

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.

<b>Unit Title</b>	<b>1A Study of an Engineered Product</b>	<b>Unit Code</b>	<b>A621</b>	<b>Series</b>	Jan/June	<b>Year</b>	<b>2</b>	<b>0</b>				
<b>Centre Name</b>							<b>Centre Number</b>					
<b>Candidate Name</b>							<b>Candidate Number</b>					

**Unit A621 1A Study of an Engineered Product:** For the engineered products studied the candidate:

Marking Criteria – total mark for this unit is 90			Teacher Comment	Page
<p><b>Has basic ability</b></p> <p>gives a basic description of:</p> <ul style="list-style-type: none"> <li>the impact of modern technologies, smart materials and components on their development;</li> <li>the advantages and disadvantages that the use of modern technology has brought to society.</li> </ul> <p>[0 1 2 3]</p>	<p><b>Demonstrates an ability</b></p> <p>gives a description of:</p> <ul style="list-style-type: none"> <li>the impact of modern technologies, smart materials and components on their development;</li> <li>the advantages and disadvantages that the use of modern technology has brought to society.</li> </ul> <p>[4 5 6]</p>	<p><b>Works competently</b></p> <p>gives a fully detailed description of:</p> <ul style="list-style-type: none"> <li>the impact of modern technologies, smart materials and components on their development;</li> <li>the advantages and disadvantages that the use of modern technology has brought to society.</li> </ul> <p>[7 8 9]</p>		<div style="border: 1px solid black; padding: 5px; width: 50px; margin: auto;">Mark</div>
<p>gives a basic explanation of the use of materials and components and some of their:</p> <ul style="list-style-type: none"> <li>properties;</li> <li>characteristics;</li> <li>performance; and</li> <li>cost.</li> </ul> <p>There will be little or no use of specialist terms. Answers may be ambiguous or disorganised. Errors of spelling, punctuation and grammar may be intrusive.</p> <p>[0 1 2 3]</p>	<p>gives a detailed explanation of the use of materials and components and their:</p> <ul style="list-style-type: none"> <li>properties;</li> <li>characteristics;</li> <li>performance; and</li> <li>cost.</li> </ul> <p>There will be some use of specialist terms, although these may not always be used appropriately. The information will be presented for the most part in a structured format. There may be occasional errors in spelling, punctuation and grammar.</p> <p>[4 5 6]</p>	<p>gives a fully detailed and justified explanation of the use of materials and components and their:</p> <ul style="list-style-type: none"> <li>properties;</li> <li>characteristics;</li> <li>performance; and</li> <li>cost.</li> </ul> <p>Specialist terms will be used appropriately and correctly. The information will be presented in a structured format. The candidate can demonstrate the accurate use of spelling, punctuation and grammar.</p> <p>[7 8 9]</p>		

