Download File Mastercam For Solidworks Training Guide Free Download Pdf

Learn SOLIDWORKS 2020 Mastering SolidWorks Learning SOLIDWORKS 2021 Learning SOLIDWORKS 2019 SOLIDWORKS 2020 Tutorial Beginner's Guide to SOLIDWORKS 2020 - Level II SOLIDWORKS 2019 and Engineering Graphics SolidWorks 2010 Automating SOLIDWORKS 2019 Using Macros Design of Weldments Solidworks 2013 Bible Teach Yourself SolidWorks SOLIDWORKS 2019 Tutorial Learning SOLIDWORKS 2016 Beginner's Guide to SOLIDWORKS 2019 - Level I Beginner's Guide to SolidWorks 2015 - Level I SOLIDWORKS 2018 Tutorial with Video Instruction An Introduction to SOLIDWORKS Flow Simulation 2015 SOLIDWORKS 2017 Tutorial with Video Instruction SolidWorks 2019 Training Guide Learn SOLIDWORKS 2020 Learn SOLIDWORKS Beginner's Guide to SOLIDWORKS 2021 - Level I SOLIDWORKS 2016 in 5 Hours with Video Instruction Official Certified SOLIDWORKS Professional Certification Guide (2018, 2019, 2020) Beginner's Guide to SOLIDWORKS 2022 - Level I Finite Element Analysis Concepts SOLIDWORKS 2021 Tutorial SOLIDWORKS 2017 in 5 Hours with Video Instruction Learning Autodesk Inventor 2022 Engineering Graphics with SOLIDWORKS 2021 Getting Started with 3D Printing Learn SOLIDWORKS 2022 - Second Edition Automating SOLIDWORKS 2021 Using Macros SOLIDWORKS 2021: A Power Guide for Beginners and Intermediate Users Official Certified SOLIDWORKS Professional Certification Guide (SOLIDWORKS 2020 - 2023) SolidWorks For Dummies Introduction to Static Analysis Using SolidWorks Simulation Official Certified SOLIDWORKS Professional Certification Guide (SOLIDWORKS 2015 - 2017) Official Certified SolidWorks Professional (CSWP) Certification Guide with Video Instruction

Explore a practical and example-driven approach to understanding SOLIDWORKS 2020 and achieving CSWA and CSWP certification Key Features Gain comprehensive insights into the core aspects of mechanical part modeling Get up to speed with generating assembly designs with both standard and advanced mates Focus on design practices for both 2D as well as 3D modeling and prepare to achieve CWSP and CWSA certification Book Description SOLIDWORKS is the leading choice for 3D engineering and product design applications across industries such as aviation, automobiles, and consumer product design. This book takes a practical approach to getting you up and running with SOLIDWORKS 2020. You'll start with the basics, exploring the software interface and working with drawing files. The book then guides you through topics such as sketching, building complex 3D models, generating dynamic and static assemblies, and generating 2D engineering drawings to equip you for mechanical design projects. You'll also do practical exercises to get hands-on with creating sketches, 3D part models, assemblies, and drawings. To reinforce your understanding of SOLIDWORKS, the book is supplemented by downloadable files that will help you follow up with the concepts and exercises found in the book. By the end of this book, you'll have gained the skills you need to create professional 3D mechanical models using SOLIDWORKS, and you'll be able to prepare effectively for the Certified SOLIDWORKS Associate (CSWA) and Certified SOLIDWORKS Professional (CSWP) exams. What you will learn Understand the fundamentals of SOLIDWORKS and parametric modeling Create professional 2D sketches as bases for 3D models using simple and advanced modeling techniques Use SOLIDWORKS drawing tools to generate standard engineering drawings Evaluate mass properties and materials for designing parts and assemblies Understand the objectives and the formats of the CSWA and CSWP exams Discover expert tips and tricks to generate different part and assembly configurations for your mechanical designs Who this book is for This book is for aspiring engineers, designers, drafting technicians, or anyone looking to get started with the latest version of SOLIDWORKS. Anyone interested in becoming a Certified SOLIDWORKS Associate (CSWA) or Certified SOLIDWORKS Professional (CSWP) will also find this book useful. Engineers working with SOLIDWORKS are often faced with tedious, repetitive work that can consume a lot of time, but it doesn’t have to be this way. One of the most exciting aspects of SOLIDWORKS is its robust programming interface or API. The SOLIDWORKS API allows you to write code that can perform almost any series of actions for you. SOLIDWORKS was built from the ground up to automate, and in this book, you will learn how to take advantage of these powerful tools to speed up your work. Automating SOLIDWORKS 2019 Using Macros is designed as a tutorial to help beginner to intermediate programmers develop macros for SOLIDWORKS. Experience with programming isn’t required. The book starts with a new chapter on the fundamentals of Visual Basic.NET and the SOLIDWORKS API to make the learning process easier for beginners. The rest of the book introduces you to developing macros using the SOLIDWORKS API. The book concludes with a chapter dedicated to some of the author’s favorite source code for you to use as the basis for typical automation procedures. The focus of this book is primarily on the Visual Studio Tools for Applications (VSTA) macro interface. It covers many of the major API functions through practical use cases. It will teach you the fundamentals of Visual Basic.NET as well as SOLIDWORKS, SOLIDWORKS PDM Professional, SOLIDWORKS Document Manager and Excel API functions. Author Mike Spens has been professionally developing macros for SOLIDWORKS for more than a decade. He has helped numerous companies develop their own programs and streamline their workflows. If you want to learn how to develop your own

