

# SolidWorks Certification

**Certified SolidWorks Associate (CSWA)**  
**Certified SolidWorks Professional (CSWP)**

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Mechanical and Mechatronics Engineering

**WATERLOO | ENGINEERING**



# What is it?

The University of Waterloo currently offers two exams from the SolidWorks Certification program.

- SolidWorks Certified Associate (CSWA)
- SolidWorks Certified Professional (CSWP)

These are designations that demonstrate a user's proficiency of mechanical design using SolidWorks.

# Overview

This presentation will outline the necessary steps to take if you are interested in pursuing SolidWorks Certification.

Please review this entire presentation before requesting an exam opportunity or asking any questions.

# Limited Opportunities

Please note that the university has a limited number of exam opportunities. Due to this, and in an effort to be fair to all students, students may only request an exam opportunity for each exam once (students may request an exam opportunity for both the CSWA **and** CSWP).

Should a student fail the exam and wish to retake it they will have to purchase the exam from SolidWorks.

# Computer Requirements

Before taking the CSWA or CSWP exam make sure you have the following:

- A computer with SolidWorks installed (current release or one release behind)
- A computer with Microsoft Excel\* installed
- A stable internet connection
- Tangix TesterPRO client (explained on the next slide)
- A valid @uwaterloo.ca email address
- A voucher code for the exam you are taking (CSWA or CSWP)

\* Microsoft Excel is required as there may be a portion of the exam that utilizes design tables

# Tangix TesterPRO

In order to take the exam, it is required that you download and install the Tangix TesterPRO Client. Tangix TesterPRO is the program you will use to access the exam. To download it, visit the address below:

<https://3dexperience.virtualtester.com>

The screenshot shows the 3DEXPERIENCE Certification Center website. The header includes the Dassault Systèmes logo and the text '3DEXPERIENCE® Certification Center'. There are 'Login' and language selection buttons in the top right. The main content area is divided into three columns. The left column contains a 'Reset lost Password?' section with instructions, a 'News' section with a post from May 6, 2020 about digital badges, and an 'FAQs' section. The middle column has a 'Welcome to the 3DEXPERIENCE® Certification Center' section, followed by links for 'SOLIDWORKS Certifications', 'CATIA Certifications', 'SIMULIA Certifications', and 'DELMIA Certifications'. Below these are sections for 'Digital Badges Now Available for Some SOLIDWORKS and 3DEXPERIENCE Exams' and 'How to take a Certification Exam?'. The right sidebar features a 'Download TesterPRO Client' section with a red circle around the download button, and a 'Latest Certificates issued' section listing various certification holders.

# Exam Preparation

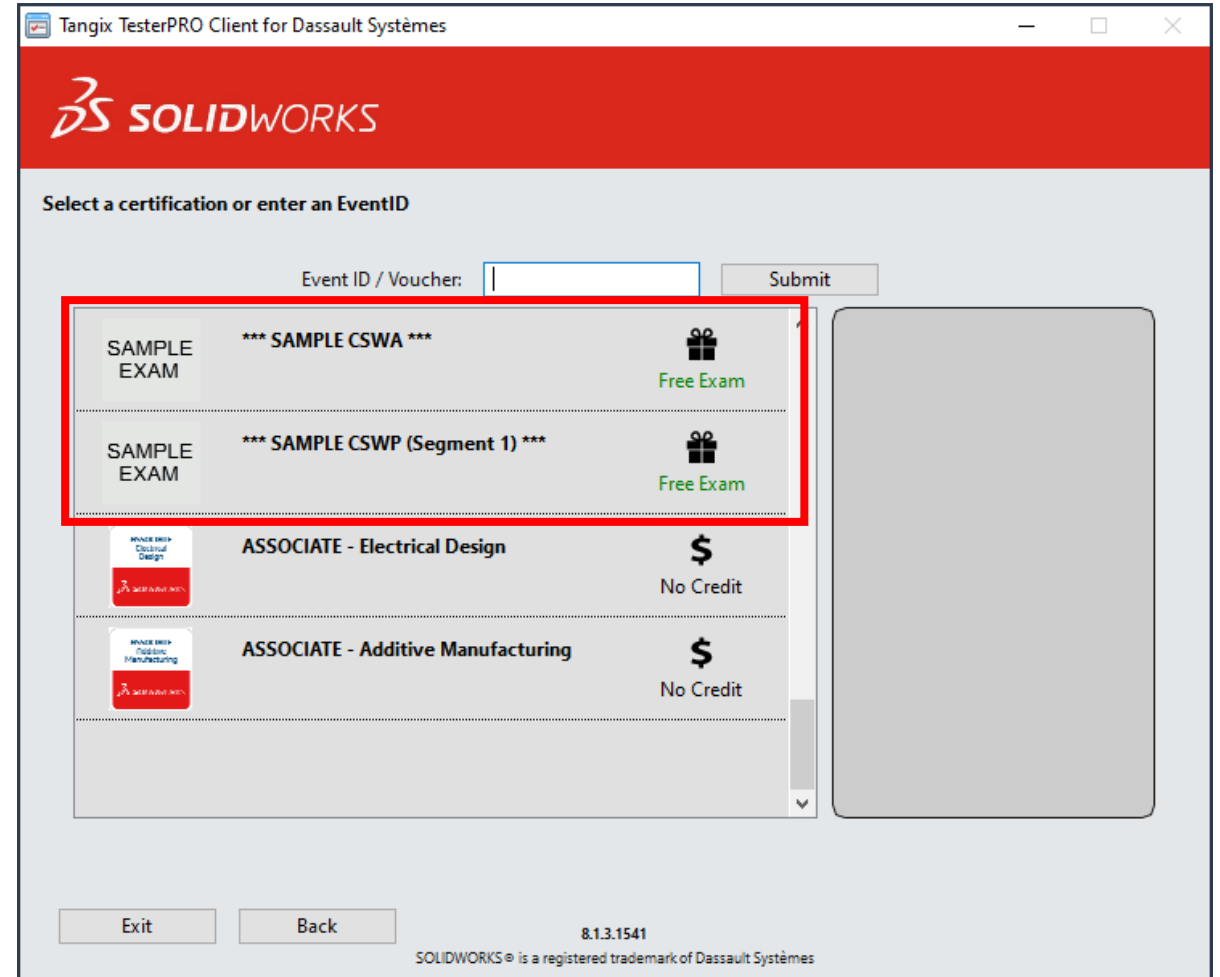
In addition to CSWA and CSWP exams, University of Waterloo students also have access to Sample exams and MySolidWorks for Students.

