

**SIEMENS**

*Ingenuity for life*

# NX CAD Design Academic Certification

Study guide

## Frequently asked questions, sample questions and preparatory learning path

### Frequently asked questions

Academic users can receive special recognition for their knowledge and proficiency with NX™ software with the NX CAD Design Academic Certification.

### Who should attempt certification?

Certification is for any academic user seeking to validate their knowledge of NX software. Anyone who uses NX as part of their academic activities, including students and educators, can benefit from the program by emphasizing their skills and knowledge with certification from Siemens Digital Industries Software.

### What version of NX is the exam based on?

Certification is based on the current version of NX. We recommend that the current version be used for the exam, though it may be possible to complete the exam using previous versions.

### Do I need to have NX to take the exam?

Yes. In order to answer the questions on the exam you need a working installation of NX to find the problem solutions.

### How much does the certification exam cost?

The NX CAD Design Academic Certification exams have a retail price of \$25 each.

### What happens if you do not pass the exam?

You may retake the exam at any time; there is no required waiting period between exams. You may retake the exam as many times as you like. However, you will have to pay for each exam attempt.

### How long does certification last?

Certification validates your core competency skills and knowledge as it relates to a specific version of NX software. Although certification for a particular version never expires, certification is not considered current unless you have passed the latest exam.

### What you will receive when you become certified?

When you earn the NX CAD Design Academic Certificate, you earn the right to share this designation to market your NX skills (on business cards, resumes and websites, including the NX Community site). You will also receive a certificate in PDF format that is suitable for printing and framing.

### How long does the exam take?

The certification exam consists of nine questions and users have up to three hours to complete the exam.

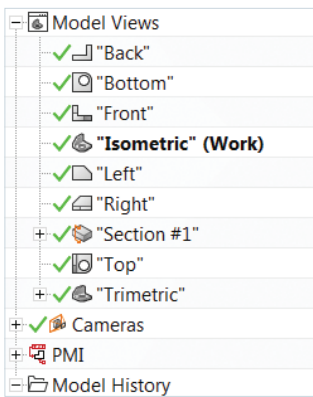
# NX CAD Design Academic Certification

## Sample test questions

### Sample question 1

From Model Navigator, which view or views currently contains PMI entities?

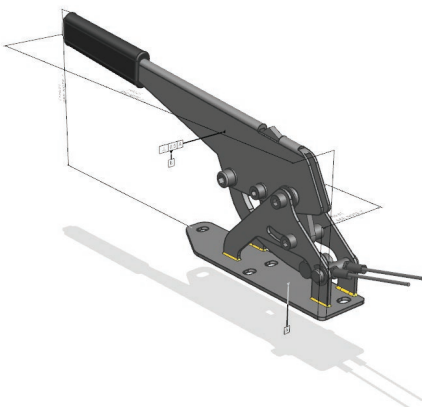
- A. Isometric
- B. Left
- C. Top
- D. Section #1 and Trimetric



### Sample question 2

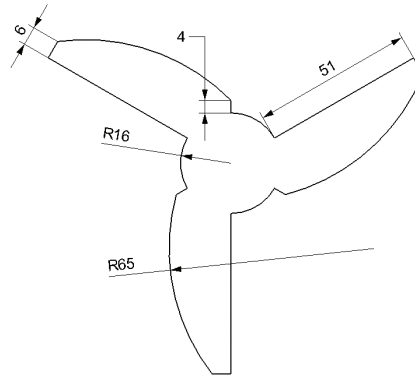
PMI entities can be displayed or shown on the assembly level, users must first:

- A. Display all the PMI in all the views
- B. Create PMI only on assembly level
- C. Add Filter in PMI Assembly Filters
- D. Copy the PMI from the component level and paste into assembly



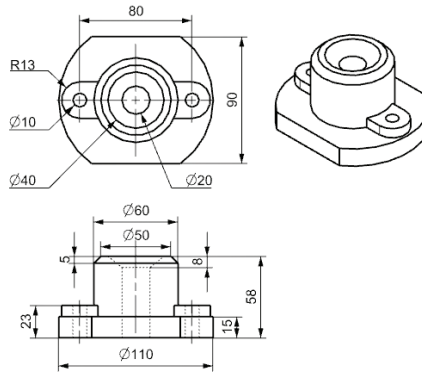
### Sample question 3

Draw the sketch and calculate the area of the shaded region shown.



