

# SolidWorks Certifications

Presented by: Abdullah Barakat

Mechanical and Mechatronics Engineering

# Overview

- This presentation will outline the necessary steps to take if you are interested in pursuing the various SolidWorks Certifications offered via the University of Waterloo
- Please review this entire presentation before requesting an exam opportunity

# SolidWorks Certification

- The University of Waterloo offers various exams from the SolidWorks Certification program, with the main two being:
  - Certified SolidWorks Associate (CSWA)
  - Certified SolidWorks Professional (CSWP)
- These are designations that demonstrate a user's proficiency of mechanical design using SolidWorks
- Normally, you would have to pay for these exams, but as UW students, we can offer you a voucher for a free attempt at the certification

# Limited Opportunities

- The university has a limited number of exam opportunities to give out each year
- To be fair to all students, you may request an exam opportunity for each type of exam (i.e. CSWA, CSWP, etc.) only **once**
  - You must complete the CSWA before you can attempt the CSWP
- Should you fail the exam and wish to retake it, you will have to purchase the exam from SolidWorks for your next attempt

# Computer Requirements

Before taking the CSWA/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 some exams that utilizes design tables

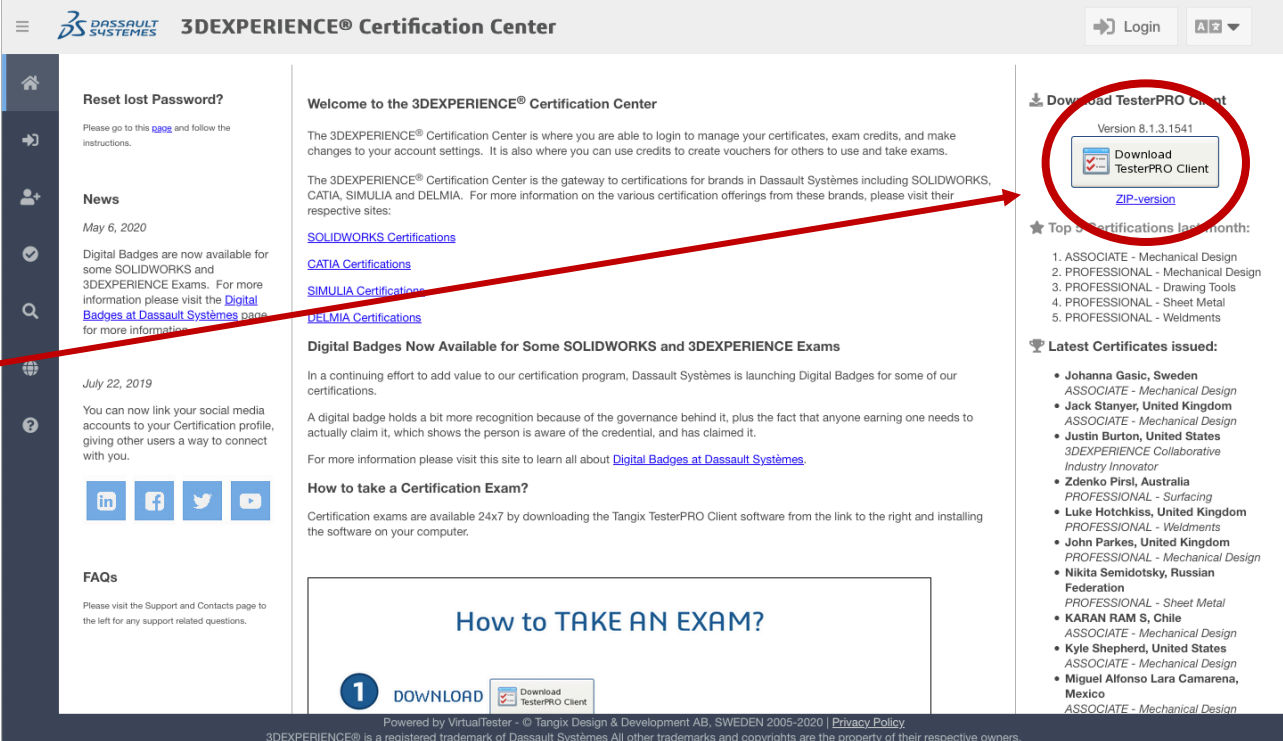
# Accessing the Exam

**WATERLOO | ENGINEERING**

# Tangix TesterPRO

To take the certification exam, you need to download and install the Tangix TesterPRO Client, which 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. A red arrow points from the URL in the previous block to the 'Download TesterPRO Client' button, which is circled in red. The button is labeled 'Download TesterPRO Client' and 'ZIP-version'. The website header includes the Dassault Systèmes logo and the title '3DEXPERIENCE® Certification Center'. The main content area has a 'Welcome' message and links to various certification programs. The right sidebar lists 'Top 5 Certifications last month' and 'Latest Certificates issued'.

**3DEXPERIENCE® Certification Center**

Reset lost Password?

Please go to this [page](#) and follow the instructions.

**News**

May 6, 2020

Digital Badges are now available for some SOLIDWORKS and 3DEXPERIENCE Exams. For more information please visit the [Digital Badges at Dassault Systèmes](#) page for more information.

July 22, 2019

You can now link your social media accounts to your Certification profile, giving other users a way to connect with you.

[LinkedIn](#) [Facebook](#) [Twitter](#) [YouTube](#)

**FAQs**

Please visit the Support and Contacts page to the left for any support related questions.

**Welcome to the 3DEXPERIENCE® Certification Center**

The 3DEXPERIENCE® Certification Center is where you are able to login to manage your certificates, exam credits, and make changes to your account settings. It is also where you can use credits to create vouchers for others to use and take exams.

The 3DEXPERIENCE® Certification Center is the gateway to certifications for brands in Dassault Systèmes including SOLIDWORKS, CATIA, SIMULIA and DELMIA. For more information on the various certification offerings from these brands, please visit their respective sites:

[SOLIDWORKS Certifications](#)  
[CATIA Certifications](#)  
[SIMULIA Certifications](#)  
[DELMIA Certifications](#)

**Digital Badges Now Available for Some SOLIDWORKS and 3DEXPERIENCE Exams**

In a continuing effort to add value to our certification program, Dassault Systèmes is launching Digital Badges for some of our certifications.

A digital badge holds a bit more recognition because of the governance behind it, plus the fact that anyone earning one needs to actually claim it, which shows the person is aware of the credential, and has claimed it.

