

# INTRODUCTION TO CAD

This 5-week hands-on programme, in manageable one-hour classroom sessions, will help to embed elements of the Maths and D&T curriculum.

Students work through a series of exercises using a professional 3D CAD (computer aided design) system.

The students will discuss the features of 2D and 3D shapes and geometry; get to extrude, revolve and merge shapes from 2D into 3D; learn about the 3D workspace to improve spatial awareness; and discuss cross-sections of a variety of 3D shapes.

Along the way they'll see how engineers use these tools, and learn about related technologies such as 3D printing, finite-element analysis, and stress analysis.

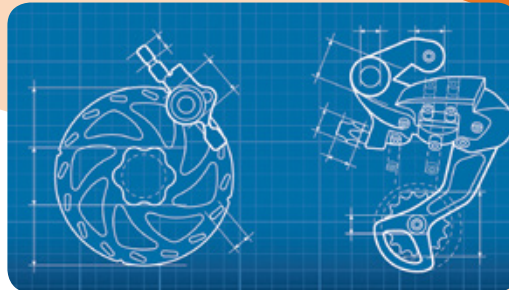
All students will receive a **Certificate of Achievement**.

A separate CPD session can be provided for teaching and support staff to aid awareness of how CAD systems are used in industry including parts, assemblies, material properties, bill-of-materials, 3D printing, and computational analysis for aerodynamics and stress calculations. Participants will have the chance to try the 2D and 3D exercises.

*Note - many schools part- or fully-fund this through student contributions.*

*"One child told me... 'I feel like I'm important because I'm using something which really clever people use to make planes'."*

**Richard Harris,**  
Year 6 teacher, Molehill Primary Academy.



- KEY STAGE 1
- KEY STAGE 2
- KEY STAGE 3
- KEY STAGE 4
- KEY STAGE 5

## About Weald Technology

Weald Technology Ltd is a social enterprise and an award-winning engineering company. Our mission is to inspire young people to pursue engineering careers, which we do with STEM workshops based on innovations in sustainable transport. We keep our knowledge up-to-date, and our STEM projects relevant, through collaborating on industrial research and development.



For further information please call  
Phil Edwards on 01825 761890  
email: [education@weald-tech.co.uk](mailto:education@weald-tech.co.uk)