It is required that you complete and pass the sample exam prior to taking the CSWA or CSWP exam; not only for additional practise, but to ensure your system is functioning properly.

MySolidWorks for Students offers a variety of resources including a CSWA Exam Prep Course and a CSWP Exam Prep Course.

The link below is a video that shows the process to set up your MySolidWorks for Students account.

<https://www.solidworks.com/media/mysolidworks-students>



# Accessing the Exam

The screenshot shows the 'Tangix TesterPRO Client for Dassault Systèmes' window. The title bar includes the window title and standard minimize, maximize, and close buttons. The header features the Dassault Systèmes logo. The main content area is titled 'Please select the language to use in Tangix TesterPRO Client'. It contains two columns of radio button options for different languages: English, French, German, Spanish, Portuguese, Polish, and Italian. At the bottom, there are 'Exit' and 'Continue' buttons, and the version number '8.1.3.1541' is displayed in the center.

Open Tangix TesterPRO and select your preferred language

The screenshot shows the 'Tangix TesterPRO Client for Dassault Systèmes' window. The title bar includes the window title and standard minimize, maximize, and close buttons. The header features the Dassault Systèmes logo. The main content area is titled 'Please complete the required fields below.' It contains two radio button options: 'I already have a VirtualTester UserID and password' and 'I do not have a VirtualTester UserID. Create one with the following information:'. The second option is selected and circled in red. Below this are several required fields: First Name, Last Name, Company / School, E-mail, Password (with a confirm field), Address 1, Address 2, City, State / Province (dropdown), Postal Code, and Country (with an 'All' checkbox). There is also a 'Privacy Policy' link and a checkbox for 'I accept the Privacy Policy', and another checkbox for 'List in Online Directory of Certified Users'. At the bottom, there are 'Exit' and 'Continue' buttons, and the version number '8.1.3.1541' is displayed in the center.

You will be prompted to create a VirtualTester UserID. If you already have an account continue to the next step. Otherwise, fill out the form to continue



# Accessing the Exam (cont'd)

Tangix TesterPRO Client for Dassault Systèmes

**DS** DASSAULT SYSTEMES

Connect to VirtualTester

I already have a VirtualTester UserID and password

E-mail:

Password:

I do not have a VirtualTester UserID. Create one with the following information:

