



Your CSWA Exam Preparation Guide

34 TIPS AND TRICKS from SOLIDWORKS experts on how to prepare, practice, and pass the Certified SOLIDWORKS Associate exam



Pass the CSWA Exam on Your First Try

The Certified SOLIDWORKS Associate (CSWA) is a widely-recognized industry certification for beginner to intermediate SOLIDWORKS users. Earning your CSWA is a great way to hone your skills and show employers that you're well-versed in SOLIDWORKS. To help you pass the exam, we spoke to SOLIDWORKS experts and compiled their top test-taking tips and tricks.



Pass the CSWA Exam by Mastering These Skills

- ⚙ Sketch entities (lines, rectangles, circles, arcs, ellipses, centerlines)
- ⚙ Sketch tools (offset, convert, trim)
- ⚙ Sketch relations
- ⚙ Boss and cut features (extrudes, revolves, sweeps, lofts)
- ⚙ Fillets and chamfers
- ⚙ Linear, circular, and fill patterns
- ⚙ Dimensions
- ⚙ Feature conditions (start and end)
- ⚙ Mass properties
- ⚙ Materials
- ⚙ Inserting components
- ⚙ Standard mates (coincident, parallel, perpendicular, tangent, concentric, distance, angle)
- ⚙ Reference geometry (planes, axis, mate references)
- ⚙ Drawing views
- ⚙ Annotations

LOOK FOR THESE TOP TIPS FROM THE SOLIDWORKS CERTIFICATION GURU



As a certified SOLIDWORKS Solutions Partner, we were able to tap into the man-in-charge to help you navigate the CSWA exam with ease!

You'll find tips and tricks throughout this e-guide from Mike Puckett, senior manager of the World Wide Certification Program at SOLIDWORKS. All of Puckett's tips are called out with a certification ribbon!



What You Need to Know About the CSWA Exam

Time limit: 3 hours

Exam length: 14 questions

Minimum passing grade: 70%

Re-test policy: 14-day waiting period between each retake

HOW TO PREPARE FOR THE CSWA EXAM

Use these tips to help you properly set up your computer and prepare yourself for the exam.

- 1 Make sure you use a reliable computer. The last thing you want is for your computer to crash during the exam.
- 2 You must have SOLIDWORKS 2011 or later to take the CSWA exam.

Note: If you're using a previous version of SOLIDWORKS (anything before 2011), you won't be able to open some of the testing files. If you don't have a compatible version, you'll need to reach out to your reseller for an upgrade.

- 3 Use two monitors so you can run SOLIDWORKS on one monitor and the exam application on the other. This isn't required, but it'll help you be more efficient by avoiding switching tabs.



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- 4 Start and run SOLIDWORKS before launching the exam application.
- 5 Eat, drink, and use the restroom prior to beginning the exam. The exam times out after 3 hours and most people need every second to take the exam.
- 6 Take the exam when you have three hours of uninterrupted time available.

TIPS FOR HOW TO PRACTICE FOR THE CSWA EXAM

You'll need hands-on practice to successfully pass the test. Use these tips to organize your studying efforts.

- 7 You'll need to practice and become proficient in using standard mates including coincident, parallel, perpendicular, tangent, concentric, distance, and angle mates.
- 8 Practice modeling objects from drawings. You'll need to be able to quickly read drawings and use basic tools.
- 9 Study drawing view types. There will be a multiple-choice section on the exam where you'll be given various drawing views and you'll have to select which type of view it is. If you know your views, this is an easy way to rack up points.
- 10 Practice using different end conditions for 3D features to see how the geometry updates when you make a change.

Example: Use the Through All end condition on an Extruded Cut instead of a Blind end condition.

- 11 You'll need to be able to update your model based on the given dimensions. Save time by using the Equation Manager to quickly make these changes.

Note: Understanding variables isn't required to pass the exam, but being comfortable with them will save you time.

- 12 Take an expert-led [CSWA Prep Course](#) with video tutorials, sample exams, and additional practice exercises.
- 13 Practice with [SOLIDWORKS' CSWA Sample Exam Questions](#).

- 14 Hands-on experience is key. The more you can familiarize yourself with the features and tools beforehand, the less time you'll waste trying to find the right functionalities during the exam.

15 **Take the CSWA for free! You'll save big bucks by earning a free exam voucher. Here's how:**

1. Sign up for a [SolidProfessor membership](#).
2. Complete the full [Become a Certified SOLIDWORKS Associate Learning Path](#). (You can earn your free exam voucher — while prepping for the exam — in only 11 hours!)
3. Email vouchers@solidprofessor.com to request your free voucher (\$99 value).

TIPS WHILE TAKING THE CSWA EXAM

Use these tips to improve your efficiency and productivity during the exam.