<b>Unit A621 1A Continued:</b> For the engineered products studied the candidate:				
<b>Marking Criteria – total mark for this unit is 90</b>			<b>Teacher Comment</b>	<b>Page</b>
<b>Has basic ability</b> gives a basic explanation of the: <ul style="list-style-type: none"> <li>• engineering processes used.</li> </ul> <p style="text-align: right;"><b>[0 1 2]</b></p>	<b>Demonstrates an ability</b> gives a detailed explanation of the: <ul style="list-style-type: none"> <li>• engineering processes used</li> </ul> <p style="text-align: right;"><b>[3 4]</b></p>	<b>Works competently with independence</b> gives a fully detailed and justified explanation of the: <ul style="list-style-type: none"> <li>• engineering processes used</li> </ul> <p style="text-align: right;"><b>[5 6]</b></p>	<b>Mark</b>	
suggests, with some explanation, limited: <ul style="list-style-type: none"> <li>• modifications to design solutions;</li> <li>• sustainability issues.</li> </ul> <p style="text-align: right;"><b>[0 1 2]</b></p>	suggests and explains: <ul style="list-style-type: none"> <li>• modifications to design solutions;</li> <li>• sustainability issues.</li> </ul> <p style="text-align: right;"><b>[3 4]</b></p>	suggests and explains in detail: <ul style="list-style-type: none"> <li>• modifications to design solutions;</li> <li>• sustainability issues.</li> </ul> <p style="text-align: right;"><b>[5 6]</b></p>		<b>Mark</b>
<b>Unit A621 1B Engineering a Product:</b> Using the Client Design Brief for a engineered product the candidate:				
<b>Marking Criteria – total mark for this unit is 90</b>			<b>Teacher Comment</b>	<b>Page</b>
provides a basic analysis of the client brief;  produces and partially applies a design specification. <p style="text-align: right;"><b>[0 1 2 3]</b></p>	provides an analysis of the client brief;  produces and applies a design specification. <p style="text-align: right;"><b>[4 5 6]</b></p>	provides a detailed and justified analysis of the client brief;  produces and fully applies a justified design specification. <p style="text-align: right;"><b>[7 8 9]</b></p>	<b>Mark</b>	
develops some design ideas using engineering drawings to current industry standards;  presents their selection of design solutions for the engineered product;  gives some considered client feedback. <p style="text-align: right;"><b>[0 1 2 3 4 5]</b></p>	develops a range of annotated design ideas using appropriate engineering drawings to current industry standards;  presents and explains their selection of design solution for the engineered product; consider client feedback and responds appropriately. <p style="text-align: right;"><b>[6 7 8 9 10]</b></p>	develops a wide range of annotated design ideas using appropriate engineering drawings to current industry standards;  presents and fully justifies their selection of design solution for the engineered product;  considers client feedback, respond appropriately and justify changes made. <p style="text-align: right;"><b>[11 12 13 14 15]</b></p>		<b>Mark</b>

Unit A621 1B Engineering Product: Using the Client Design Brief for a engineered product the candidate:					
Marking Criteria – total mark for this unit is 90				Teacher Comment	Page
<p>makes a prototype of the design solution.</p> <p style="text-align: right;">[0 1 2 3 4 5 6]</p>	<p>makes a quality prototype of the design solution.</p> <p style="text-align: right;">[7 8 9 10 11 12]</p>	<p>makes a complete, high quality prototype of the design solution.</p> <p style="text-align: right;">[13 14 15 16 17 18]</p>		<div style="border: 1px solid black; padding: 5px; width: 50px; margin: 0 auto;">Mark</div>	
<p><b>Has basic ability</b></p> <p>selects and safely uses appropriate materials, parts and components, processes, tools and equipment;</p> <p>applies some quality control techniques.</p> <p style="text-align: right;">[0 1 2 3]</p>	<p><b>Demonstrates an ability</b></p> <p>selects and safely uses a range of appropriate materials, parts and components, processes, tools and equipment;</p> <p>appropriately applies a range of quality control techniques.</p> <p style="text-align: right;">[4 5 6]</p>	<p><b>Works competently with independence</b></p> <p>selects and safely uses a wide range of appropriate materials, parts and components, processes, tools and equipment;</p> <p>appropriately applies and details a range of quality control techniques.</p> <p style="text-align: right;">[7 8 9]</p>		<div style="border: 1px solid black; padding: 5px; width: 50px; margin: 0 auto;">Mark</div>	
<p>suggests some modifications to the design solution giving some consideration to the use of modern materials, processes and technologies.</p> <p style="text-align: right;">[0 1 2 3]</p>	<p>suggests modifications to the design solution giving consideration to the use of modern materials, processes and technologies.</p> <p style="text-align: right;">[4 5 6]</p>	<p>suggests detailed and justified modifications to the design solution giving consideration to the use of modern materials, processes and technologies.</p> <p style="text-align: right;">[7 8 9]</p>		<div style="border: 1px solid black; padding: 5px; width: 50px; margin: 0 auto;">Mark</div>	
<b>Total/ 90</b>					
If this work is a re-sit, please tick	Session and Year of previous submission	Jan / June	<b>2 0</b>	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](http://www.ocr.org.uk)). Please complete one *Centre Authentication Form* (CCS160) for each unit and forward to the moderator with your sample.

### 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 90 Enter this total in the relevant box.