Exit 8.1.3.1541 Continue

If you already have an account enter your VirtualTester UserID credentials

Tangix TesterPRO Client for Dassault Systèmes

**DS** DASSAULT SYSTEMES

Select a Brand to show Certification Exams

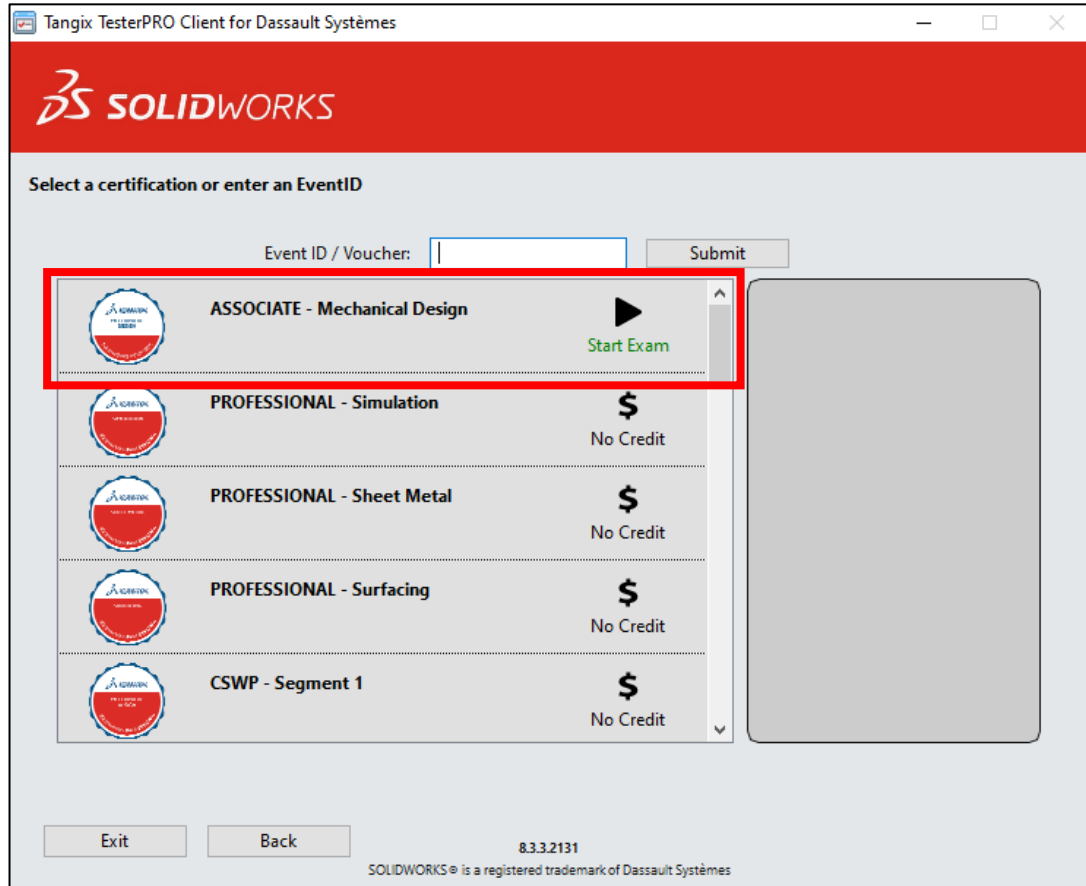
**DS** SOLIDWORKS **DS** 3DEXPERIENCE **DS** CATIA