macros for SOLIDWORKS, following best practices and using well written code, then this is the perfect book for you. 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. Young engineers are often required to utilize commercial finite element software without having had a course on finite element theory. That can lead to computer-aided design errors. This book outlines the basic theory, with a minimum of mathematics, and how its phases are structured within a typical software. The importance of estimating a solution, or verifying the results, by other means is emphasized and illustrated. The book also demonstrates the common processes for utilizing the typical graphical icon interfaces in commercial codes. in particular, the book uses and covers the widely utilized SolidWorks solid modeling and simulation system to demonstrate applications in heat transfer, stress analysis, vibrations, buckling, and other fields. The book, with its detailed applications, will appeal to upper-level undergraduates as well as engineers new to industry. 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. An Introduction to SOLIDWORKS Flow Simulation 2015 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. Whether it’s your first venture into 3D technical drawing software or you’re switching to SolidWorks from something else, you’re probably excited about what this CAD program has to offer. Chances are, you figure it’s going to take awhile to get the hang of it before you can begin cranking out those perfectly precise 3D designs. SolidWorks For Dummies, 2nd Edition, can help you dramatically shorten that get-acquainted period! SolidWorks For Dummies, 2nd Edition will help you get up and running quickly on the leading 3D technical drawing software. You’ll see how to set up SolidWorks to create the type of drawings your industry requires and how to take full advantage of its legendary 3D features. You’ll discover how to: Work with virtual prototypes Understand the user interface Use templates and sketch, assemble, and create drawings Automate the drawing process Review drawings and collaborate with other team members Define and edit sketches Create dimensions and annotations Print or plot your drawings Leverage existing designs Sample files on the bonus CD-ROM show you how to apply the latest version of SolidWorks and accomplish specific tasks. Even if you’re brand-new to CAD software, SolidWorks For Dummies, 2nd Edition will have you feeling like a pro in no time. You’ll find you’ve entered a whole new dimension. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file. 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 2021 Tutorial 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 in the 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. The only continuous, step-by-step tutorial for SolidWorks SolidWorks is a 3D CAD manufacturing software package that has been used to design everything from aerospace robotics to bicycles. This book teaches beginners to use SolidWorks through a step-by-step tutorial, letting you build, document, and present a project while you learn. Tools and functionality are explained in the context of professional, real-world tasks and workflows. You will learn the essential functions and gain the skills to use the software at once. SolidWorks is a popular design software for manufacturing, and this book introduces it in the context of actually creating an object Begins with an overview of SolidWorks conventions and the interface Explains how to create models and drawings, create a revolved part and subassembly, and model parts within a subassembly Explores modification capabilities and drawing and Bill of Materials templates Moves on to top-level assembly models and drawings, Toolbox components and the Design Library, mates, export and printing capabilities, and creating renderings Includes a glossary, a foreword from the SolidWorks product manager, and downloadable tutorial files SolidWorks 2010: No Experience Required quickly turns beginners into confident users of SolidWorks. This book will teach you everything you need to know to start using SOLIDWORKS 2019 with easy to understand, step-by-step tutorials. This book features a simple robot design used as a project throughout the book. You will learn to model parts, create assemblies, run simulations and even create animations of your robot design. No previous experience with Computer Aided Design (CAD) is needed since this book starts at an introductory level. The author begins by getting you familiar with the SOLIDWORKS interface and its basic tools right away. You will start by learning to model simple robot parts and before long you will graduate to creating more complex parts and multi-view drawings. Along the way you will learn the fundamentals of parametric modeling through the use of geometric constraints and relationships. You will also become familiar with many of SOLIDWORKS's powerful tools and commands that enable you to easily construct complex features in your models. Also included is coverage of gears, gear trains and spur gear creation using SOLIDWORKS. This book continues by examining the different mechanisms commonly used in walking robots. You will learn the basic types of planar four-bar linkages commonly used in mechanical designs and how to use the GeoGebra Dynamic Geometry software to simulate and analyze 2D linkages. Using the knowledge you gained about linkages and mechanisms, you will learn how to modify your robot and change its behavior by modifying or creating new parts. In the second to last chapter of this book you learn how to combine all the robot parts into assemblies and then run motion analysis. You will finish off your project by creating 3D animations of your robot in action. Finally, in the last chapter, the author introduces you to 3D printing. You will learn the general principles of 3D printing including a brief history of 3D printing, the types of 3D printing technologies, commonly used filaments, and the basic procedure for printing a 3D model. Being able to turn your designs into physical objects will open up a whole new world of possibilities to you. There are many books that show you how to perform individual tasks with SOLIDWORKS, but this book takes you through an entire project and shows you the complete engineering process. By the end of this book you will have modeled and assembled nearly all the parts that make up the TAMIYA® Mechanical Tiger and can start building your own robot. SOLIDWORKS 2017 in 5 Hours with video instruction introduces the new user to the basics of using SOLIDWORKS 3D CAD software in five easy lessons. This book

