

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<b>P1</b> describe the advantages, compared to other methods, of producing drawings electronically using a CAD package	<b>M1</b> explain the relationship between CAD and other software/hardware used in manufacturing	<b>D1</b> justify the use of CAD in a manufacturing company
<b>P2</b> describe the software and hardware required to produce CAD drawings	<b>M2</b> explain how the range of commands used to produce CAD drawings can impact drawing production	<b>D2</b> evaluate the impact of the use of 2D and 3D CAD models on final design requirements.
<b>P3</b> produce 2D CAD detail drawings of five components that make up an assembly or sub-assembly to given standards, using appropriate commands [CT1, CT5, SM3]	<b>M3</b> explain how 3D CAD models can be used in the design process.	
<b>P4</b> produce a circuit diagram containing at least five components to appropriate standards, using appropriate commands [CT1, CT5, SM3]		
<b>P5</b> produce an assembly drawing and exploded view of an assembly or sub-assembly containing at least five parts, using appropriate commands [CT1, CT5, SM3]		
<b>P6</b> interpret the properties of an engineering component or circuit from a given CAD drawing [IE4]		
<b>P7</b> within a 3D environment construct a 3D CAD drawing as a surface and solid model.		