**DS** DELMIA **DS** GEOVIA **DS** SIMULIA

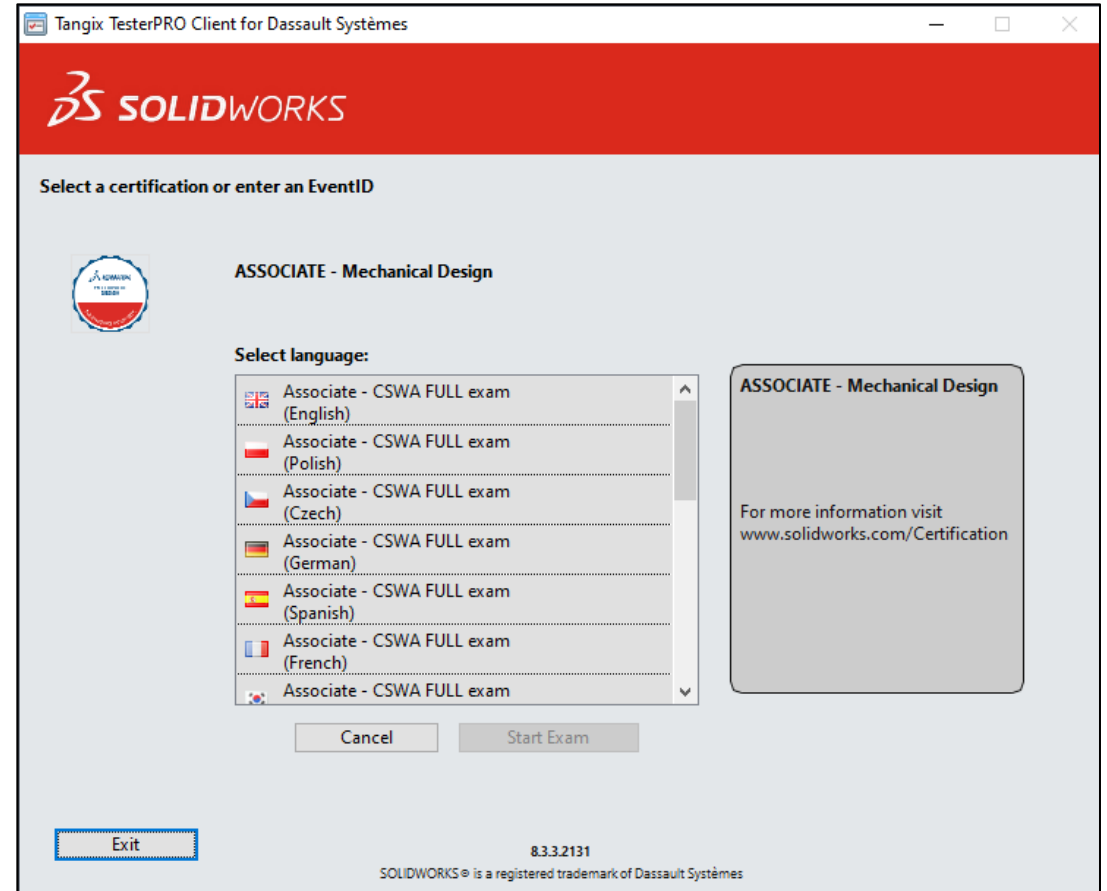
Exit 8.1.3.1541

Select SolidWorks from the software options

# Accessing the Exam (cont'd)

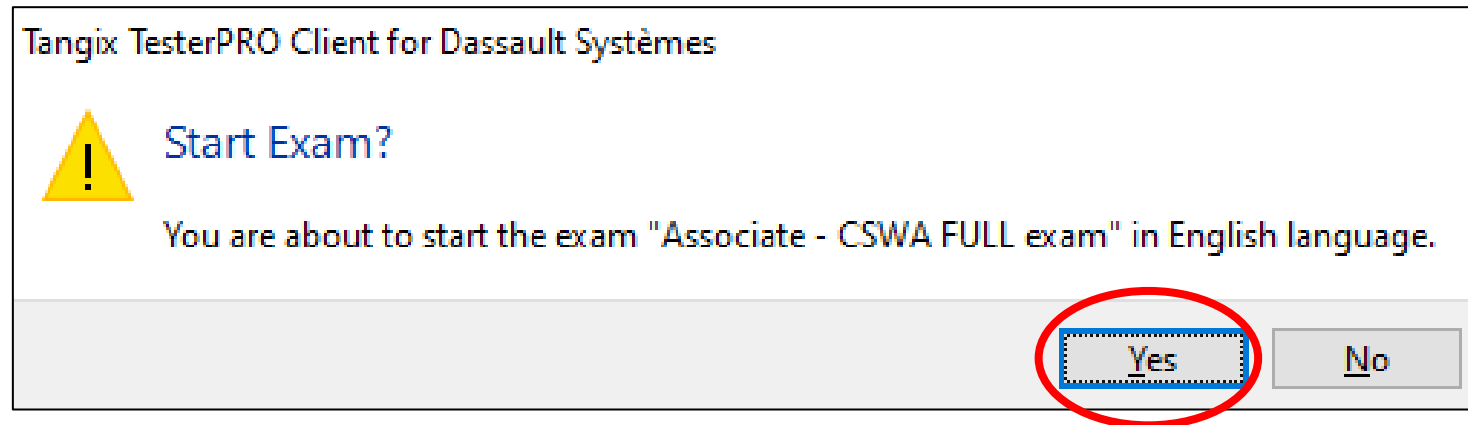


Once the exam opportunity has been created for you it will appear in your list of exams. Select “Start Exam”



Choose your preferred language and click “Start Exam”

# Accessing the Exam (cont'd)



After indicating your preferred language, a pop-up window will appear. Click “Yes” to start the exam