is intended for the student or designer that needs to learn SOLIDWORKS quickly and effectively for senior capstone, machine design, kinematics, dynamics, and other engineering and technology projects that use SOLIDWORKS as a tool. Engineers in industry are expected to have SOLIDWORKS skills for their company's next project. Students need to learn SOLIDWORKS without taking a formal CAD course. Based on years of teaching SOLIDWORKS to engineering students, SOLIDWORKS 2017 in 5 Hours concentrates on the areas where the new user improves efficiency in the design modeling process. By learning the correct SOLIDWORKS skills and file management techniques, you gain the most knowledge in the shortest period of time. You develop a mini Stirling Engine and investigate the proper design intent and constraints. The mini Stirling Engine is based on the external combustion, closed cycle engine of Scottish inventor, Robert Stirling. In addition to 3D modeling, the engine can be used to teach and connect many engineering and physics principles. You begin with an overview of SOLIDWORKS and the User Interface (UI), its menus, toolbars and commands. With a quick pace, you learn the essentials of 2D sketching, part and assembly creation, preform motion study, develop detailed part and assembly drawings and much more. Designed to provide an insight into the Mechanical Design concept DESCRIPTION The book promises to make you understand and practice the SolidWorks framework. The aim of this book is to take you on a journey to all the phases of SolidWorks. SolidWorks is an innovative, next-generation industry software that allows you to solve and understand the designing and mechanical problems. SolidWorks uses a technical implementation approach for sketching, surfacing, and sheet metal drafting in an incremental and easy way. The main objective of this book is to make the reader understand the concepts of design based on practical knowledge rather than theoretical knowledge. KEY FEATURES Each command is explained in a simple and understandable manner Step-by-step explanation Practical knowledge rather than theoretical knowledge Covers all the modules of SolidsWorks 2019 WHAT WILL YOU LEARN SolidWorks and its GUI Sketches (Line, Rectangle, Slot, Circle, ARC, Polygon, and Spline) Extrude, Revolved, Swept, Loft, Boundary, Filt, and Chamfer) Surface (Extruded, Revolved, Swept, Lofted, Boundary, Filled, and Planner) Sheet metal (Base flange/tab, Edge flange, Miter flange, and Hem) Weldments (Structural member, Trim/Extend, End cap, and Gusset) Curves Mold design Drafting Assembly WHO THIS BOOK IS FOR Mechanical engineers and designers, automobile engineers, product designers, heavy vehicle designers. Table of Contents ?1. Introduction and Overview 2. Sketch 3. Features 4. Surface 5. Sheet Metal 6. Weldments 7. Curves 8. Mold Design 9. Assembly 10. Drafting 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. 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. Engineers working with SOLIDWORKS are often faced with tedious, repetitive work that can consume a lot of time, but it doesn't have to be this way. One of the most exciting aspects of SOLIDWORKS is its robust programming interface or API. The SOLIDWORKS API allows you to write code that can perform almost any series of actions for you. SOLIDWORKS was built from the ground up to automate, and in this book, you will learn how to take advantage of these powerful tools to speed up your work. Automating SOLIDWORKS 2021 Using Macros is designed as a tutorial to help beginner to intermediate programmers develop macros for SOLIDWORKS. Experience with