For more information please visit this site to learn all about [Digital Badges at Dassault Systèmes](#).

**How to take a Certification Exam?**

Certification exams are available 24x7 by downloading the Tangix TesterPRO Client software from the link to the right and installing the software on your computer.

**How to TAKE AN EXAM?**

1. **DOWNLOAD** [Download TesterPRO Client](#)

**Download TesterPRO Client**

Version 8.1.3.1541

[ZIP-version](#)

**★ Top 5 Certifications last month:**

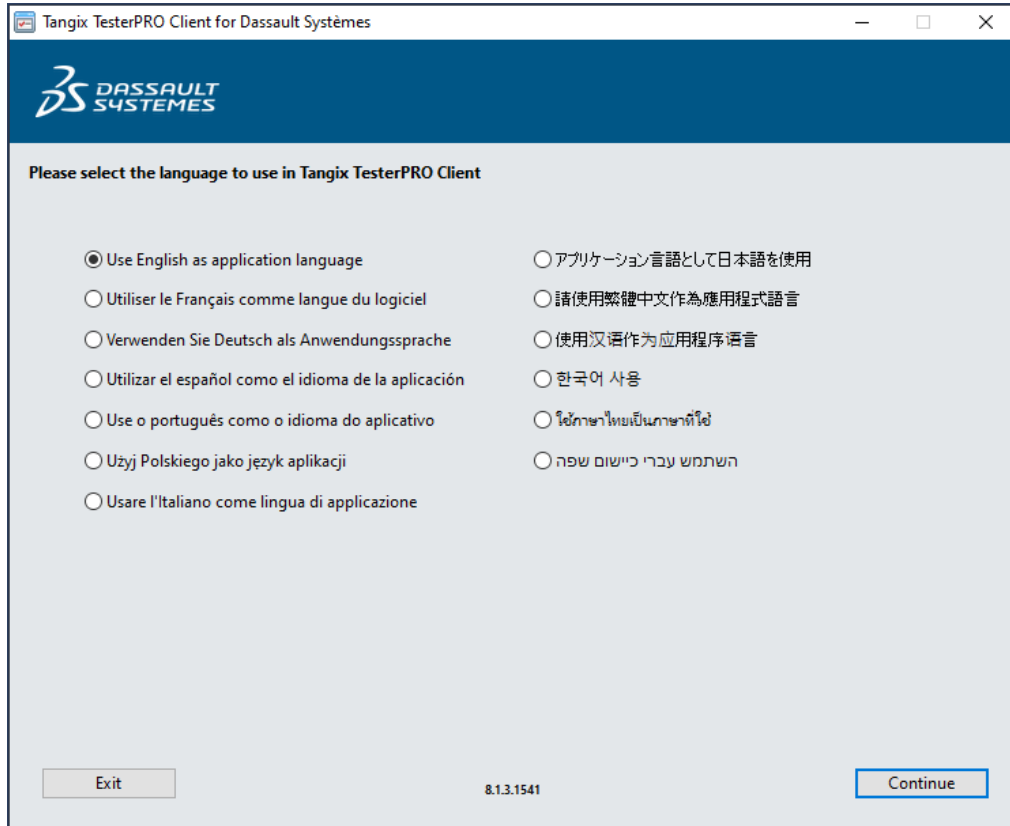
1. ASSOCIATE - Mechanical Design
2. PROFESSIONAL - Mechanical Design
3. PROFESSIONAL - Drawing Tools
4. PROFESSIONAL - Sheet Metal
5. PROFESSIONAL - Weldments

**🏆 Latest Certificates issued:**

- **Johanna Gasic, Sweden**  
ASSOCIATE - Mechanical Design
- **Jack Stanyer, United Kingdom**  
ASSOCIATE - Mechanical Design
- **Justin Burton, United States**  
3DEXPERIENCE Collaborative Industry Innovator
- **Zdenko Pirs, Australia**  
PROFESSIONAL - Surfacing
- **Luke Hotchkiss, United Kingdom**  
PROFESSIONAL - Weldments
- **John Parkes, United Kingdom**  
PROFESSIONAL - Mechanical Design
- **Nikita Semidotsky, Russian Federation**  
PROFESSIONAL - Sheet Metal
- **KARAN RAM S, Chile**  
ASSOCIATE - Mechanical Design
- **Kyle Shepherd, United States**  
ASSOCIATE - Mechanical Design
- **Miguel Alfonso Lara Camarena, Mexico**  
ASSOCIATE - Mechanical Design

Powered by VirtualTester - © Tangix Design & Development AB, SWEDEN 2005-2020 | [Privacy Policy](#)  
3DEXPERIENCE® is a registered trademark of Dassault Systèmes All other trademarks and copyrights are the property of their respective owners.

