

# Creating and Meshing aerofoil in Gmsh

**Talk to a Teacher**

<http://www.sakshat.ac.in>

**National Mission on Education through ICT**

<http://spoken-tutorial.org>

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**August 1, 2014**



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# Learning Objectives

- Create an aerofoil using Gmsh



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- **Create an aerofoil using Gmsh**
- **Mesh the aerofoil**



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# Pre-requisite

- **Basic knowledge about aerofoil and Gmsh**



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# Pre-requisite

- **Basic knowledge about aerofoil and Gmsh**
- **Installing and Running Gmsh**



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# System Requirement

- **Ubuntu Linux Operating System version 13.10**



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# System Requirement

- **Ubuntu Linux Operating System version 13.10**
- **Gmsh version 2.8.4**



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# Introduction to Aerofoil

- Streamline shaped wings



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# Introduction to Aerofoil

- **Streamline shaped wings**
- **Airplanes and turbo machinery**



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# Introduction to Aerofoil

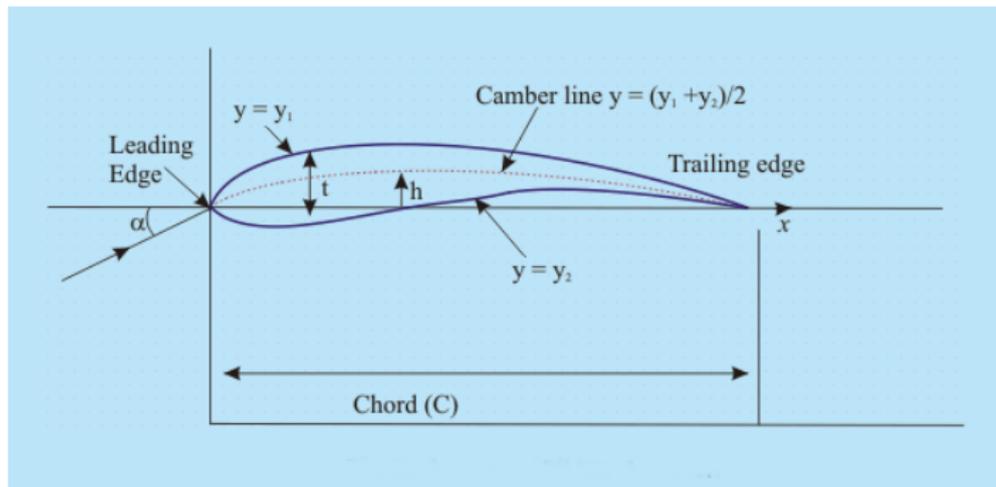
- **Streamline shaped wings**
- **Airplanes and turbo machinery**
- **Drag force very small compared to lift**



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# Aerofoil geometry



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# Aerofoil coordinates

- Available in text file with `.dat` extension



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# Aerofoil coordinates

- Available in text file with .dat extension
- Download the .dat file and python script from



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# Aerofoil coordinates

- Available in text file with .dat extension
- Download the .dat file and python script from
- <http://community.dur.ac.uk/.l.ingram/download.php>



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# Assignment

- Create other aerofoil using different .dat file



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# Summary

**In this tutorial we learnt :**

- **To create an aerofoil in Gmsh**
- **Create mesh in Gmsh**



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# About the Spoken Tutorial Project

- Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- It summarises the Spoken Tutorial project



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- 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)**



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# Acknowledgements

- Spoken Tutorial Project is a part of the Talk to a Teacher project
- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at

<http://spoken-tutorial.org/NMEICT-Intro>



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