

# Introduction to Onshape

A series of activities and video tutorials that introduce Onshape CAD software

## ABOUT THE RESOURCE

**The slides** take students through a series of activities that introduce basic CAD skills using Onshape. The activities have been used successfully by year 9 and 10 DVC and Materials Technology students. Most students can follow the video tutorials with very little assistance. The activities could be completed all in one unit or could be split between a number of units as appropriate. They can be used as stand-alone lessons or to introduce students to skills that they will require to complete design projects.

## OVERVIEW OF LEARNING COVERED

As students work through the activities, they will learn to use Onshape CAD software to:

- Create simple forms with the extrude and revolve feature tools.
- Add details and patterns.
- Create an orthographic drawing with a section view.
- Export parts for 3D printing
- Prepare a parts drawing for laser cutting.

## WHAT IS ONSHAPE?

Onshape is fully cloud based CAD software that is suitable for product design, manufacturing and industrial design contexts. For more about Onshape, follow [this link](#). It will operate on any platform or operating system including netbooks and ipads. Users can share and collaborate on documents in real time. All schools and students can create free education accounts easily [here](#).

Onshape is very similar to Solidworks which is the most frequently used CAD package for product design and manufacturing industries in New Zealand. Students who learn to use Onshape should find their skills transferrable to other CAD software such as Solidworks, Inventor and Fusion 360. Onshape is one of the simplest packages to access and get started with using.