# Accessing the Exam



Tangix TesterPRO Client for Dassault Systèmes

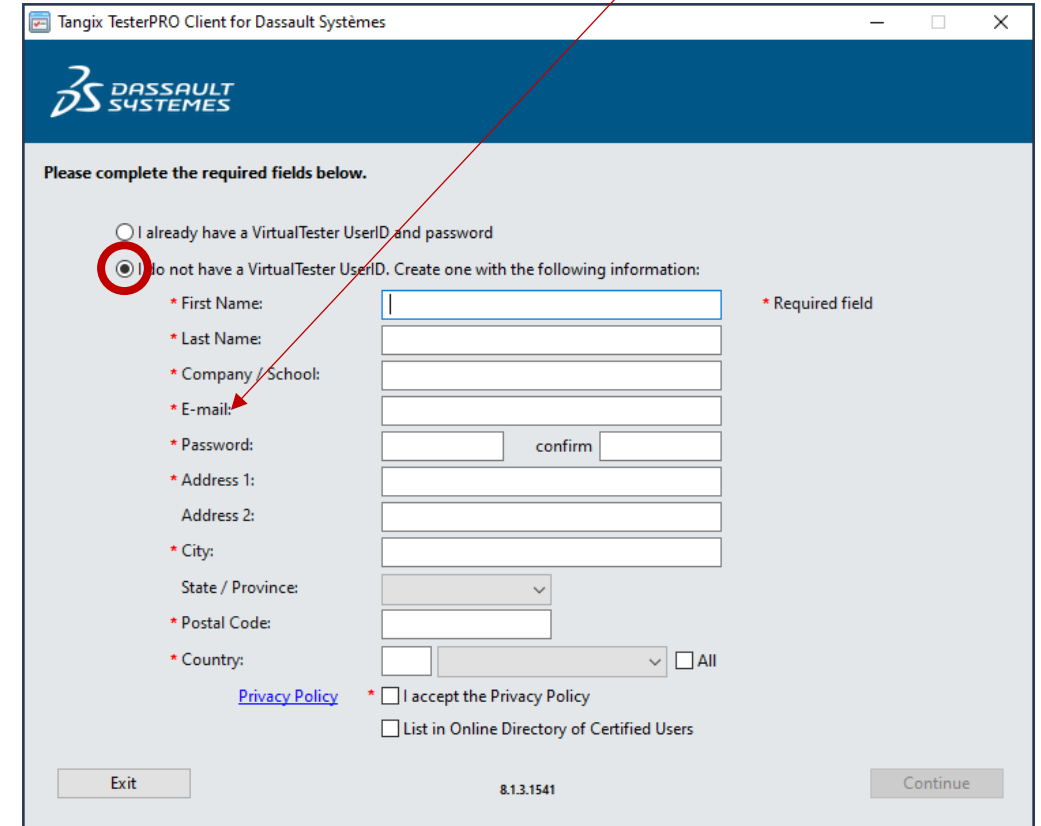
**DASSAULT SYSTEMES**

Please select the language to use in Tangix TesterPRO Client

<input checked="" type="radio"/> Use English as application language	<input type="radio"/> アプリケーション言語として日本語を使用
<input type="radio"/> Utiliser le Français comme langue du logiciel	<input type="radio"/> 請使用繁體中文作為應用程式語言
<input type="radio"/> Verwenden Sie Deutsch als Anwendungssprache	<input type="radio"/> 使用汉语作为应用程序语言
<input type="radio"/> Utilizar el español como el idioma de la aplicación	<input type="radio"/> 한국어 사용
<input type="radio"/> Use o português como o idioma do aplicativo	<input type="radio"/> ใช้ภาษาไทยเป็นภาษาที่ใช้
<input type="radio"/> Użyj Polskiego jako język aplikacji	<input type="radio"/> השתמש עברי כיישום שפה
<input type="radio"/> Usare l'Italiano come lingua di applicazione	

Exit 8.1.3.1541 Continue

Open Tangix TesterPRO and select your preferred language



Tangix TesterPRO Client for Dassault Systèmes

**DASSAULT SYSTEMES**

Please complete the required fields below.

☐ I already have a VirtualTester UserID and password

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

\* First Name:  \* Required field

\* Last Name:

\* Company / School:

\* E-mail:

\* Password:  confirm

\* Address 1:

Address 2:

\* City:

State / Province:

\* Postal Code:

\* Country:   ☐ All

[Privacy Policy](#) \* ☐ I accept the Privacy Policy

☐ List in Online Directory of Certified Users

Exit 8.1.3.1541 Continue

Use your UW email!

