DASSAULT SYSTEMES

CATIA - Perform as a Mechanical Designer Specialization

Design mechanical products and parts.

Instructor: CATIA

Included with **coursera PLUS** • Learn more

7 course series
Get in-depth knowledge of a subject

Beginner level
Recommended experience ⓘ

4 weeks to complete
at 10 hours a week

Flexible schedule
Learn at your own pace

What you'll learn

✓ Cover the end-to-end process for mechanical design

✓ Explore innovative solutions and workable concepts for detailed design

✓ Reduce time-to-market by designing right the first time

✓ Collaborate with your team and others

Skills you'll gain

Engineering Drawings | Computer Aided Three-Dimensional Interactive Application (CATIA) | Computer-Aided Design | Mechanical Drawings

Geometric Dimensioning And Tolerancing | Microsoft Office | Product Engineering | Collaborative Software | Technical Drawing | Drafting and Engineering Design

Issue Tracking | 3D Modeling | Mechanical Engineering | 3D Assets | Mechanical Design | Document Management | Product Family Engineering | Assembly Drawing

Team Building | Product Lifecycle Management | View less skills

Details to know

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Advance your subject-matter expertise

- Learn in-demand skills from university and industry experts
- Master a subject or tool with hands-on projects
- Develop a deep understanding of key concepts
- Earn a career certificate from Dassault Systèmes

Specialization - 7 course series

In this CATIA specialization you will find the most comprehensive process coverage. including part design, assembly creation, mechanism movement, 3D mock-up review and drawing generation.

Access powerful capabilities for Engineering with **3D**EXPERIENCE CATIA for Students offer at a low price, €60 (excluding taxes), follow this link : https://go.3ds.com/CMD1 ↗

Thanks to the full integration within the **3D**EXPERIENCE Platform, it is possible to share changes at the object level and work simultaneously in teams on the same product. And to speed up the design process, users also benefit from all the features of the CATIA modeler, including direct modeling technology, functional design, advanced feature-based approach and design automation by knowledge software .

Applied Learning Project

Learners will:
 - Cover the end-to-end process for mechanical design
- Explore innovative solutions and workable concepts for detailed design
- Reduce time-to-market by designing right the first time
- Be ready to overcome new challenges with a scalable solution
- Collaborate with your team and others
- Take benefits from your assets and reuse existing designs
- Work on large assemblies with flexibility

Read less

Explore the 3DSwymer Role

Course 1 • 2 hours

Explore the Collaborative Industry Innovator Role

Course 2 • 2 hours

Explore the Mechanical Designer Role

Course 3 • 8 hours

Practice CATIA Part Design

Course 4 • 4 hours

Course details ⌃

What you'll learn

✓ -Create and constrain 2D sketches
-Design fully associative models in 3D
-Design reusable features
-Parameterize a model
-Use Boolean operations

Skills you'll gain

Mechanical Design   Computer Aided Three-Dimensional Interactive Application (CATIA)   3D Modeling   Design Software

Practice CATIA Assembly Design
Course 5 • 5 hours

Course details ⌃

What you'll learn

✓ - Create and manage assemblies
- Manage the positioning of parts
- Create engineering connections
- Create flexible assemblies

Skills you'll gain

File Management   Technical Design   Engineering Software   3D Assets   Design Software   Product Family Engineering

Practice CATIA Generative Wireframe and Surface
Course 6 • 7 hours

Course details ⌃

What you'll learn

✓ - Create curves and surfaces using wireframe geometries

- Assemble, re-limit and connect the surfaces

- Analyze surface quality and heal defects

Practice CATIA Drafting
Course 7 • 6 hours

Course details ⌃

What you'll learn

✓   -Create simple projection views and section views

-Position the views on a drawing sheet

-Add dimensions and annotations to the views

Skills you'll gain

Engineering Drawings   Drafting and Engineering Design   Computer Aided Three-Dimensional Interactive Application (CATIA)   Technical Drawing
Geometric Dimensioning And Tolerancing   3D Modeling   Visualization (Computer Graphics)   Assembly Drawing   Mechanical Drawings