programming isn’t required. The book starts with a new chapter on the fundamentals of Visual Basic.NET and the SOLIDWORKS API to make the learning process easier for beginners. The rest of the book introduces you to developing macros using the SOLIDWORKS API. The book concludes with a chapter dedicated to some of the author’s favorite source code for you to use as the basis for typical automation procedures. The focus of this book is primarily on the Visual Studio Tools for Applications (VSTA) macro interface. It covers many of the major API functions through practical use cases. It will teach you the fundamentals of Visual Basic.NET as well as SOLIDWORKS, SOLIDWORKS PDM Professional, SOLIDWORKS Document Manager and Excel API functions. Author Mike Spens has been professionally developing macros for SOLIDWORKS for more than a decade. He has helped numerous companies develop their own programs and streamline their workflows. If you want to learn how to develop your own macros for SOLIDWORKS, following best practices and using well written code, then this is the perfect book for you. SOLIDWORKS 2019 and Engineering Graphics: An Integrated Approach combines an introduction to SOLIDWORKS 2019 with a comprehensive coverage of engineering graphics principles. Not only will this unified approach give your course a smoother flow, your students will also save money on their textbooks. What’s more, the exercises in this book cover the performance tasks that are included on the Certified SOLIDWORKS Associate (CSWA) Examination. Reference guides located at the front of the book and in each chapter show where these performance tasks are covered. The primary goal of SOLIDWORKS 2019 and Engineering Graphics: An Integrated Approach is to introduce the aspects of Engineering Graphics with the use of modern Computer Aided Design package – SOLIDWORKS 2019. This text is intended to be used as a training guide for students and professionals. The chapters in this text proceed in a pedagogical fashion to guide you from constructing basic shapes to making complete sets of engineering drawings. This text takes a hands-on, exercise-intensive approach to all the important concepts of Engineering Graphics, as well as in-depth discussions of parametric feature-based CAD techniques. This textbook contains a series of sixteen chapters, with detailed step-by-step tutorial style lessons, designed to introduce beginning CAD users to the graphics language used in all branches of technical industry. This book does not attempt to cover all of SOLIDWORKS 2019’s features, only to provide an introduction to the software. It is intended to help you establish a good basis for exploring and growing in the exciting field of Computer Aided Engineering. This book, along with the companion disc that accompanies it, 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. This book comes with a companion disc containing segment videos for you to follow while you use the book. Each segment video provides valuable information, tips and tricks to successfully pass the CSWP CORE exam. SolidWorks model files, in both their initial and final state, are provided on this disc for SolidWorks 2012, 2013 and 2014. 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. This book will teach you everything you need to know to start using SOLIDWORKS 2016 with easy to understand, step-by-step tutorials. This book features a simple robot design used as a project throughout the book. You will learn to model parts, create assemblies, run simulations and even create animations of your robot design. No previous experience with Computer Aided Design (CAD) is needed since this book starts at an introductory level. The author begins by getting you familiar with the SOLIDWORKS interface and its basic tools right away. You will start by learning to model simple robot parts and before long you will graduate to creating more complex parts and multi-view drawings. Along the way you will learn the fundamentals of parametric modeling through the use of geometric constraints and relationships. You will also become familiar with many of SOLIDWORKS powerful tools and commands that enable you to easily construct complex features in your models. Also included is coverage of gears, gear trains and spur gear creation using SolidWorks. This book continues by examining the different mechanisms commonly used in walking robots. You will learn the basic types of planar four-bar linkages commonly used in mechanical designs and how to use the GeoGebra Dynamic Geometry software to simulate and analyze 2D linkages. Using the knowledge you gained about linkages and mechanism, you will learn how to modify your robot and change its behavior by modifying or creating new parts. In the final chapter of this book you learn how to combine all the robot parts into assemblies and then run motion analysis. You will finish off your project by creating 3D animations of your robot in action. There are many books that show you how to perform individual tasks with SOLIDWORKS, but this book takes you through an entire project and shows you the complete engineering process. By the end of this book you will have modeled and assembled nearly all the parts that make up the TAMIYA Mechanical Tiger and can start building your own robot. Get to grips with leading 3D engineering and product design application to design robust 3D models and achieve CSWA and CSWP certification Key FeaturesGain comprehensive insights into the core aspects of 3D modeling's mechanical partsLearn how to generate assembly designs with both standard and advanced matesDiscover design practices for both 2D as well as 3D modeling and prepare to achieve CSWP and CSWA certificationBook Description SOLIDWORKS is the leading choice for 3D engineering and product design applications across industries such as aviation, automobile, and consumer product design. This book helps you to get up and running with SOLIDWORKS and understand each new concept and tool with the help of easy-to-follow exercises. You'll begin with the basics, exploring the software interface and finding out how to work with drawing files. The book then guides you through topics such as sketching, building complex 3D models, generating dynamic and static assemblies, and generating 2D engineering drawings to prepare you to take on any design project. You'll also work with practical exercises to get hands-on experience with creating sketches, 3D part models, assemblies, and drawings. To reinforce your understanding of SOLIDWORKS, the book is supplemented by downloadable files that will help you to understand the concepts and exercises more easily. Finally, you'll