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

Tangix TesterPRO Client for Dassault Systèmes

**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

**DASSAULT SYSTEMES**

Select a Brand to show Certification Exams

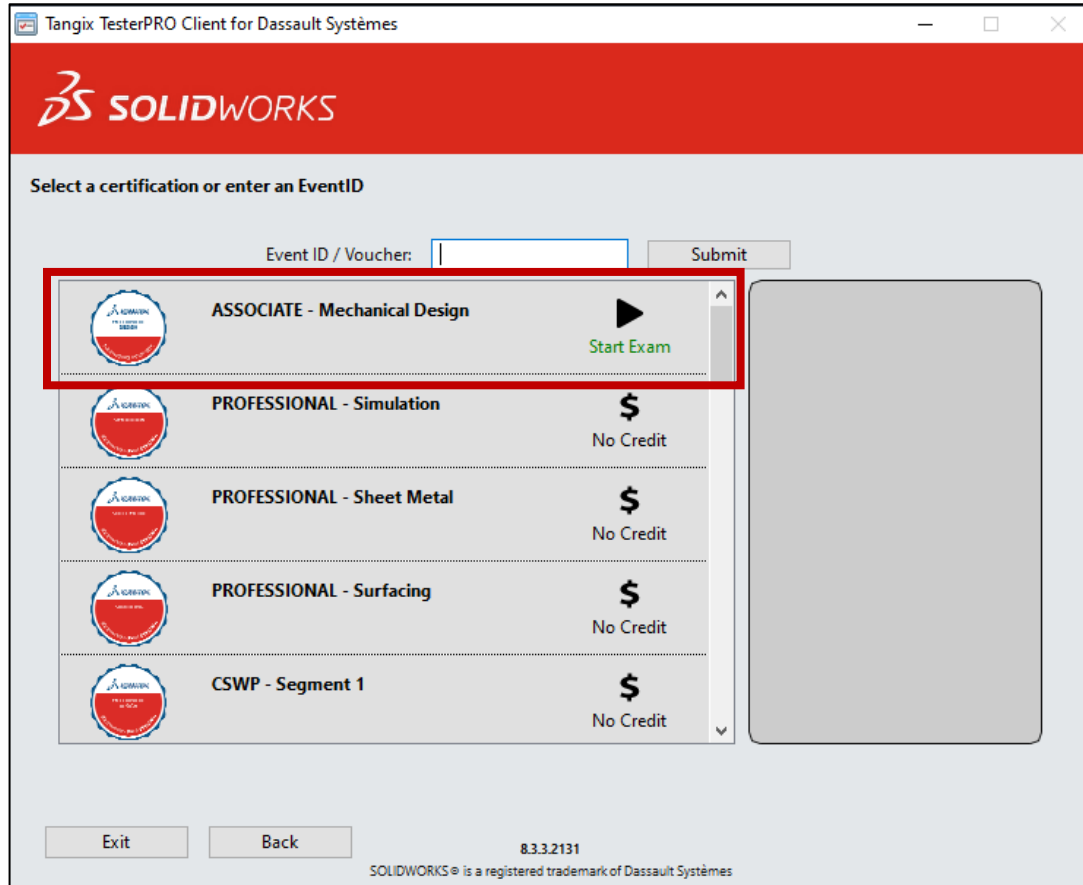
**SOLIDWORKS** 3DEXPERIENCE CATIA

DELMIA GEOVIA SIMULIA

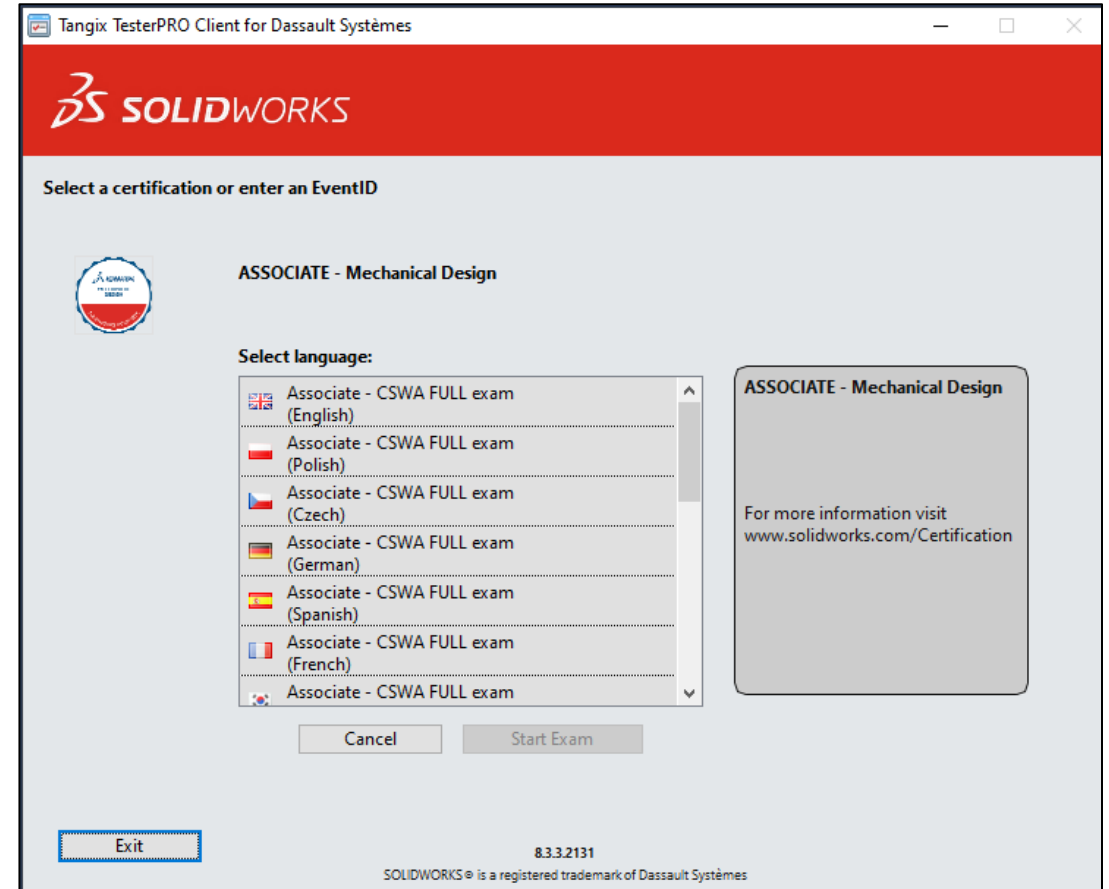
Exit 8.1.3.1541

Select SolidWorks from the software options

# Accessing the Exam

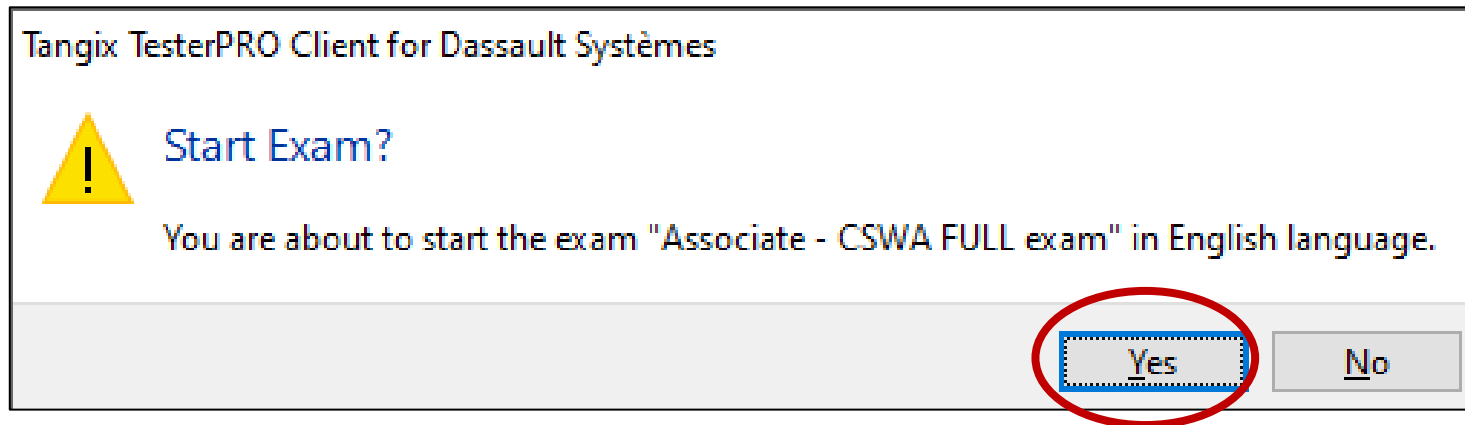


Once the exam opportunity has been created for you it will appear in your list of exams. Select “Start Exam”



Choose your preferred language and click “Start Exam”

