6th Form Preparation work for Design and Technology

Product Design

Week 3 and 4

design

NOTE: If you do not have access to a PC to download the software –No Worries – You can still watch tutorials or

try MOBILE APP - ONSHAPE 3D (IOS)



Watch this introductory video into what Fusion 360 is and how it can be used.

What is Fusion 360? What is Sketchup?

Youtube Videos
Time: 30 mins



Getting started Sketchup A number of brief tutorials to watch (or try out if you have managed to download

the software.

master the software.

<u>Getting started with Sketchup</u> – Part1 <u>Sketchup Tutorial</u> – Part 2 Try the rest of the tutorials till you



Watch these brief introductions to CAD Software and how t has developed.

Where do you think we would be today without CAD?

The History of CAD
First 3D Software
What is CAD?
CAD In schools – Why?

Youtube Video **Time: 25 mins**



Getting started with Fusion 360 A number of brief tutorials to watch (or try out if you have managed

to download the software.

Introductory Video

Work through each video

- Step 1: Open your first file.
- Step 2: Manage your data.
- Step 3: Navigate the UI.

Getting Started with FUSION 360

Enrol on this course and complete all tasks

Fusion 360: Introduction to CAD, CAM, and CAE 15 lessons | 3 hours 15 minutes

Time: 3 hours 30 mins

Read BIM Vs. CAD Files: What's The Difference?

Read through the web page, considering the difference between CAD and BIM

Consider the advantages and disadvantages of each for the Designer and the Architect.

CAD Vs BIM Link

Archive Document
Time: 45 mins



Mastery Fusion 360 If you are already familiar with Fusion 360 – try some of the more advanced

functions to master their concepts.

Beginners Tutorial
Medium Level Tutorial
Advanced Tutorials (Enrol on Course)

TOP TIP: Investigate using Isometric crating to help.

Isometric Crating

Time: 1hr – 4 hours



Install Fusion 360 onto a PC if you have access. Or Google Sketchup – (Slower PCs)

- You should use you school email address if you have one.
- You will need a reasonably quick PC to install.

<u>Installation link</u> – OnShape (also on IOS)

<u>Installation link</u> – Fusion 360

<u>Installation link</u> – Sketchup FREE

Fusion 360 Website / Sketchup Website

Time: 45mins



Watch the TED talk which looks at how the future of 3D Printing.

4th Industrial Revolution... the future

TED Talks – Dr Tim Minshall

Time: 11m



TASK – Using CAD Software Design one of the following products:

Easy – A Mobile phone case Medium – A new toaster Hard – A set of Headphones

Time: 1hr - 6 hours

FOCUS: USING SKETCHUP / FUSION 360 TO DESIGN