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Instructor

CATIA
Dassault Systèmes
7 Courses • 1,027 learners

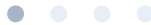**Offered by**

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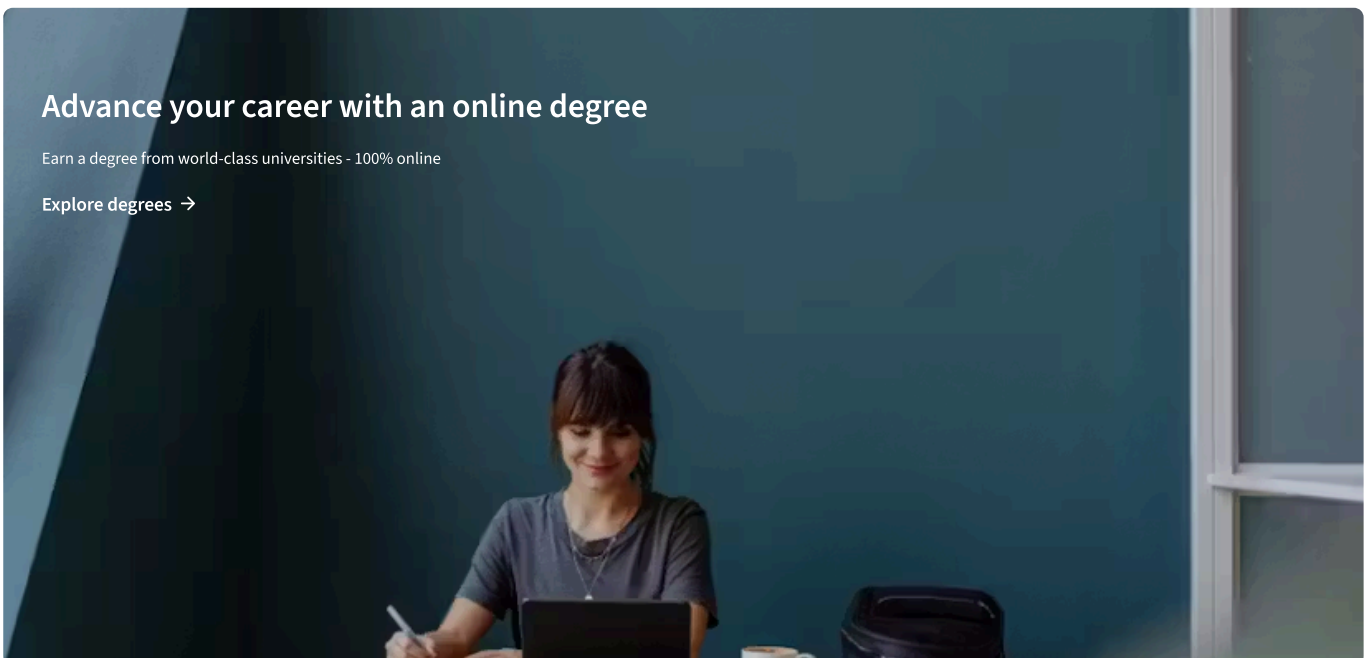
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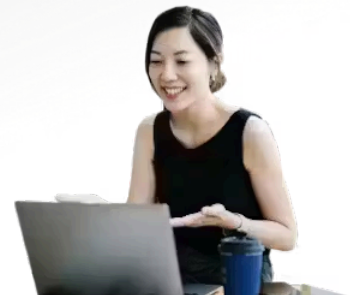
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Frequently asked questions

∧ **What background knowledge is necessary?**

Engineering concepts and fundamentals of the Mechanical Design domain.

∧ **Do I need to take the courses in a specific order?**

Yes, the courses in this specialization are designed to be taken in a specific order

∧ **Is this course really 100% online? Do I need to attend any classes in person?**

This course is completely online, so there's no need to show up to a classroom in person. You can access your lectures, readings and assignments anytime and anywhere via the web or your mobile device.

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