# Accessing the Exam



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

# A Note About the Exams

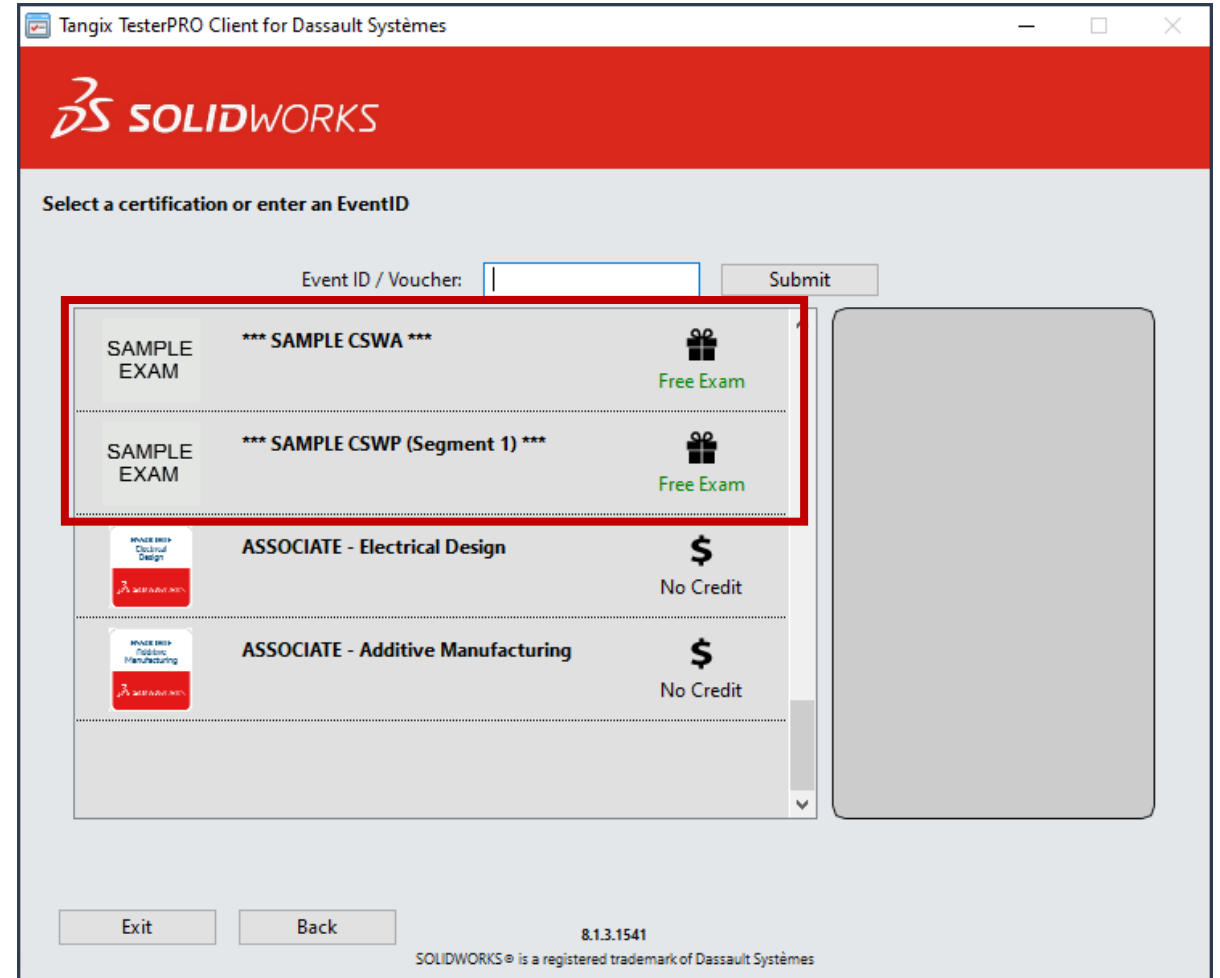
- Once the voucher for the exam has been created, you will have one month from the day that it is issued to complete the exam
- These exams are not proctored, so you can work on them at any time
- However, you **must** allocate a time where you can focus on the exam, as it must be completed entirely within one sitting
- You are given 180 minutes to complete the CSWA, and 200 minutes for the CSWP

# Before Receiving the Voucher

Given the limited opportunities available, we require all students to complete **AND PASS** a sample exam for the certification in question before we provide a voucher

This sample exam will help you prepare for the actual certification exam, ensure that your computer can handle the actual exam, and it gives you an idea of what to expect

If you fail the sample exam, there will be 30-day waiting period before you can attempt it again



