Student Overview for the Certified SolidWorks Associate (CSWA) Program
CSWA Certification Program Overview

- CSWA Certification
- CSWA Competencies
- CSWA Preparation
- CSWA Exam Day
- CSWA Benefits
CSWA Certification

- The CSWA Certification demonstrates your aptitude with SolidWorks, 3D solid modeling techniques, design concepts and engineering practices, and commitment to professional development.
- The CSWA Certification requires passing the CSWA Exam. The CSWA Exam is a comprehensive, on-line, proctored, three hour test administered by the CSWA Provider.
- The CSWA Certification proves to employers that you have the required skill sets to work in the design and engineering fields.
CSWA Competencies

- 3D CAD modeling technology
  - Parts and Assemblies
  - 2D Sketching and Geometry Principles
  - Drawing Basics
- Engineering Principles
  - Mass Properties
  - Materials
  - Design Iterations
- Design Process
  - Design Intent
- Recognition of industry practices and standards
CSWA Exam Preparation

- Minimum for 45 hours of classroom instruction in engineering design
- 3D illustrations with dimensions
- 2D Drawing views with dimensions and annotations
- Reference Books:
  - Engineering Drawing, Detailing, Technical Drafting, Machine Drafting and Drawing Communication
CSWA Exam Preparation

- Complete the suggested SolidWorks Tutorials
- Utilize SolidWorks Help Topics to locate information about a particular function
- Complete the “Sample Exam” questions at [www.solidworks.com/cswa](http://www.solidworks.com/cswa)
- Verify your time to complete the Sample Exam (~90 min)
## CSWA Exam Breakdown

<table>
<thead>
<tr>
<th>Category</th>
<th>Qty</th>
<th>Points</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing Theory</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Basic Part Modeling</td>
<td>2</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Intermediate Part Modeling</td>
<td>2</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Advanced Part Modeling</td>
<td>3</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>Assembly Modeling</td>
<td>4</td>
<td>30</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>240</strong></td>
</tr>
</tbody>
</table>

Passing: 165 Points  (or greater)

Time allotted: Three hours: (180 minutes)
CSWA Exam Day: Requirements

- **Requirements:**
  - A computer with SolidWorks installed on it in a secure environment
  - An internet connection
  - A valid email address
  - A voucher ID code (Provided by your CSWA Provider)

- **CSWA Provider Institution**
  - Accredited, degree granting educational institution, secondary or post secondary level
  - SolidWorks subscription
  - Approved CSWA Provider application
    - [www.solidworks.com/cswa](http://www.solidworks.com/cswa)
Exam Day: Download the TesterPro Client

- Login to the Tangix_TesterPRO site (http://www.virtualtester.com/solidworks). Click **Download TesterPRO Client** link to start the exam process.
- Click the **Run** button.
Exam Day: Run the Tester software

- Click **Run** to run the Tangix Tester software.
- **Read** the Tangix Software License Agreement.
- Click **I Agree**.
CSWA Exam Day: Select Language

- Select your **language** for the Tangix tester:
  - English
  - French
  - German
  - Portuguese
  - Spanish
  - Italian
  - Japanese
  - Chinese Simplified
  - Chinese Traditional
  - Korean
- Click **Continue**.
CSWA Exam Day: Your Information

- Students can not use notes, books, calculators, PDA’s, cell phones, or materials not authorized by a SolidWorks Certified Provider or DS SolidWorks Corp. during the exam.
- Enter your personal information.
- Click Continue.
CSWA Exam Day: Login and Voucher Number

- Write down your login email and password.
- Click Yes, I have written my password down.
- Enter your Voucher number provided by your instructor.
- Click Submit.
- Click Continue.
CSWA Exam Day: Select Language for Exam

- Select language for the exam.
- Read the Exam Publisher license agreement.
- Click I Agree.
CSWA Exam Day: Start Exam

- **Read** the Examination Information.
- **Click** Start Examination.

![Examination Information](image)
CSWA Exam Day: Answering questions

- Read the question.
- Click on **views** for more detail.
- **Create** the model in SolidWorks.
- Select the **best** answer or **fill** in the answer field.
- Click **Next Question**
CSWA Exam Day: Answering questions

- Read the question.
- Click on views for more detail.
- Download and unzip the assembly models and save them locally.
- Create the final assembly.
- Select the best answer or fill in the answer field.
- Click Next Question.
CSWA Exam Day: Answering questions

- **Answer** multiple choice questions for the Drawing Theory and Analysis Theory questions.
- Use **Help** for assistance.
- Note: Click the Reset Question button to clear a selected answer.
CSWA Exam Day: Tips

- Read directions thoroughly. The complete question requires you to scroll down.
- Review all drawing views.
- Know how to apply materials and calculate material properties (mass, volume, moment of inertia, etc).
- Enter dimensions and annotations precisely.
- Know how to create a Reference Coordinate System.
- Work quickly and accurately. It is a timed exam.
CSWA Exam Day: Show Summary

- Click **Show Summary** button to review the Answered questions.
- Click **Back to Question** to return to exam.
- Click **End Examination** when complete.
- Click **Yes** to exit.
- Read your score.
CSWA Exam Day: Your account

- If you pass, return to the Virtual Tester, www.virtualtester.com/SolidWorks
- Login to your account.
CSWA Exam Day: Print your certificate

- Select the CSWA Exam.
- Print your CSWA certificate.
- Record the Certificate ID for your resume.
CSWA Exam Benefits

• Formal recognition of achievement
• Professional credibility with proven engineering competencies
• Membership to the CSWA community
• Online certificate access
• Success in the first level of the SolidWorks Certification program
  • Professional, Sheet Metal, Surfacing, Finite Element Analysis, Sustainable Design
Thank You

www.solidworks.com/cswa