawings, assemblies, Revision tables, Bills of Materials and more. Apply your drawing and detailing knowledge to over thirty exercises. The exercises test your usage competency as well as explore additional topics with industry examples. Advanced exercises require the ability to create parts and assemblies. Drawing and Detailing with SolidWorks 2012 is not a reference book for all drafting and drawing techniques. The following areas: History of engineering graphics, manual sketching techniques, orthographic projection, isometric projection, multi-view drawings, dimensioning practices, fasteners in general, tolerance and fit and the history of CAD leading to the development of SolidWorks. Start a SolidWorks 2012 session and to understand the following interfaces: Menu bar toolbar, Menu bar menu, Drop-down menus, Context toolbars, Consolidated drop-down toolbars, System feedback icons, Confirmation Corner, Heads-up View toolbars. Properties to reflect the ASME Y14 Engineering Drawing and related Drawing Practices. Import an AutoCAD file as a Sheet format. Insert SolidWorks System Properties and Custom Properties. Create new SolidWorks Document tabs. Create multi-sheet drawings from various part configurations and develop the following drawing views: Standard, Isometric, Auxiliary, Section, Broken Section, Detail, Half Section (Cut-away), Crop, Projected Back, with a Bill of Materials and a Revision Table and Revisions. Insert and edit: Dimensioning, Surface Finishes, and Weld Symbols using DimXpert and manual techniques. Create, apply, and save Blocks and Parametric Notes in a drawing. Chapter 10 provides a bonus section on the Certified SolidWorks Associate CSWA program with sample exam questions and initial and final SolidWorks models. The book is designed to compliment the SolidWorks Users Guide, SolidWorks Reference Guide, Standards, Engineering Drawing/Design and Graphics Communications reference books. The authors recognize that the authors developed the industry scenarios by combining industry experience with their knowledge of engineers, sales, vendors and manufacturers. These professionals are directly involved with SolidWorks everyday. Their work goes far beyond a simple drawing with a few dimensions. They create detailed drawings, assembly drawings, marketing drawings and customer drawings. SolidWorks users work between drawings, parts, assemblies and many other documents to complete a project on time.*

*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 exam, 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 the principles of stress analysis and the Finite Element Method (FEM). 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 the principles of stress analysis and the Finite Element Method (FEM).*

*Motion Simulation and Mechanism Design with SolidWorks Motion 2011 is written to help you become familiar with SolidWorks Motion, an add-on module of the SolidWorks software family. This book covers the basic concepts and frequently used commands required to advance readers from a novice to intermediate level in using SolidWorks Motion. SolidWorks Motion allows you to use solid models created in SolidWorks to simulate and visualize mechanism motion and performance. Using SolidWorks Motion early in the design process allows you to design defects found in the physical testing phase. Therefore, using SolidWorks Motion contributes to a more cost effective, reliable, and efficient product design process. Basic concepts discussed in this book include model generation, such as creating assembly mates for proper motion; carrying out simulation and animation; and visualizing simulation results, such as graphs and spreadsheet data. These concepts are introduced using simple, yet realistic examples. Verifying the results obtained from the computer simulation is the incorporation of theoretical discussions for kinematic and dynamic analyses in conjunction with the simulation results obtained using SolidWorks Motion. Verifying the simulation results will increase your confidence in using the software and prevent you from being fooled by erroneous simulations.*

*Take a step-by-step, guided tour of SolidWorks 2010 that can be tailored to match your unique pace, allowing you to progress easily and efficiently through the content to achieve your ultimate goal: using the software effectively. Harnessing the power of numerous and varied tutorial exercises, SOLIDWORKS 2010 TUTOR will take you through a series of steps required for the completion of a final product, whether it is a 3D part or an assembly file. Each chapter is arranged so that it builds upon the skills and commands of the software and the basics of navigating the user interface. Coverage then progresses to creating sketches, then creating part files, and finally, creating assemblies. Using a combination of short, command-focused exercises and longer, more involved tutorial files, you will find this a valuable tool for establishing a solid foundation in SolidWorks and then, once you have mastered that, for fine tuning your skills.*