# Completing the Exam

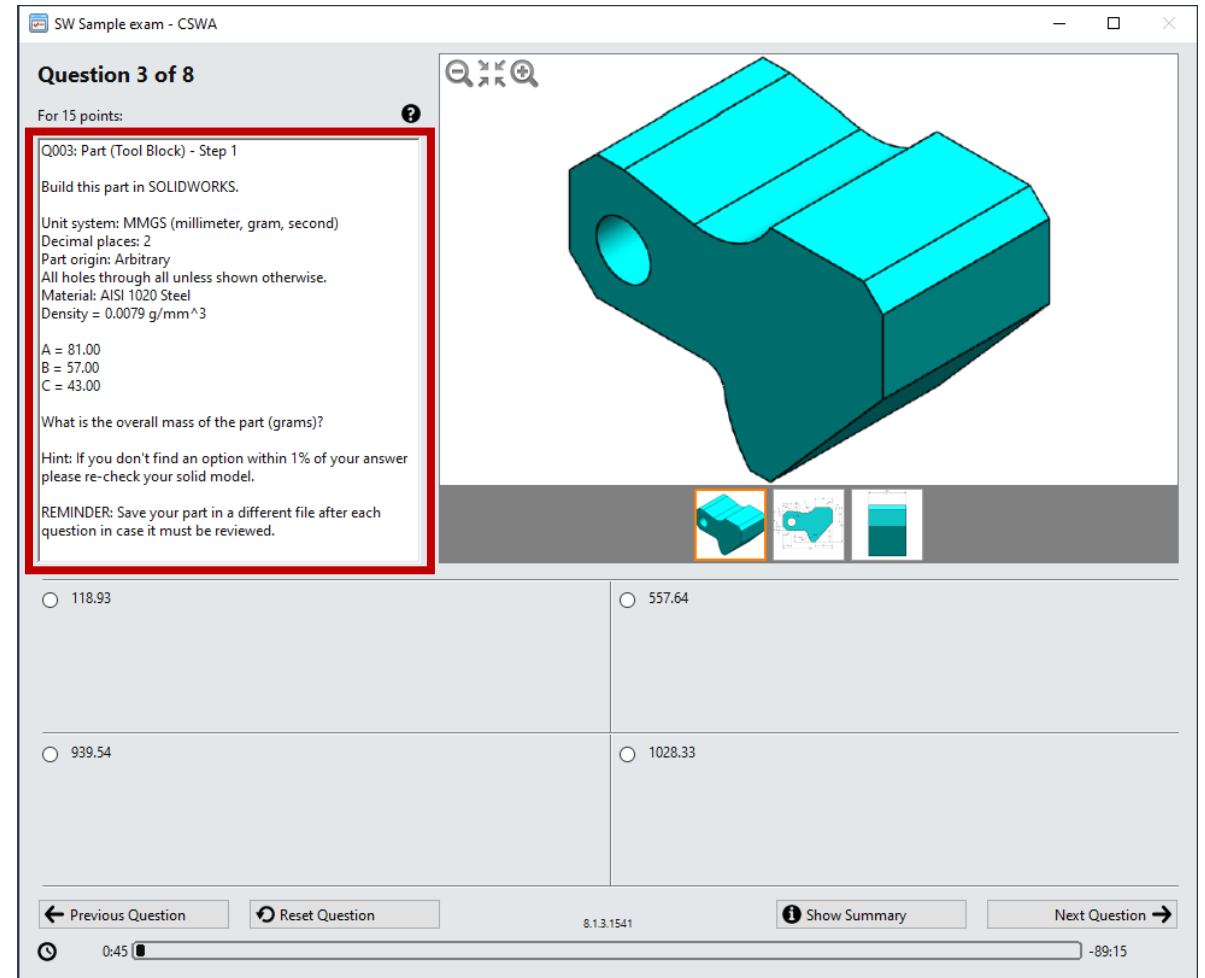
# CSWA Exam

The CSWA exam is comprised of three sections:

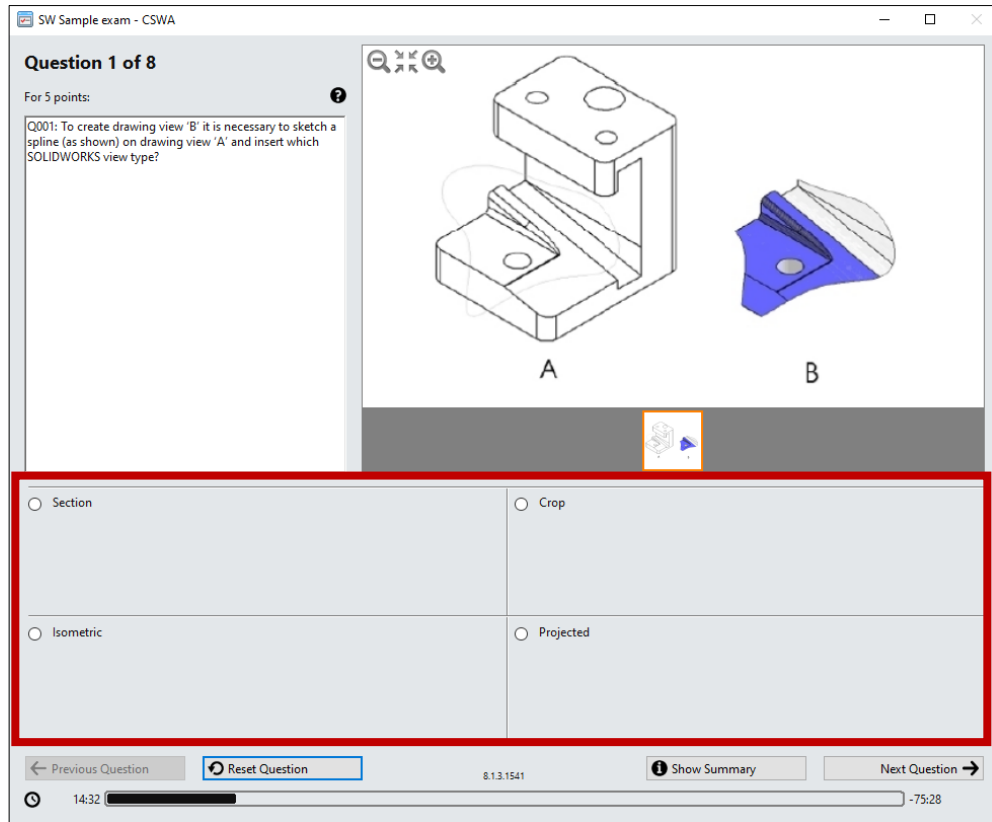
- Drawing view knowledge
- Part modelling
- Bottom-up assembly (using pre-built parts)

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.

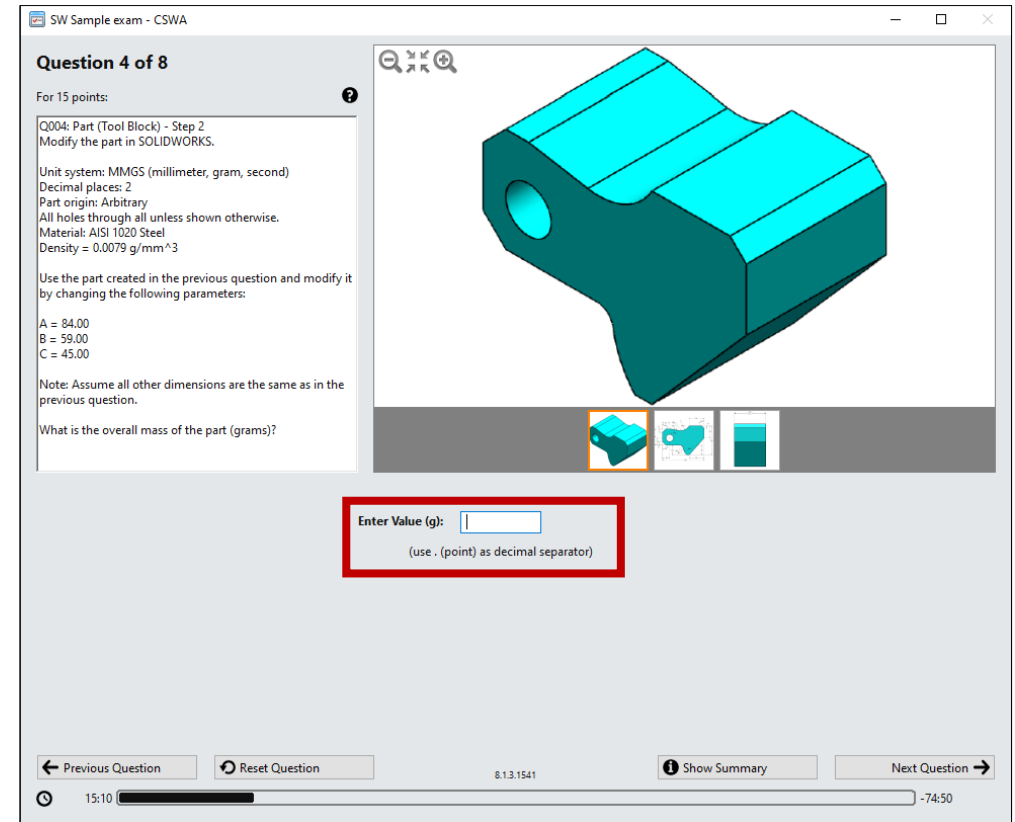
You have 180 minutes to complete the exam. To pass the exam, you must receive a minimum score of 70%.