- 16 Be sure to keep an eye on the time tracker. You want to be able to get through the questions at a reasonable pace and not spend all your time on one question. Complete the questions you can first, then come back and spend the remainder of your time on the harder questions.

- 17 For each individual question, save your models frequently with unique names. Some questions use the same model a few times so it'll prevent you from having to remodel something if your progress is lost.



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- 18 Read the questions and prompts thoroughly from start to finish. Don't assume you know what's coming.

- 19 Write your answers down on a piece of paper as well as in the Tester Client. Keeping track of your answers in a couple of locations will help you check your answers quickly before you submit your exam.

- 20 There are three models that have subsequent questions. It's OK to invest your time in the first model since you need to get that one correct to successfully answer the follow-up questions. Plus, the follow-up questions won't be as complex as the initial model, so you should be able to move through them more quickly.

- 21 For models that have subsequent questions, skip ahead in the exam to see how the part will be updated. This will help you determine the design intent of your model.

Note: If you go down the wrong path at the start, it'll be more challenging and take longer to update the part in future questions.

- 22 Be aware of the parametric history and how features will affect one another downstream.

- 23 Pay attention to the material assigned to a part. For the test to determine if you modeled a part correctly, it will ask you how much it weighs. The exam will always use simple materials with the default material properties. Common materials are brass, steel, and ABS plastic.



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24 Use the Measure Tool to quickly find and correct mistakes you might've made.

25 Round your answers to the same number of decimal points as the prompt.

Example: If the prompt rounds to the nearest one-hundredth (e.g., 68.18), your answer needs to also round to the nearest one-hundredth (e.g., 129.10).

26 Use the unit of measure required by the prompt. You can quickly switch the units in the Status Bar at the bottom.

Example: If the prompt asks for your answer in millimeters, you must convert your answer into millimeters.

27 Account for all variable value changes between questions. Don't assume the values will remain the same.

Example: In one question, you might be asked to provide your answer in metric units, and in another question, you might be asked to use imperial units.

28 Use the correct coordinate systems when you're working with assemblies.

Note: You might be asked to create a custom coordinate system and use that to find the answer.

29 Look for the origin of an assembly. When you're asked to mate parts in different orientations, the center of mass will change. Since that is how the Tester Client determines if the orientation is correct, make sure the origin is correct.



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30 Using the Equation Manager, set variable values to easily make adjustments.

31 If you're stuck on a problem, work from the largest shape to the smallest. Don't get too wrapped up in finding the perfect way to build a model. You're judged on building the correct model, not on using specific techniques. Once you have an idea, be confident and start modeling.

Example: If you have to model a block with a hole through it, don't worry about making them both in a single sketch if you're uncomfortable with that technique. You can make it as two separate features.

32 The easiest way to increase your speed is to use keyboard shortcuts.

See pg. 5 for a list of popular SOLIDWORKS keyboard shortcuts that you should start committing to memory.

33 Check the Results Summary page in the test prompt at the end of the exam to see if you accidentally left any answers blank.

34 If you have time, cross reference each of the answers you entered into the fields with the answers you wrote down on paper or in your individually saved files.



Keyboard Shortcuts that'll increase your efficiency in SOLIDWORKS

One of the easiest ways to become more efficient during this timed exam is to use keyboard shortcuts. When you're taking your practice exams and prep courses, practice the most popular shortcuts (outlined below). By the time you're ready to take the exam, you'll be able to launch commands quickly instead of wasting valuable time searching for them in the toolbar.

FILE SHORTCUTS

Ctrl + N	New
Ctrl + O	Open
Ctrl + D	Make new drawing from part or assembly
Ctrl + A	Make new assembly from part or assembly
Ctrl + S	Save

EDIT SHORTCUTS

Ctrl + Z	Undo
Ctrl + Y	Redo
Enter	Repeat last command
Ctrl + X	Cut
Ctrl + C	Copy
Ctrl + V	Paste
Delete	Delete
Ctrl + B	Rebuild
Ctrl + Q	Forced rebuild
Ctrl + R	Redraw screen
S	Open shortcut bar
Ctrl + click items	Select multiple items
Shift + drag	Move item

VIEW SHORTCUTS

Arrow keys	Rotate model
Ctrl + arrow keys	Pan model
Ctrl + R	Redraw the screen
Spacebar	Orientation
F	Zoom to fit
Shift + Z	Zoom in
Z	Zoom out

Start Designing Faster with a SOLIDWORKS Keyboard Shortcuts Cheat Sheet

This free cheat sheet includes all of the shortcuts on this page, plus a blank, editable chart for you to add your own custom shortcuts. Download now!

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- [SOLIDWORKS Essentials for Parts & Assemblies](#) (147 tutorials)
- [SOLIDWORKS Drawings](#) (64 tutorials)
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- Aaron, Sales Drafter

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