also work on projects for 3D modeling objects inspired by everyday life. By the end of this SOLIDWORKS book, you'll have gained the skills you need to create professional 3D mechanical models using SOLIDWORKS and be able to prepare effectively for the Certified SOLIDWORKS Associate (CSWA) and Certified SOLIDWORKS Professional (CSWP) exams. What you will learnUnderstand the fundamentals of SOLIDWORKS and parametric modelingCreate professional 2D sketches as bases for 3D models using simple and advanced modeling techniquesUse SOLIDWORKS drawing tools to generate standard engineering drawingsEvaluate mass properties and materials for designing parts and assembliesJoin different parts together to form static and dynamic assembliesDiscover expert tips and tricks to generate different part and assembly configurations for your mechanical designsWho this book is for This book is for aspiring engineers, designers, makers, draftsmen, and hobbyists looking to get started with SOLIDWORKS and explore the software. Individuals who are interested in becoming Certified SOLIDWORKS Associates (CSWAs) or Certified SOLIDWORKS Professionals (CSWPs) will also find this book useful. No specific background is needed to follow the concepts in the book as it starts from the basics of SOLIDWORKS. However, basic theoretical knowledge of 3D modeling will be helpful to get the most out of this book. Uses Finite Element Analysis (FEA) as Implemented in SolidWorks Simulation Outlining a path that readers can follow to ensure a static analysis that is both accurate and sound, Introduction to Static Analysis using SolidWorks Simulation effectively applies one of the most widely used software packages for engineering design to the concepts of static analysis. This text utilizes a step-by-step approach to introduce the use of a finite element simulation within a computer-aided design (CAD) tool environment. It does not center on formulae and the theory of FEM; in fact, it contains essentially no theory on FEM other than practical guidelines. The book is self-contained and enables the reader to progress independently without an instructor. It is a valuable guide for students, educators, and practicing professionals who wish to forego commercial training programs, but need to refresh or improve their knowledge of the subject. Classroom Tested with Figures, Examples, and Homework Problems The book contains more than 300 illustrations and extensive explanatory notes covering the features of the SolidWorks (SW) Simulation software. The author presents commonly used examples and techniques highlighting the close interaction between CAD modelling and FE analysis. She describes the stages and program demands used during static analysis, details different cases, and explores the impact of selected options on the final result. In addition, the book includes hands-on exercises, program commands, and a summary after each chapter. Explores the static studies of simple bodies to more complex structures Considers different types of loads and how to start the loads property managers Studies the workflow of the run analysis and discusses how to assess the feedback provided by the study manager Covers the generation of graphs Determines how to assess the quality of the created mesh based on the final results and how to improve the accuracy of the results by changing the mesh properties Examines a machine unit with planar symmetrical geometry or with circular geometry exposed to symmetrical boundary conditions Compares 3D FEA to 2D FEA Discusses the impact of the adopted calculating formulation by comparing thin-plate results to thick-plate results Introduction to Static Analysis using SolidWorks Simulation equips students, educators, and practicing professionals with an in-depth understanding of the features of SW Simulation applicable to static analysis (FEA/FEM). 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 2016 in 5 Hours with video instruction introduces the new user to the basics of using SOLIDWORKS 3D CAD software in five easy lessons. This book is intended for the student or designer that needs to learn SOLIDWORKS quickly and effectively for senior capstone, machine design, kinematics, dynamics, and other engineering and technology projects that use SOLIDWORKS as a tool. Engineers in industry are expected to have SOLIDWORKS skills for their company’s next project. Students need to learn SOLIDWORKS without taking a formal CAD course. Based on years of teaching SOLIDWORKS to engineering students, SOLIDWORKS 2016 in 5 Hours concentrates on the areas where the new user improves efficiency in the design modeling process. By learning the correct SOLIDWORKS skills and file management techniques, you gain the most knowledge in the shortest period of time. You develop a mini Stirling Engine and investigate the proper design intent and constraints. The mini Stirling Engine is based on the external combustion, closed cycle engine of Scottish inventor, Robert Stirling. In addition to 3D modeling, the engine can be used to teach and connect many engineering and physics principles. You begin with an overview of SolidWorks and the User Interface (UI), its menus, toolbars and commands. With a quick pace, you learn the essentials of 2D sketching, part and assembly creation, preform motion study, develop detailed part and assembly drawings and much more. View the provided videos for each section of the book to enhance your experience. Start a SOLIDWORKS 2016 sessionUnderstand the SOLIDWORKS 2016 InterfaceCreate 2D Sketching, Sketch Planes and use Sketch toolsCreate 3D Features and apply Design IntentCreate an AssemblyCreate fundamental Drawings Part 1 & Part 2 This book will teach you