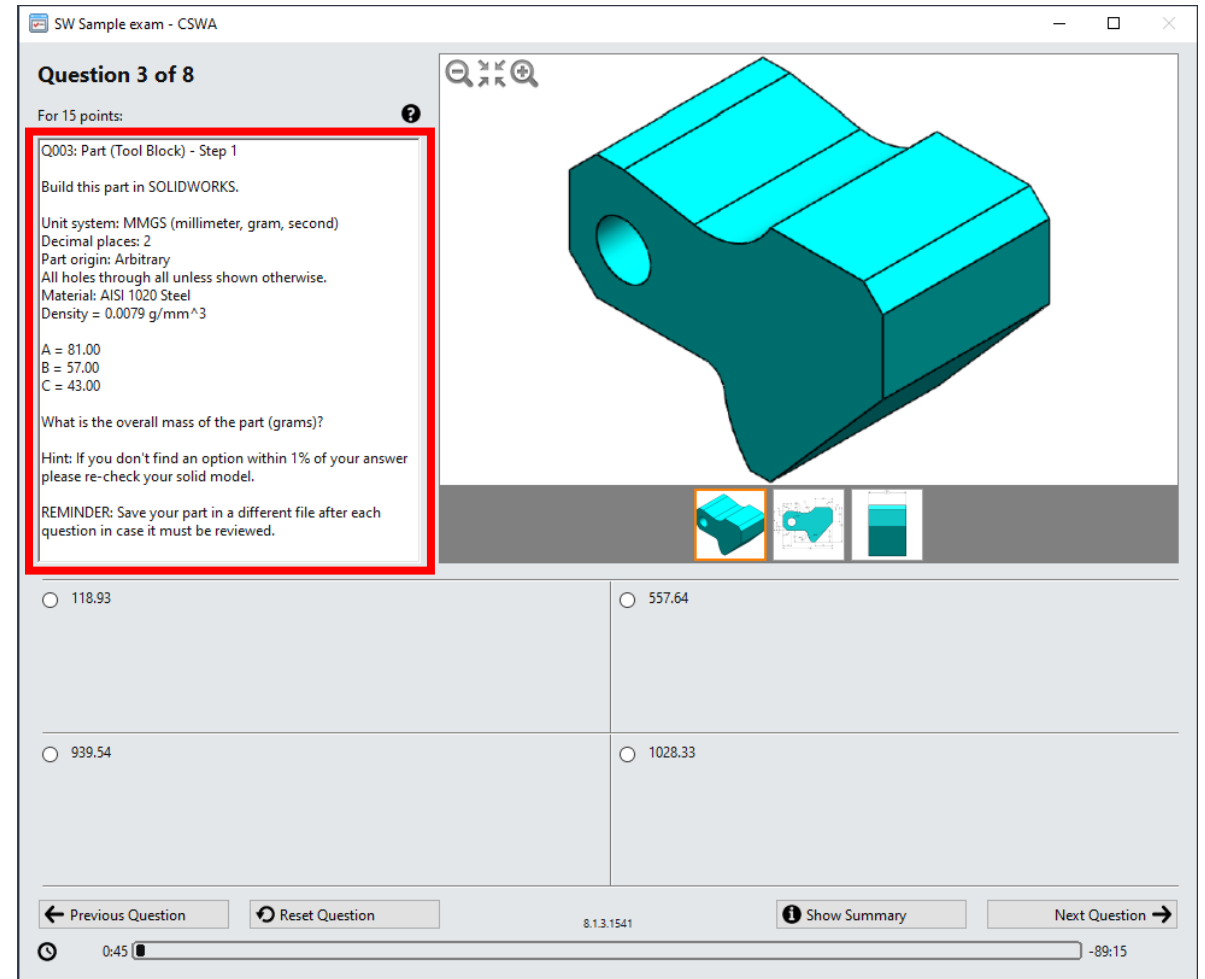
# CSWA Exam

The CSWA exam is comprised of three sections:

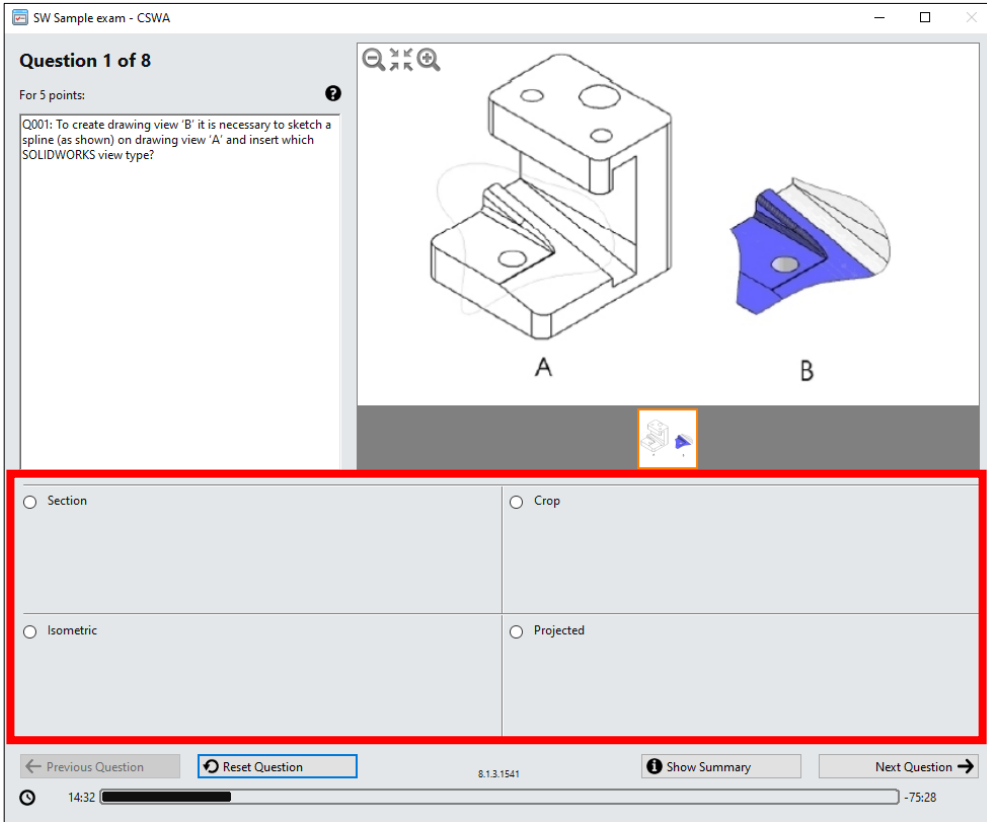
- drawing view knowledge
- part modelling
- bottom-up assembly (an assembly using pre-built parts)

For all questions there are instructions in the dialogue box on the left. Read and understand the question before submitting your answer. Some questions will be multiple-choice, and others will ask the user to enter a value.

