

## Onshape self-directed resource

This resource outlines a non-linear approach to exploring and developing skills within the Onshape cloud-based CAD platform. This resource is designed to emulate and support an online elective CPD event which took place in term one of the 2020/2021 academic year.

### **What is Onshape?**

Onshape is a cloud-based CAD platform which may be a suitable for Junior Cycle students as it encourages an understanding of the relationship between 2D shapes and 3D form. It may also be a suitable platform to realise and communicate design solutions.

### **How is this resource structured?**

This resource is structured into three Microsoft Forms, supported by a [CPD booklet](#) which aims to develop knowledge and proficiency with Onshape while also considering how Onshape could contribute to the overall student experience in Junior Cycle Graphics.

[Part 1](#) – Introduction to Onshape.

[Part 2](#) – Modelling geometric solids using Onshape.

[Part 3](#) – Collaborating and using Onshape on multiple devices.

More detail on what is explored in each part and the accompanying links to the Microsoft Forms can be found on the next page.

### **How do I know where to start?**

On the following page, you will find the main information explored in each part. Choose an appropriate part which will match your prior experience with Onshape. This resource is non-linear and can be engaged with however you see fit.

### **How can I best engage with the resource?**

To best engage with this resource, register for a free [Onshape Education Standard Plan](#) account and use the online platform in tandem with the Microsoft Forms. It is also recommended that you have a copy of the [CPD booklet](#) which is referenced in the resource.

To register for your free [Education Standard Plan](#), click the icon below.



## CPD booklet

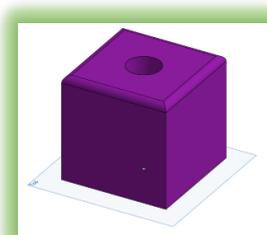
The [CPD booklet](#) is designed to scaffold engagement with the Microsoft Forms. The booklet is referenced directly in the resource.



## Part 1:

Part 1 is an introduction to Onshape. Topics which will be explored in this section are:

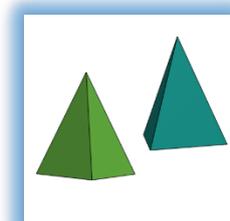
- Onshape signup process.
- Onshape settings and preferences.
- Navigation of the Onshape workspace.
- Creating a sketch.
- Extrude feature.
- Non sketch based features.
- Revolve feature.
- Editing and manipulating parts.



## Part 2:

Part 2 focuses on creating more complex 3D geometric solids. Topics which will be explored in this section are:

- Loft feature.
- Sketch constraints.
- Editing an Onshape part.
- Inserting planes.
- Creating a drawing.
- Exporting and importing.



## Part 3:

Part 3 focuses on the collaboration and sharing of Onshape documents. Topics which will be explored in this section are:

- Sharing and collaboration.
- Keyboard shortcuts.
- Help and Learning Centre.
- Onshape using iOS and Android.
- Exploring the workshop booklet.