everything you need to know to start using Autodesk Inventor 2022 with easy to understand, step-by-step tutorials. This book features a simple robot design used as a project throughout the book. You will learn to model parts, create assemblies, run simulations and even create animations of your robot design. An unassembled version of the same robot used throughout the book can be bundled with the book. No previous experience with Computer Aided Design(CAD) is needed since this book starts at an introductory level. The author begins by getting you familiar with the Inventor interface and its basic tools. You will start by learning to model simple robot parts and before long you will graduate to creating more complex parts and multi-view drawings. Along the way you will learn the fundamentals of parametric modeling through the use of geometric constraints and relationships. You will also become familiar with many of Inventor's powerful tools and commands that enable you to easily construct complex features in your models. Also included is coverage of gears, gear trains and spur gear creation using Autodesk Inventor. This book continues by examining the different mechanisms commonly used in walking robots. You will learn the basic types of planar four-bar linkages commonly used in mechanical designs and how to use the GeoGebra Dynamic Geometry software to simulate and analyze 2D linkages. Using the knowledge you gained about linkages and mechanism, you will learn how to modify your robot and change its behavior by modifying or creating new parts. In the final chapter of this book you learn how to combine all the robot parts into assemblies and then run motion analysis. You will finish off your project by creating 3D animations of your robot in action. There are many books that show you how to perform individual tasks with Autodesk Inventor, but this book takes you through an entire project and shows you the complete engineering process. By the end of this book you will have modeled and assembled nearly all the parts that make up the TAMIYA® Mechanical Tiger and can start building your own robot. This book will teach you everything you need to know to start using SOLIDWORKS 2021 with easy to understand, step-by-step tutorials. This book features a simple robot design used as a project throughout the book. You will learn to model parts, create assemblies, run simulations and even create animations of your robot design. No previous experience with Computer Aided Design (CAD) is needed since this book starts at an introductory level. The author begins by getting you familiar with the SOLIDWORKS interface and its basic tools right away. You will start by learning to model simple robot parts and before long you will graduate to creating more complex parts and multi-view drawings. Along the way you will learn the fundamentals of parametric modeling through the use of geometric constraints and relationships. You will also become familiar with many of SOLIDWORKS's powerful tools and commands that enable you to easily construct complex features in your models. Also included is coverage of gears, gear trains and spur gear creation using SOLIDWORKS. This book continues by examining the different mechanisms commonly used in walking robots. You will learn the basic types of planar four-bar linkages commonly used in mechanical designs and how to use the GeoGebra Dynamic Geometry software to simulate and analyze 2D linkages. Using the knowledge you gained about linkages and mechanisms, you will learn how to modify your robot and change its behavior by modifying or creating new parts. In the second to last chapter of this book you learn how to combine all the robot parts into assemblies and then run motion analysis. You will finish off your project by creating 3D animations of your robot in action. Finally, in the last chapter, the author introduces you to 3D printing. You will learn the general principles of 3D printing including a brief history of 3D printing, the types of 3D printing technologies, commonly used filaments, and the basic procedure for printing a 3D model. Being able to turn your designs into physical objects will open up a whole new world of possibilities to you. There are many books that show you how to perform individual tasks with SOLIDWORKS, but this book takes you through an entire project and shows you the complete engineering process. By the end of this book you will have modeled and assembled nearly all the parts that make up the TAMIYA® Mechanical Tiger and can start building your own robot. 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. Includes Video Instruction Each copy of this book includes access to video instruction. In these videos the author provides a clear 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 while he provides additional details along the way. Captioned versions of these videos are also available for customers who want or need video captions. 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. • Uses step-by-step, project based tutorials designed for beginning or intermediate users • Will prepare you for the Certified SOLIDWORKS Associate Exam • Includes a chapter introducing you to 3D printing SOLIDWORKS 2020 Tutorial 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 in the 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. 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 Graphics with SOLIDWORKS 2021 is written to assist students, designers, engineers and professionals who are new to SOLIDWORKS. The book combines the fundamentals of engineering graphics and dimensioning practices with a step-by-step project based approach to learning SOLIDWORKS. The book is divided into four sections with 11 Chapters. Chapters 1 - 3: Explore the history of engineering graphics, manual sketching techniques, orthographic projection, Third vs. First angle projection, multi-view drawings, dimensioning practices (ASME Y14.5-2009 standard), line type, fit type, tolerance, fasteners in general, general thread notes and the history of CAD leading to the development of SOLIDWORKS. Chapters 4 - 9: Comprehend the SOLIDWORKS User Interface and CommandManager, Document and System properties, simple machine parts, simple and complex assemblies, proper design intent, design tables, configurations, multi-sheet, multi-view drawings, BOMs, and Revision tables using basic and advanced features. Follow the step-by-step instructions in over 80 activities to develop eight parts, four sub-assemblies, three drawings and six document templates. Chapter 10: Prepare for the Certified SOLIDWORKS Associate (CSWA) exam. Understand the curriculum and categories of the CSWA exam and the required model knowledge needed to successfully take the exam. Chapter 11: Provide a basic understanding between Additive vs. Subtractive manufacturing. Discuss Fused Filament Fabrication (FFF), STereoLithography (SLA), and Selective Laser Sintering (SLS) printer technology. Select suitable filament material. Comprehend 3D printer terminology. Knowledge of preparing, saving, and printing a model on a Fused Filament Fabrication 3D printer. Information on the Certified SOLIDWORKS Additive Manufacturing (CSWA-AM) exam. Review individual features, commands, and tools using SOLIDWORKS Help. The chapter exercises analyze and examine usage competencies based on the chapter objectives. The book is designed to complement the SOLIDWORKS Tutorials located in the SOLIDWORKS Help menu. 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 author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers. The book is written in a casual, conversational style. It is easily accessible to those who have no prior knowledge in 3D printing, yet the book's message is solidly practical, technically