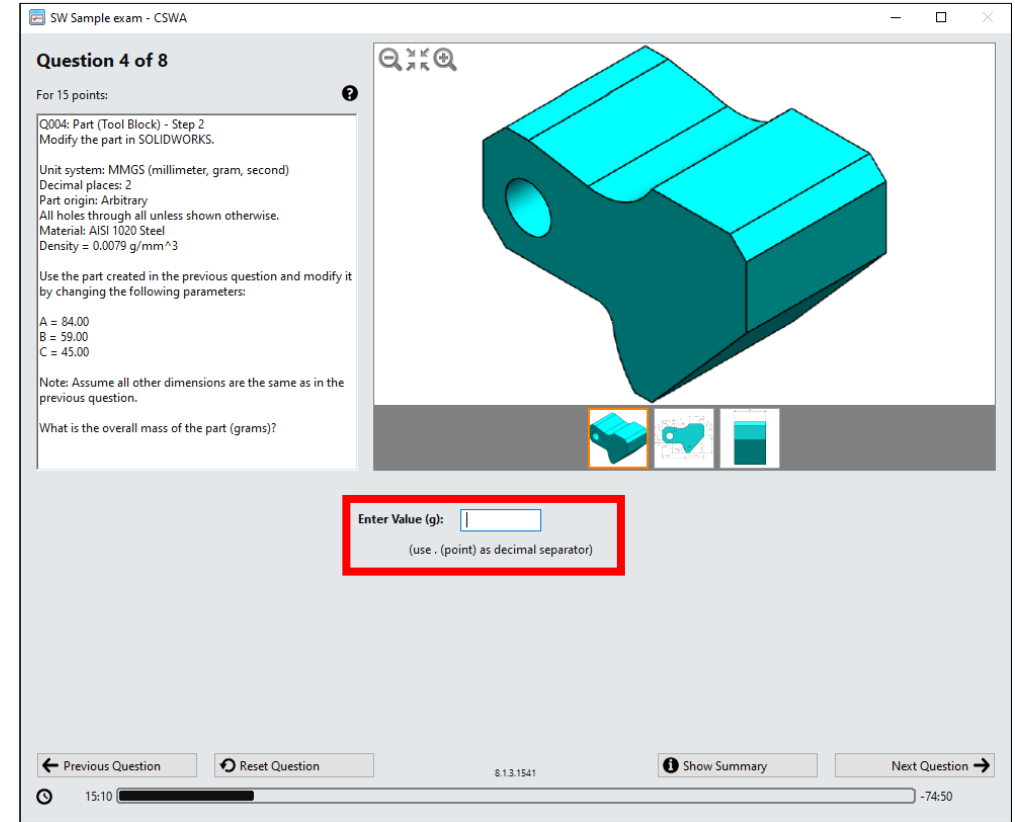
You have 180 minutes to complete the exam. In order to pass the exam, you must receive a minimum score of 70%



# CSWA Exam



Example of a multiple-choice question



Example of a user input question

# CSWA Exam – Part Modelling

In the part modeling questions there are multiple views of the part that you can access, and you are able to zoom in and out of the views as well.

**Question 3 of 8**  
For 15 points:

Q003: Part (Tool Block) - Step 1  
Build this part in SOLIDWORKS.

Unit system: MMGS (millimeter, gram, second)  
Decimal places: 2  
Part origin: Arbitrary  
All holes through all unless shown otherwise.  
Material: AISI 1020 Steel  
Density = 0.0079 g/mm<sup>3</sup>

A = 81.00  
B = 57.00  
C = 43.00

What is the overall mass of the part (grams)?

Hint: If you don't find an option within 1% of your answer please re-check your solid model.

REMINDER: Save your part in a different file after each question in case it must be reviewed.

118.93       557.64

939.54       1028.33

← Previous Question    Reset Question    8.1.3.1541    Show Summary    Next Question →

1:36    -88:24

# CSWA Exam – Assembly

In the assembly section of the exam, you will be asked to create an assembly using provided parts. You will need to download the .zip file and extract the part files.