# 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.

SW Sample exam - CSWA

**Question 3 of 8**

For 15 points:

Q003: Part (Tool Block) - Step 1

Build this part in SOLIDWORKS.

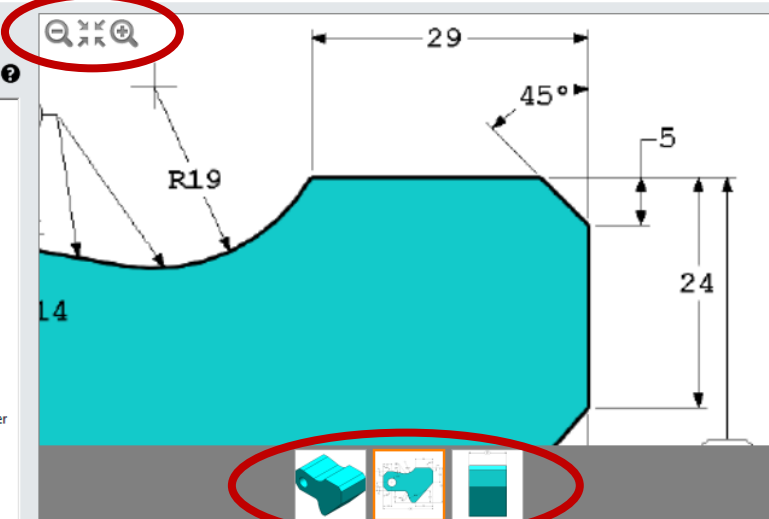
Unit system: MMGS (millimeter, gram, second)  
Decimal places: 2  
Part origin: Arbitrary  
All holes through all unless shown otherwise.  
Material: AISI 1020 Steel  
Density = 0.0079 g/mm<sup>3</sup>

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.

SW Sample exam - CSWA

**Question 7 of 8**

For 30 points:


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

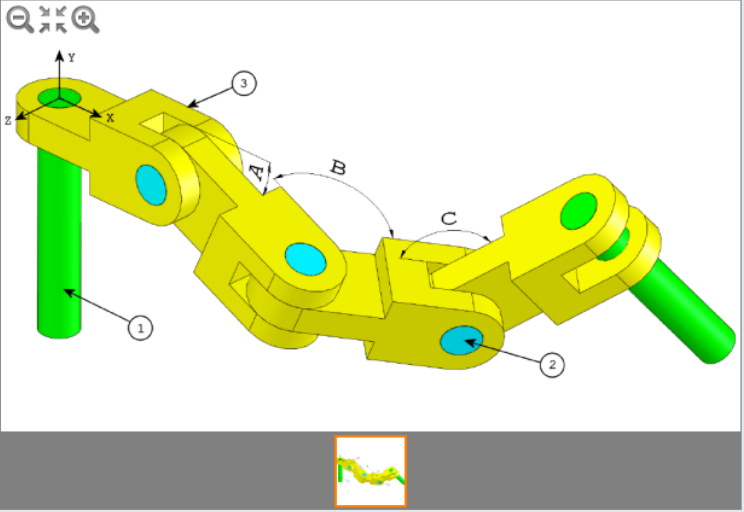
- Download the attached zip file and open it.
- Save the contained parts and open those parts in SOLIDWORKS. (Note: If SOLIDWORKS prompts "Do you want to proceed with feature recognition?" please click "No".)
- IMPORTANT: Create the Assembly with respect to the Origin as shown in isometric view. (This 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