accurate, and consumer-relevant. The chapters include contemporary, real-life learning exercises and insights for how to buy, use and maintain 3D printers. It also covers free 3D modeling software, as well as 3D printing services for those who don't want to immediately invest in the purchase of a 3D printer. Particular focus is placed on free and paid resources, the various choices available in 3D printing, and tutorials and troubleshooting guides. 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 test as listed on the SolidWorks website, as well as several more. 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. A comprehensive resource packed with information for both beginners and advanced users SolidWorks is the leading 3D solid modeling software used in computer-aided design. It's powerful but not simple. This complete guide introduces beginners to the software but then goes far beyond, covering numerous details that advanced users have requested. Beginners will learn not only how the software works but why, while more experienced users will learn all about search criteria, Pack-and-Go, other file management concepts, and much more. A valuable companion website contains before and after real-world parts and assemblies along with many example files used in the text. Additionally, the text of the book is augmented by video tutorials with author voice-over which can be found on the website. SolidWorks is the leading 3D CAD program, and previous editions of this book have sold more than 33,000 copies Covers necessary information to give beginners a solid foundation in the software, including part and assembly modeling and 2D drawing techniques Addresses a wide range of advanced topics not treated in other books, including best practices, search criteria, Pack-and-Go, and other file management concepts Includes tutorials on both beginning and advanced topics, with videos; sample part, assembly, and drawing files; and before-and-after example files available on the companion website SolidWorks 2013 Bible is the ultimate resource on SolidWorks 2013, the book beginners can start with and advanced users will want to keep close at hand. Explore a practical and example-driven approach to understanding SOLIDWORKS 2020 and achieving CSWA and CSWP certification Key FeaturesGain comprehensive insights into the core aspects of mechanical part modelingGet up to speed with generating assembly designs with both standard and advanced matesFocus on design practices for both 2D as well as 3D modeling and prepare to achieve CWSP and CWSA certificationBook Description SOLIDWORKS is the leading choice for 3D engineering and product design applications across industries such as aviation, automobiles, and consumer product design. This book takes a practical approach to getting you up and running with SOLIDWORKS 2020. You'll start with the basics, exploring the software interface and working with drawing files. The book then guides you through topics such as sketching, building complex 3D models, generating dynamic and static assemblies, and generating 2D engineering drawings to equip you for mechanical design projects. You'll also do practical exercises to get hands-on with creating sketches, 3D part models, assemblies, and drawings. To reinforce your understanding of SOLIDWORKS, the book is supplemented by downloadable files that will help you follow up with the concepts and exercises found in the book. By the end of this book, you'll have gained the skills you need to create professional 3D mechanical models using SOLIDWORKS, and you'll be able to prepare effectively for the Certified SOLIDWORKS Associate (CSWA) and Certified SOLIDWORKS Professional (CSWP) exams. What you will learnUnderstand the fundamentals of SOLIDWORKS and parametric modelingCreate professional 2D sketches as bases for 3D models using simple and advanced modeling techniquesUse SOLIDWORKS drawing tools to generate standard engineering drawingsEvaluate mass properties and materials for designing parts and assembliesUnderstand the objectives and the formats of the CSWA and CSWP examsDiscover expert tips and tricks to generate different part and assembly configurations for your mechanical designsWho this book is for This book is for aspiring engineers, designers, drafting technicians, or anyone looking to get started with the latest version of SOLIDWORKS. Anyone interested in becoming a Certified SOLIDWORKS Associate (CSWA) or Certified SOLIDWORKS Professional (CSWP) will also find this book useful. Get to grips with leading 3D engineering and product design application to design robust 3D models and achieve CSWA and CSWP certification Key Features: Gain comprehensive insights into the core aspects of 3D modeling's mechanical parts Learn how to generate assembly designs with both standard and advanced mates Discover design practices for both 2D as well as 3D modeling and prepare to achieve CSWP and CSWA certification Book Description: SOLIDWORKS is the leading choice for 3D engineering and product design applications across industries such as aviation, automobile, and consumer product design. This book helps you to get up and running with SOLIDWORKS and understand each new concept and tool with the help of easy-to-follow exercises. You'll begin with the basics, exploring the software interface and finding out how to work with drawing files. The book then guides you through topics such as sketching, building complex 3D models, generating dynamic and static assemblies, and generating 2D engineering drawings to prepare you to take on any design project. You'll also work with practical exercises to get hands-on experience with creating sketches, 3D part models, assemblies, and drawings. To reinforce your understanding of SOLIDWORKS, the book is supplemented by downloadable files that will help you to understand the concepts and exercises more easily. Finally, you'll also work on projects for 3D modeling objects inspired by everyday life. By the end of this SOLIDWORKS book, you'll have

