

# Handling 3D models and CAD in Osdag

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

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# Learning Objectives

**In this tutorial, we will learn to**



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In this tutorial, we will learn to

► **Handle 3D CAD model in Osdag**



# Learning Objectives

In this tutorial, we will learn to

- ▶ Handle 3D CAD model in Osdag
- ▶ Export a CAD model from Osdag in standard file formats



# Learning Objectives

In this tutorial, we will learn to

- ▶ Handle 3D CAD model in Osdag
- ▶ Export a CAD model from Osdag in standard file formats
- ▶ Import and view the CAD model in FreeCAD



# System Requirements

**To record this tutorial, I am using**

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► **Windows 11**

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- ▶ Windows 11

- ▶ Osdag v2021.02.a.a12f



# System Requirements

To record this tutorial, I am using

- ▶ Windows 11
- ▶ Osdag v2021.02.a.a12f
- ▶ **FreeCAD version 0.20**



# Pre-requisites

**To follow this tutorial, you should have**



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**To follow this tutorial, you should have**

► **Osdag installed on your system**



# Pre-requisites

To follow this tutorial, you should have

- ▶ Osdag installed on your system
- ▶ **Basic knowledge of structural steel design**



# Pre-requisites

**To follow this tutorial, you should have**

- ▶ **Osdag installed on your system**
- ▶ **Basic knowledge of structural steel design**
- ▶ **Basic knowledge of any CAD manipulation software**



# Pre-requisites

The pre-requisite tutorials are available on <https://spoken-tutorial.org>



# Code Files

- The files used in this tutorial are available in the Code Files link

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- ▶ Please download and extract them



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- ▶ Please download and extract them
- ▶ **Make a copy and then use them while practising**



# Summary

In this tutorial, we have

- ▶ Handled the 3D CAD model in Osdag
- ▶ Exported a CAD model from Osdag in a standard file format
- ▶ Imported and viewed the CAD model in FreeCAD



# Assignment

**As an assignment do the following**

- ▶ **Explore the Change background option in the Graphics menu**
- ▶ **Save the 3D CAD models in STEP, STL and BREP file formats**
- ▶ **Import the model in any CAD manipulation software**



# Assignment

- **Perform some post-processing activity like measuring the size of the members, etc.**

# About the Spoken Tutorial Project

- ▶ Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](https://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



# Spoken Tutorial Workshops

## The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)



# Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org/>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer
- ▶ You will have to register to ask questions



- For any general or technical questions on Osdag, visit the FOSSEE forum and post your question <https://forums.fossee.in/>



# Sample Design Examples

- ▶ The Osdag team at FOSSEE creates sample design examples for self-learning
- ▶ These examples can be practised using the Osdag software
- ▶ For more details, please visit <https://osdag.fossee.in/resources/sample-design>



# Acknowledgements

- ▶ **The Spoken Tutorial project is funded by the Ministry of Education, Government of India**

# Thank You!

- ▶ **This is Anandajith TS, FOSSEE, IIT Bombay signing off**
- ▶ **Thanks for joining**