



Explore the Mechanical Designer Role

This course is part of [CATIA - Perform as a Mechanical Designer Specialization](#)

Instructor: [CATIA](#)

1 module

Gain insight into a topic and learn the fundamentals.

Beginner level

Recommended experience ○

8 hours to complete

Flexible schedule

Learn at your own pace

What you'll learn

- Design parts & surface geometries
- Build sheet metal parts
- ✓ - Construct and modify assemblies
- Generate part and assembly drawings

Skills you'll gain

- Product Development
- Manufacturing and Production
- Design Process
- Product Engineering
- Engineering Drawings
- Technical Drawing

Details to know



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Assessments

1 assignment



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In this course, you will learn to design and modify mechanical parts and assemblies using design methodologies such as solid modeling and surface modeling. You will assess their manufacturability. You will also learn about the know-how of parametric design and concurrent engineering.

Overview of the Mechanical Designer Role


Module 1 • 8 hours to complete

[Module details ^](#)

What's included


 1 assignment  16 plugins

Show info about module content ▾

 1 assignment • Total 30 minutes

Quiz: Explore the Mechanical Designer Role

- 30 minutes

 16 plugins • Total 480 minutes

Overview of the Mechanical Designer Role

- 10 minutes

Design the Base Part

- 30 minutes

Complete the Base Part

- 20 minutes

Create Parametric Design and Compare the Versions

- 25 minutes

Create Surface Geometries

- 30 minutes

Design Sheet Metal Parts

- 40 minutes

Design Functional Parts

- 30 minutes

Design Parts in Context

- 35 minutes

Create a Component Family

- 35 minutes

Define and Use Smart Mechanical Components

- 35 minutes

Work with Power Copy and User Feature

- 30 minutes

Recommended experience

Beginner level

Students attending this course should complete the Explore the 3DSwmer Role module & must be familiar with mechanical engineering concepts.

Create Assemblies

- 45 minutes

Reuse and Modify External CAD Data

- 30 minutes

Check the Part Manufacturability

- 45 minutes

Analyze the Weight of Assemblies

- 20 minutes

Create Drawings

- 20 minutes



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Recommended experience

Beginner level

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Explore more from Mechanical Engineering

Recommended

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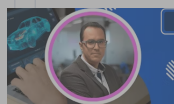


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Frequently asked questions

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^ Is financial aid available?

Yes. In select learning programs, you can apply for financial aid or a scholarship if you can't afford the enrollment fee. If fin aid or scholarship is available for your learning program selection, you'll find a link to apply on the description page.

More questions



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Beginner level

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Skills

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Data Analytics
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Generative AI (GenAI)
Microsoft Excel
Microsoft Power BI
Project Management
Python

Certificates & Programs

Google Cybersecurity Certificate
Google Data Analytics Certificate
Google IT Support Certificate
Google Project Management Certificate
Google UX Design Certificate
IBM Data Analyst Certificate
IBM Data Science Certificate
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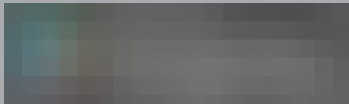
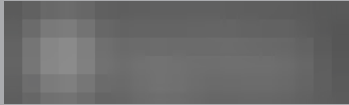
Press

Investors

Recommended experience

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