



# Blue Coat Church of England Academy

**Year: 9**

**Subject: 3D Design**

## Overview

GCSE OCR 3D Design is a NEW exciting course with comes under the OCR GCSE Art and Design framework. Over year, 10 and 11 pupils will produce a portfolio of work and a Set task as set by the exam board. This course focuses on learning different 3D Design techniques and exploring the work of designers. Students can base their work on any of the below categories:

## Term 1.1: Autodesk fusion training

In this unit pupils will explore how 3D CAD is used within industry and how to compile drawings in 3D using a range of CAD techniques in autodesk fusion 360. These include:

- Revolve
- Extrude
- Assembly
- Render
- Engineering drawing

AO1 Develop

## **Term 1:2 Portfolio 1- Festival project**

In this unit, pupils will be introduced into how CAD and DTP can be combined together to for fill an industrial brief.

Pupils will build on their knowledge of CAD/CAM and incorporate these into pieces created. Pupils will explore and experiment with manipulating of media, techniques and processes within work. Pupils should be able to identify that the work they produce meets outcomes linked to the following GCSE skills.

AO2 Refine

AO4 Present

## **Term 2:1 Night light Project**

In this unit pupils are able to apply what they have learnt during the first term through an assessed mini project. Students are expected to use both 2D and 3D CAD to develop design ideas and then apply these through the use of 2D and 3D CAM.

Techniques used are

- Photoshop
- 2D Design tools
- Auto CAD Fusion 360
- 3D printing
- 2D CAMM1 cutting
- 2D printing
- Laser Cutting

AO3 Record

A04 Present

## **Term 2&3- Portfolio 2 – Time**

This unit will be student's first independent portfolio; it is designed to allow them to meet the four assessment objectives under the OCR assessment criteria. Students will investigate the theme of time, designing and developing their own full portfolio. They will be encouraged to observe and record in a variety of ways from a range of secondary sources. This unit will provide students with a good knowledge base of a range of materials, techniques and processes and allow them to develop their skills, independence and creativity

AO1 Develop – research

AO2 Refine design ideas

AO3 Record- design development

AO4 Present- Final design Product