



[Link to IMCE Ltd](#)

Aim: To maximise the utilisation of the 3D CAD model, thus minimising the reliance on fully detailed 2D drawings and hence deliver quicker yet contractually robust specifications.

Objectives: after the course, candidates will be able to

- Understand how the advent of 3D CAD modelling has affected drawing practices.
- Emphasise the role of standards in defining contractually robust specifications.
- Discuss the correct use of datums, size, location and orientation.
- Apply the principal of functional dimensioning.
- Clearly differentiate between the use of general and specific tolerances.
- Use basic tolerance analysis techniques to differentiate between significant and non-significant dimensions.
- Implement the principal of 'undimensioned' features of the 3D CAD model.
- Deal with potential misunderstandings caused by 'partially' dimensioned drawings.
- Work within a data release policy in order to link 3D and 2D data robustly.
- Understand the need to secure supplier 'buy-in'.
- Give special consideration to complex surfaces.

Pre-requisites:

- Maximum of 12 candidates.
- A commitment to engage and secure agreement of suppliers and other manufacturing partners in the use of 'partially' dimensioned drawings.