

Parametric Modelling

Mechanical Engineering

Building a CAD model that survives being changed by somebody else.

Feature order is design intent, written down where the software can read it.

1

Sketch on a datum plane

Not on a model face. Faces move; datum planes do not.

2

Fully constrain the sketch

No dragging. An under-defined sketch moves when a size changes.

3

Build features in order

Base feature, then what depends on it, then the cosmetic work.

4

Name key dimensions

Drive related sizes from one parameter or an equation.

5

Test the model

Change the driving dimensions and check nothing breaks or flips.

A model that only its author can edit is unfinished work, however good the geometry looks.