gained the skills you need to create professional 3D mechanical models using SOLIDWORKS and be able to prepare effectively for the Certified SOLIDWORKS Associate (CSWA) and Certified SOLIDWORKS Professional (CSWP) exams. What You Will Learn: Understand the fundamentals of SOLIDWORKS and parametric modeling Create professional 2D sketches as bases for 3D models using simple and advanced modeling techniques Use SOLIDWORKS drawing tools to generate standard engineering drawings Evaluate mass properties and materials for designing parts and assemblies Join different parts together to form static and dynamic assemblies Discover expert tips and tricks to generate different part and assembly configurations for your mechanical designs Who this book is for: This book is for aspiring engineers, designers, makers, draftsmen, and hobbyists looking to get started with SOLIDWORKS and explore the software. Individuals who are interested in becoming Certified SOLIDWORKS Associates (CSWAs) or Certified SOLIDWORKS Professionals (CSWPs) will also find this book useful. No specific background is needed to follow the concepts in the book as it starts from the basics of SOLIDWORKS. However, basic theoretical knowledge of 3D modeling will be helpful to get the most out of this book. SOLIDWORKS 2021: 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 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, with a total of 798 pages covering the major environments of SOLIDWORKS such as Sketching environment, Part modeling environment, Assembly environment, and Drawing environment. This textbook teaches users to use SOLIDWORKS mechanical design software for creating parametric 3D solid components, assemblies, and 2D drawings. This textbook also includes a chapter on creating multiple configurations of a design. This textbook not only focuses on the usage of the tools and commands of SOLIDWORKS 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 SOLIDWORKS. SOLIDWORKS 2019 Tutorial 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 in the 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. SOLIDWORKS 2017 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 three sections. Chapters 1 - 6 explore the SOLIDWORKS User Interface and CommandManager, Document and System properties, simple machine parts, simple and complex assemblies, proper design intent, design tables, configurations, equations, multi-sheet, multi-view drawings, BOMs, and Revision tables using basic and advanced features. 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. View Chapter 11 on Additive Manufacturing (3D printing) and its benefits and features. Understand 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.

Thank you unquestionably much for downloading **Mastercam For Solidworks Training Guide**.Maybe you have knowledge that, people have look numerous period for their favorite books subsequently this Mastercam For Solidworks Training Guide, but stop in the works in harmful downloads.

Rather than enjoying a fine PDF once a cup of coffee in the afternoon, then again they juggled next some harmful virus inside their computer. **Mastercam For Solidworks Training Guide** is straightforward in our digital library an online permission to it is set as public for that reason you can download it instantly. Our digital library saves in merged countries, allowing you to get the most less latency period to download any of our books with this one. Merely said, the Mastercam For Solidworks Training Guide is universally compatible subsequently any devices to read.

Getting the books **Mastercam For Solidworks Training Guide** now is not type of challenging means. You could not by yourself going subsequent to ebook increase or library or borrowing from your contacts to gain access to them. This is an entirely simple means to specifically get guide by on-line. This online notice Mastercam For Solidworks Training Guide can be one of the options to accompany you considering having extra time.

It will not waste your time. understand me, the e-book will very appearance you supplementary event to read. Just invest little era to right to use this on-line statement **Mastercam For Solidworks Training Guide** as well as review them wherever you are now.

Yeah, reviewing a ebook **Mastercam For Solidworks Training Guide** could build up your close links listings. This is just one of the solutions for you to be successful. As understood, capability does not suggest that you have wonderful points.

Comprehending as capably as arrangement even more than additional will allow each success. bordering to, the revelation as capably as insight of this Mastercam For Solidworks Training Guide can be taken as with ease as picked to act.

Right here, we have countless book **Mastercam For Solidworks Training Guide** and collections to check out. We additionally allow variant types and next type of the books to browse. The all right book, fiction, history, novel, scientific research, as skillfully as various supplementary sorts of books are readily easy to get to here.

As this Mastercam For Solidworks Training Guide, it ends in the works monster one of the favored ebook Mastercam For Solidworks Training Guide collections that we have. This is why you remain in the best website to look the amazing ebook to have.

corsonlearning.com