**Question 7 of 8**

For 30 points:

Q007: Build this assembly in SOLIDWORKS (Chain Link Assembly)

- Download the attached zip file and open it.
- Save the contained parts and open those parts in SOLIDWORKS. (Note: If SOLIDWORKS prompts "Do you want to proceed with feature recognition?" please click "No".)
- IMPORTANT: Create the Assembly with respect to the Origin as shown in isometric view. (This is important for calculating the proper Center of Mass)
- Create the assembly using the following conditions:

1. Pins are mated concentric to chain link holes (no clearance).
2. Pin end faces are coincident to chain link side faces.

Unit system: MMGS (millimeter, gram, second)  
Decimal places: 2

Attachment to this question

ChainLinkAssembly.zip (87.3 kB)

X = 308.53, Y = -109.89, Z = -61.40

X = 298.66, Y = -17.48, Z = -89.22

X = 348.66, Y = -88.48, Z = -91.40

X = 448.66, Y = -208.48, Z = -34.64

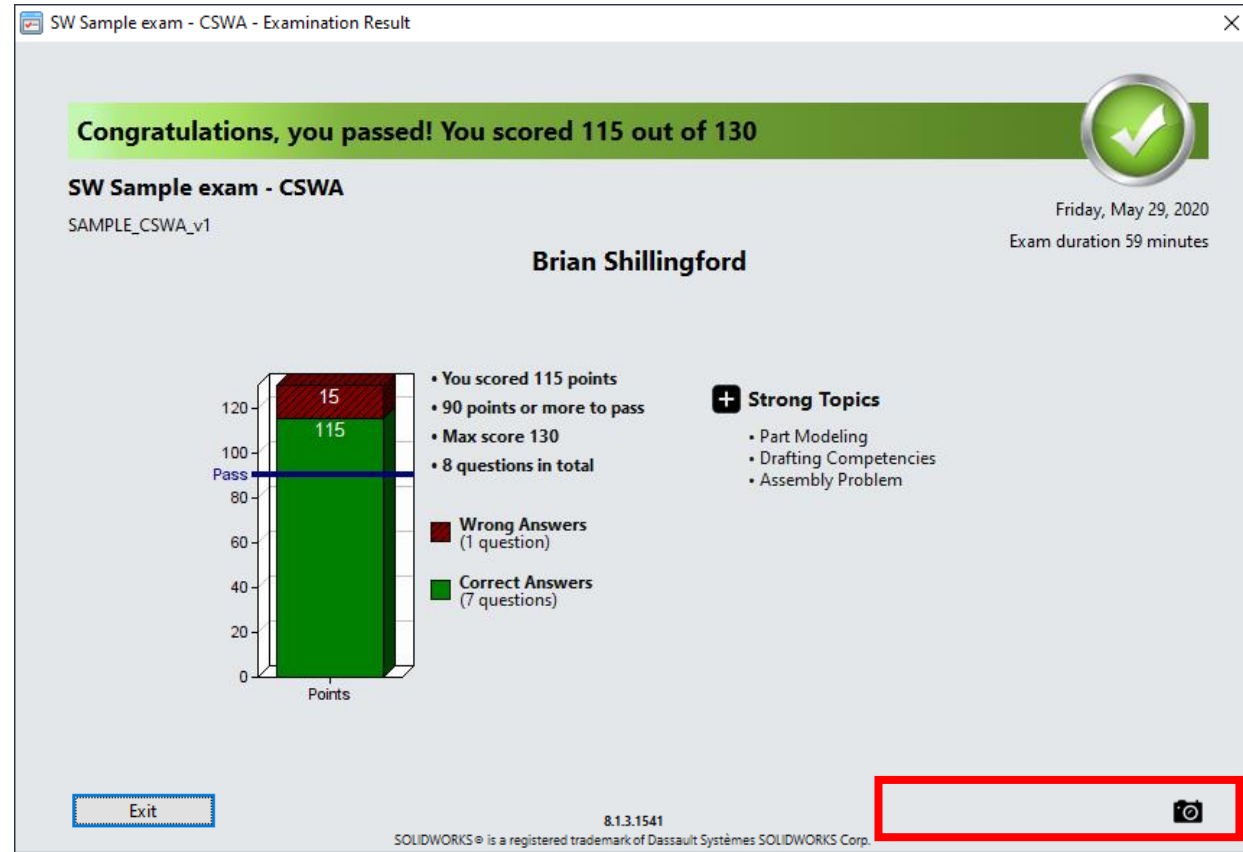
← Previous Question    Reset Question    8.1.3.1541    Show Summary    Next Question →

2:12    -87:48

# CSWA Exam

After completing the exam your results will be displayed immediately and indicate if you have passed the exam or not.