### Sample question 4

Draw the model and calculate the volume.



### Sample question 5

Open the given assembly. Add constrain to the component and the components are caster\_fork, caster\_axle and caster\_wheel.

Add "2 to 2 center" constrain between 'piston pin' and 'piston'.

Add "2 to 2 center" constrain between 'connecting rod' and 'piston'.

Add "Touch Align" constrain between 'connecting rod' and 'piston pin'.

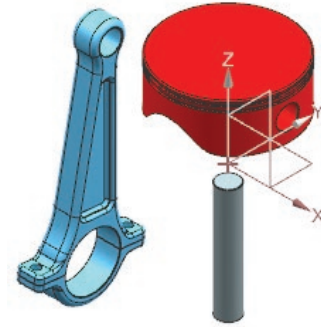
Add "Touch Align" constrain between 'piston pin' and 'piston'.

Add "Angle" constrain between 'TestingPart\_8' and 'connecting rod'.

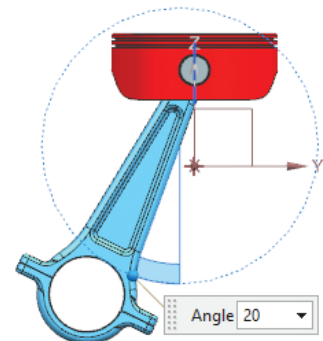
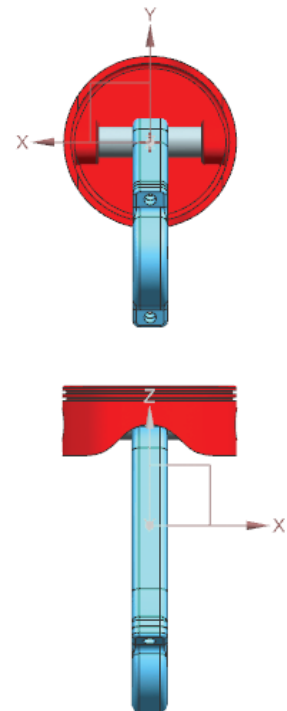
Calculate Center of Mass (Xcbar, Ycbar, Zcbar) of whole assembly.

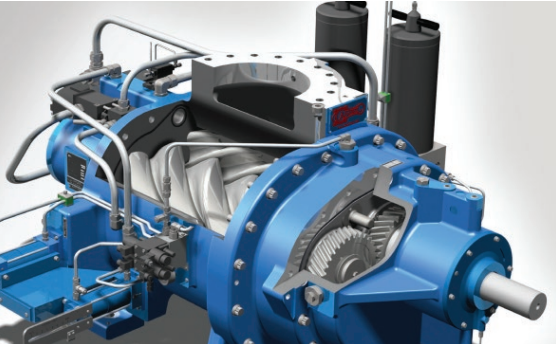
### Question 5 continued

Before:



After:





### **Suggested learning path**

We strongly suggest the use of Learning Advantage for exam preparation. All schools with active Siemens Digital Industries software license agreements have free, unlimited access to Learning Advantage for all faculty and students. Learn more about free access to Learning Advantage at the [FAQ](#).

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[Make design changes](#)

[Create basic models from sketches](#)

[Using NX Sketcher](#)

[Fit the pieces together](#)

[Create and update a drawing](#)

[Organize models](#)

[Design parts with sketches](#)

[Create a basic assembly](#)

[Constrain assemblies](#)

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[Introduction to synchronous modeling](#)

[Synchronous modeling in NX](#)

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[Constraining assembly components](#)

[Creating PMI dimensions and centerlines](#)

[Adding GD&T PMI to your model](#)

[Drafting fundamentals and drawing creation](#)

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Siemens Digital Industries Software  
[siemens.com/software](https://www.siemens.com/software)

Americas +1 314 264 8499

Europe +44 (0) 1276 413200

Asia-Pacific +852 2230 3333

Email: [academic.sisw@siemens.com](mailto:academic.sisw@siemens.com)

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