

<b>SOLIDWORKS DOCUMENTS</b>
<b>CREATING A PART</b>
CREATING A SKETCH
SELECTING A PLANE
GENERATING A SKETCH
CHANGING DIMENSIONS
MODIFYING ENTITIES
EXTRUDED BOSS/BASE
EXTRUDED CUT
FILLET
CHAMFER
SHELL
CREATING A PLANE
LOFTED BOSS/BASE
DRAFT
3D PATTERNS
REFERENCE GEOMETRY
ZOOM TO FIT/AREA
SECTION VIEW
VIEW ORIENTATION
DISPLAY STYLE
XYZ MEASUREMENTS
POINT TO POINT MEASUREMENT
ARC/CIRCLE MEASUREMENTS
INSERT COMPONENTS
MOVE / ROTATE COMPONENTS
MATE
SELECTING GEOMETRY
ASSIGNING MATERIALS
ASSIGNING DECALS
EDIT SCENE
PHOTOVIEW 360
PHOTOVIEW 360 OPTIONS
FINAL RENDER
RECALL LAST RENDER
SHEET FORMAT/SIZE
MODEL VIEWS
SMART DIMENSIONS

## HT3- Y9 CAD

In the Third half-term of Year 9, students will move on to intermediate Computer-Aided Design (CAD) skills. This module aims to provide more advanced knowledge and practical experience in using CAD software for design and modelling purposes. The objectives and outcomes for this module align with the National Curriculum (NC) Programme of Study (PoS) and support the overall Map of Learning.

### WHAT IS CAD ?

- CAD (computer-aided design) is the use of computer-based software to aid in design processes. CAD software is frequently used by different types of engineers and designers
- The purpose of CAD is to optimise the designer's workflow, increase productivity, improve the quality and level of detail in the design. CAD software outputs come in the form of electronic files, which are then used accordingly for manufacturing processes.
- CAD is often used in tandem with digitised manufacturing processes. CAD/CAM (computer-aided design/computer-aided manufacturing

### WHAT WILL YOU BE COMPLETING THIS TERM

This term you will be working on creating a 3D model of your local Masjid, this will include you carrying out primary research into your masjid and note down all the notable features. It will then be your job to create the masjid on Solidworks utilising all of the tools we have gone over (included on the right hand side)

- Features may include.
- Dome
  - Minaret
  - Mihrab
  - Mimbar
- Any other features of note.

### WHERE IS SOLIDWORKS USED

Solidworks is widely used in various industries for 3D modelling, simulation, and product design. It is commonly used in industries such as automotive, aerospace, consumer goods, and machinery. Solidworks is known for its user-friendly interface and powerful capabilities, making it a popular choice for engineers and designers. Many companies use Solidworks for tasks such as creating prototypes, simulating product performance, and generating manufacturing documentation. Overall, Solidworks is a prominent tool in the industrial landscape for product development and design.


