

Please read the instructions printed at the end of this form. One of these sheets, suitably completed, should be attached to the assessed work of each candidate.

Unit Title	Computer aided manufacture	Unit Code	R111	Series Jan / June	Year	2	0		
Centre Name				Centre Number					
Candidate Name				Candidate Number					

Marking Criteria – Total Marks for this unit is 60

Mark Band 1	Mark Band 2	Mark Band 3	Teacher Comment	Page
LO1: Be able to plan the production of components on Computer Numerical Control (CNC) machines				
<p>Produces a basic plan for the production of components on CNC machines that contains limited detail and considers some relevant factors in the production of components.</p> <p>The plan shows some coherence, but successful application by others would require significant additional information and clarification.</p> <p style="text-align: center;">1 – 3 marks</p>	<p>Produces an adequate plan for the production of components on CNC machines that contains some detail and considers most relevant factors in the production of components.</p> <p>The plan is coherent and successful application by others would require some additional information and clarification.</p> <p style="text-align: center;">4 – 6 marks</p>	<p>Produces a comprehensive and detailed plan for the production of components on CNC machines that considers all relevant factors in the production of components.</p> <p>The plan is coherent and successful application by others would require minimal clarification.</p> <p style="text-align: center;">7 – 9 marks</p>	<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;">Mark</div>	
LO2: Be able to interpret information from CAD to manufacture components on CNC equipment				
<p>Requires regular assistance to interpret a CNC program and needs regular prompting to demonstrate program operation.</p> <p>Considers some relevant factors when performing CNC programming operations.</p> <p style="text-align: center;">1 – 4 marks</p>	<p>Requires occasional assistance to interpret a CNC program and demonstrates program operation with occasional prompting, making changes where appropriate.</p> <p>Considers most relevant factors when performing CNC programming operations.</p> <p style="text-align: center;">5 – 8 marks</p>	<p>Works independently and competently to interpret a CNC program and demonstrates program operation without prompting, making changes where appropriate.</p> <p>Considers all relevant factors when performing CNC programming operations.</p> <p style="text-align: center;">9 – 12 marks.</p>	<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;">Mark</div>	

LO3: Be able to set-up and use Computer Numerical Control (CNC) equipment to manufacture components			Teacher Comment	Page
<p>Requires regular prompting to follow procedures to set-up a CNC machine correctly.</p> <p>Selects appropriate tools and equipment on some occasions, setting them with limited accuracy.</p> <p>Draws upon limited skills/knowledge/understanding from other units in the specification.</p> <p style="text-align: right;">1 – 5 marks</p>	<p>Requires occasional prompting to follow procedures to set-up a CNC machine correctly.</p> <p>Selects appropriate tools and equipment on most occasions, setting them with some accuracy.</p> <p>Draws upon some relevant skills/knowledge/understanding from other units in the specification.</p> <p style="text-align: right;">6 – 10 marks</p>	<p>Independently follows procedures to correctly set-up a CNC machine.</p> <p>Selects appropriate tools and equipment and sets them accurately.</p> <p>Clearly draws upon relevant skills/knowledge/understanding from other units in the specification.</p> <p style="text-align: right;">11 – 15 marks</p>	<div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> Mark </div>	
<p>Requires regular assistance to produce products and follow safe use procedures. Requires prompting on most occasions to identify and use appropriate PPE.</p> <p style="text-align: right;">1 – 3 marks</p>	<p>Requires occasional assistance to produce products. Follows safe use procedures with some competence. Requires prompting on some occasions to identify and use appropriate PPE.</p> <p style="text-align: right;">4 – 6 marks</p>	<p>Works independently and competently to produce products. Competently follows safe use procedures and identifies and uses appropriate PPE.</p> <p style="text-align: right;">7 – 9 marks</p>	<div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> Mark </div>	
<p>Makes limited and occasionally relevant comparisons of manual and CNC produced components.</p> <p style="text-align: right;">1 – 2 marks</p>	<p>Makes some considered and mostly relevant comparisons of manual and CNC produced components.</p> <p style="text-align: right;">3 – 4 marks</p>	<p>Makes clear, considered and relevant comparisons of manual and CNC produced components.</p> <p style="text-align: right;">5 – 6 marks</p>	<div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> Mark </div>	

LO4: Know about applications of computer controlled processes used to manufacture products					Teacher Comment	Page
<p>Outlines a limited range of applications of computer controlled processes to manufacture a component.</p> <p>Gives a basic description of computer controlled processes used for different scales of manufacture with few relevant examples.</p> <p style="text-align: right;">1 – 3 marks</p>	<p>Describes a range of applications of computer controlled processes to manufacture a component in some detail.</p> <p>Gives an adequate description of computer controlled processes used for different scales of manufacture with some relevant examples.</p> <p style="text-align: right;">4 – 6 marks</p>	<p>Describes a wide range of applications of computer controlled processes used to manufacture a component in detail.</p> <p>Gives a comprehensive description of computer controlled processes used for different scales of manufacture with clear and relevant examples.</p> <p style="text-align: right;">7 – 9 marks</p>	<div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> Mark </div>			
Total/60						
If this work is a re-sit, please tick		Session and Year of previous submission	Jan / June	2 0		Please tick to indicate this work has been standardised internally

Guidance on Completion of this Form

Please note: This form may be updated on an annual basis. The current version of this form will be available on the OCR website (www.ocr.org.uk).

Guidance on Completion of this Form

- 1 **One** sheet should be used for each candidate.
- 2 Please ensure that the appropriate boxes at the top of the form are completed.
- 3 Please enter *specific* page numbers where evidence can be found in the portfolio, and where possible, indicate to which part of the text in the mark band the evidence relates.
- 4 Circle the mark awarded for each strand of the marking criteria in the appropriate box and enter the circled mark in the final column.
- 5 Add the marks for the strands together to give a total out of 60 Enter this total in the relevant box.