If you have completed the official exam in the bottom right corner next to the camera icon there will be an option to download your certificate.\*



\*Note this is a screen shot from the sample exam so there is no option to download the certificate

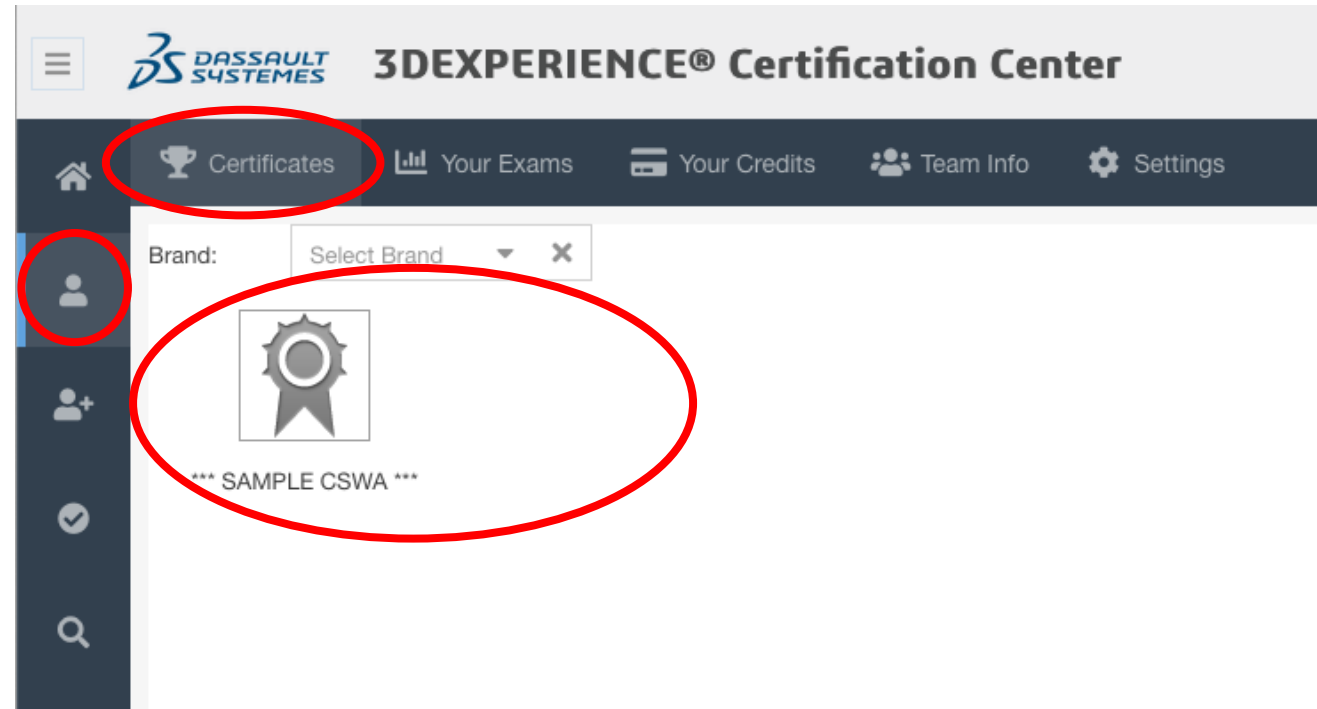


# Access Certificates

You can access your certificates online by logging into your account using your VirtualTester UserID credentials

<https://3dexperience.virtualtester.com>

Select the Certificates tab under My Account to access your certificates. They will be available for PDF download



# LinkedIn

Upon successfully completing the CSWA or CSWP exam it is a good idea to link your certificate to your LinkedIn profile.

If you don't already have any licenses or certificates on your profile add "Licenses & Certificates" from the "Add profile section" drop down menu.

Fill out the form with the correct credentials and be sure to use your unique certificate number.

Credential URL:

<https://cv.virtualtester.com/qr/?b=SLDWRKS&i=C-XXXXXXXXXX>

**Edit licenses & certifications**

Name \*  
Certified SolidWorks Associate - Mechanical Design

Issuing Organization \*  
Dassault Systèmes

This credential does not expire

Issue Date: July 2020  
No Expiration Date: -

Credential ID: C-XXXXXXXXXX  
*← Unique certificate number*

Credential URL: <https://cv.virtualtester.com/qr/?b=SLDWRKS&i=C-XXXXXXXXXX>  
*← Unique certificate number*

We no longer share changes to licenses & certifications with your network. [Learn how these are shared and when](#)

Delete Save

# Requesting an Exam Opportunity

Before requesting an exam opportunity, you first need to complete (**and pass**) the sample exam using the official testing software. Once you've done that you can send a screen shot of the results along with the following information to Abdullah Barakat

[ambarakat@uwaterloo.ca](mailto:ambarakat@uwaterloo.ca)

- Given name(s):
- Last name(s):
- Email (uwaterloo):
- User ID (not student number):
- Program:
- Term:
- Exam (CSWA/CSWP):

# Closing Remarks

After reviewing this presentation if you have any questions about the CSWA or CSWP process or how to prepare for the exams please contact Abdullah Barakat.

[ambarakat@uwaterloo.ca](mailto:ambarakat@uwaterloo.ca)

Good Luck!

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