

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	Engineered application of computers	Unit Code	R115	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: Understand how computers are used in engineering design, manufacture and process control			<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;">Mark</div>	
<p>Demonstrates a limited understanding of how computers are used within engineering design, manufacture and process control.</p> <p>Draws upon limited skills/knowledge/understanding from other units in the specification.</p> <p style="text-align: center;">1 – 5 marks</p>	<p>Demonstrates a sound understanding of how computers are used within engineering design, manufacture and process control.</p> <p>Draws upon some relevant skills/knowledge/understanding from other units in the specification.</p> <p style="text-align: center;">6 – 10 marks</p>	<p>Demonstrates a thorough understanding of how computers are used within engineering design, manufacture and process control.</p> <p>Clearly draws upon relevant skills/knowledge/understanding from other units in the specification.</p> <p style="text-align: center;">11 – 15 marks</p>		
LO2: Understand how computers are used for maintenance of engineering systems			<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;">Mark</div>	
<p>Demonstrates a limited understanding of the use of 'Human Machine Interface (HMI)' and 'expert systems' within system operation, diagnostics and maintenance.</p> <p>Interprets some results obtained from system operation data with limited accuracy.</p> <p>Recommendations for modifications or corrections to a system operation are basic with limited relevance.</p> <p style="text-align: center;">1 – 6 marks</p>	<p>Demonstrates a sound understanding of the use of 'Human Machine Interface (HMI)' and 'expert systems' within system operation, diagnostics and maintenance.</p> <p>Interprets results obtained from system operation data with some accuracy.</p> <p>Recommendations for modifications or corrections to a system operation are appropriate with some relevance.</p> <p style="text-align: center;">7 – 12 marks</p>	<p>Demonstrates a thorough understanding of the use of 'Human Machine Interface (HMI)' and 'expert systems' within system operation, diagnostics and maintenance.</p> <p>Accurately interprets results obtained from system operation data</p> <p>Recommendations for modifications or corrections to a system operation are thorough and relevant.</p> <p style="text-align: center;">13 – 18 marks.</p>		

LO3: Know how computers are used to communicate and use data for production and maintenance					Teacher Comment	Page
<p>Demonstrates limited knowledge of the use of computers to communicate and exchange data during production operations.</p> <p>Provides a basic description of how production data is used in maintenance operations.</p> <p style="text-align: right;">1 – 4 marks</p>	<p>Demonstrates some knowledge of the use of computers to communicate and exchange data during production operations.</p> <p>Provides a detailed description of how production data is used in maintenance operations.</p> <p style="text-align: right;">5 – 8 marks</p>	<p>Demonstrates comprehensive knowledge of the use of computers to communicate and exchange data during production operations.</p> <p>Provides a comprehensive and detailed description of how production data is used in maintenance operations.</p> <p style="text-align: right;">9 – 12 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>Provides a limited description of how computer are used to communicate and exchange data in maintenance operations.</p> <p>Demonstrates a basic knowledge of the use of hand held computer devices in manufacturing and maintenance systems.</p> <p style="text-align: right;">1 – 5 marks</p>	<p>Provides a detailed description of how computers are used to communicate and exchange data in maintenance operations.</p> <p>Demonstrates a detailed knowledge of the use of hand held computer devices in manufacturing and maintenance systems.</p> <p style="text-align: right;">6 – 10 marks</p>	<p>Provides a comprehensive and detailed description of how computers are used to communicate and exchange data in maintenance operations.</p> <p>Demonstrates a comprehensive knowledge of the use of hand held computer devices in manufacturing and maintenance systems.</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>			
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.