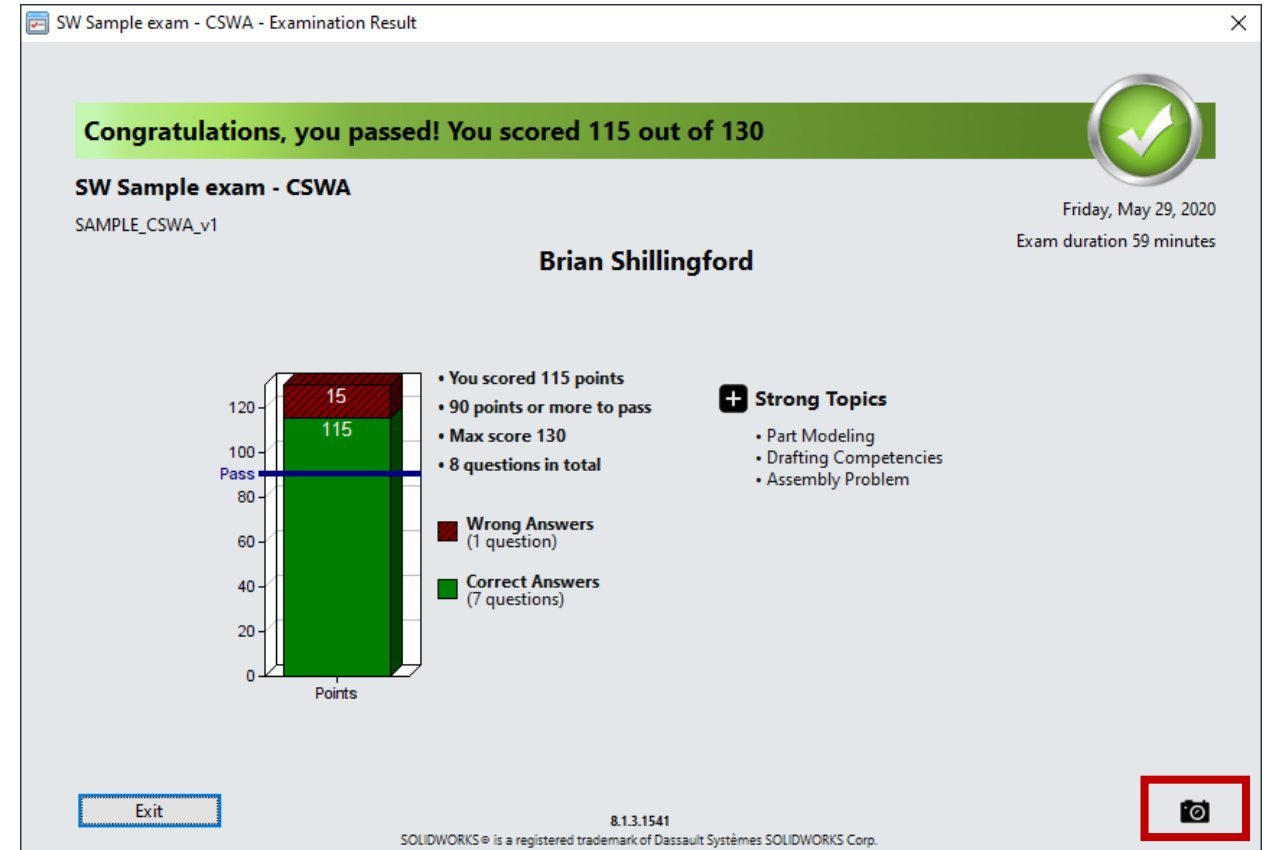
☐ X = 448.66, Y = -208.48, Z = -34.64

← 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.\*
- For the **sample exam**, this is the screenshot you need to submit as proof of completion in order to receive the voucher



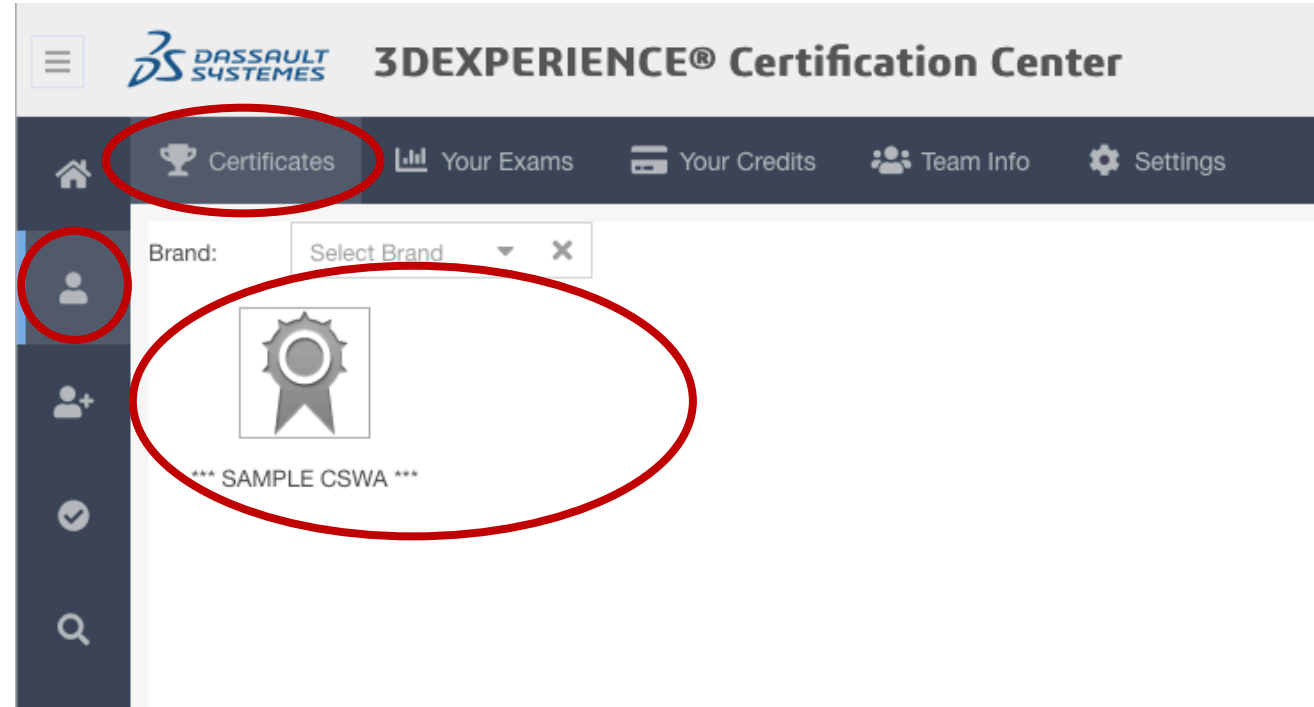
\*Note this is a screen shot from the sample exam so there is no option to download the certificate

# CSWP Exam

- The CSWP exam is similar to, but more advanced than the CSWA
- The CSWA is an entry-level certification, while the CSWP focuses on complex parts, configurations and advanced assembly techniques
- The CSWP is broken into 3 segments, each covering different areas of knowledge within SolidWorks

# Accessing 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, you can 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>

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

Delete Save



# **Requesting an Exam Opportunity**

**WATERLOO | ENGINEERING**

# Requesting an Exam Opportunity

To request a voucher for an exam opportunity, email Abdullah Barakat ([ambarakat@uwaterloo.ca](mailto:ambarakat@uwaterloo.ca)) with the screenshot of your passing grade on the sample exam, along with the following information:

- Given name(s):
- Last name(s):
- UW Email:
- Username (i.e. your email without “@uwaterloo.ca”):
- Program (ME/MTE):
- Term (1B, 3A, etc.):
- Exam (CSWA/CSWP):



# Other SolidWorks Certifications

Aside from the CSWA/CSWP, UW offers the following SolidWorks Certifications:

- CSWPA-SM - SolidWorks Sheet Metal Professional
- CSWPA-DT - SolidWorks Drawing Tools Professional
- CSWPA-MM - SolidWorks Mold Making Professional
- CSWPA-WD - SolidWorks Weldments Professional
- CSWPA-SU - SolidWorks Surfacing Professional
- CSWA-AM - SolidWorks Additive Manufacturing Associate
- CSWP-S - SolidWorks Simulations Professional
- CSWA-SD - SolidWorks Sustainability Associate
- CSWP-CAM - SolidWorks CAM Professional
- CSWP-MBD - SolidWorks MBD Professional
- CSWA-E - SolidWorks Electrical Associate
- CSWA-S - SolidWorks Simulations Associate

# Closing Remarks

- In summary, to get access to the voucher for the certification exams, you must:
  - Download Tangix TesterPro Client
  - Complete and Pass the sample exam for your desired certification
  - Email Abdullah Barakat proof of completion and the required information in this presentation
- If you have any questions about the certification process or how to prepare for the exams, please contact Abdullah Barakat at [ambarakat@uwaterloo.ca](mailto:ambarakat@uwaterloo.ca)
- Good Luck!