

GCSE in Engineering

OCR J322 (Single Award) in Engineering J344 (Double Award) in Engineering Unit A621
Unit Recording Sheet

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	1A Study of an Eng	ineered Product	Unit Code	A621	Series	June	Year	2	0	
Centre Nar	ne				Centre Nu	ımber				
Candidate	Name				Candidate	e Number				

Unit A621 1A Study of an Engineered I	Product: For the engineered product	ucts studied the candidate:		
	Teacher Comment	Page		
Has basic ability	Demonstrates an ability	Works competently		
 gives a basic description of: the impact of modern technologies, smart materials and components on their development; the advantages and disadvantages that the use of modern technology has brought to society. 	gives a description of: • the impact of modern technologies, smart materials and components on their development; • the advantages and disadvantages that the use of modern technology has brought to society.	gives a fully detailed description of: • the impact of modern technologies, smart materials and components on their development; • the advantages and disadvantages that the use of modern technology has brought to society.		
[0 1 2 3]	[4 5 6]	[7 8 9]	Ma	ark
gives a basic explanation of the use of materials and components and some of their: • properties; • characteristics; • performance; and	gives a detailed explanation of the use of materials and components and their: • properties; • characteristics; • performance; and	gives a fully detailed and justified explanation of the use of materials and components and their: • properties; • characteristics; • performance; and		
 cost. 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. 	cost. 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. [4 5 6]	cost. 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. [7 8 9]	Ma	ark

Unit A621 1B Engineering a Product: Using the Client Design Brief for a engineered product the candidate: Marking Criteria – total mark for this unit is 90 Teacher Comment provides a basic analysis of the client brief; produces and partially applies a design specification. [0 1 2 3] develops a range of annotated design ideas using engineering drawings to current industry standards; presents their selection of design solutions for the engineered product; consider client feedback and responds [5 6] [7 8 9] Teacher Comment provides a detailed and justified analysis of the client brief; produces and fully applies a justified design specification. [7 8 9] develops a wide 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	Unit A621 1A Continued: For the	engineered products studied the candidate:			
gives a basic explanation of the: • engineering processes used [0 1 2] • engineering processes used [3 4] • engineering processes used [5 6] suggests, with some explanation, limited: • modifications to design solutions; • sustainability issues. [0 1 2] Unit A621 1B Engineering a Product: Using the Client Design Brief for a engineered product the candidate: Marking Criteria – total mark for this unit is 90 Teacher Comment provides a basic analysis of the client brief; produces and partially applies a design specification. [0 1 2 3] develops a range of annotated design ideas using engineering drawings to current industry standards; presents their selection of design solutions for the engineered product; on of design solutions for the engineered product; consider client feedback and responds gives a fully detailed and justified explanation of the: • engineering processes used [5 6] suggests and explains in detail: • modifications to design solutions; • sustainability issues. [5 6] Suggests and explains in detail: • modifications to design solutions; • sustainability issues. [5 6] Teacher Comment provides a detailed and justified analysis of the client brief; produces and partially applies a design specification. [7 8 9] develops a wide range of annotated design ideas using appropriate engineering drawings to current industry standards; presents their selection of design solutions for the engineered product; consider client feedback and responds		Teacher Comment	Pag		
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suggests, with some explanation, limited: • modifications to design solutions; • sustainability issues. • modifications to design solutions; • modifications to design so	gives a basic explanation of the:	gives a detailed explanation of the:	gives a fully detailed and justified explanation of the:		
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• sustainability issues.	suggests, with some explanation, limited:	suggests and explains:	suggests and explains in detail:		
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develops some design ideas using engineering drawings to current industry standards; presents their selection of design solutions for the engineered product; consider client feedback and responds [4 5 6] [7 8 9] develops a range of annotated design ideas using appropriate engineering drawings to current endustry standards; presents a develops a wide 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 develops a wide 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	provides a basic analysis of the client brief;	provides an analysis of the client brief;	provides a detailed and justified analysis of the client	reacher comment	Pag
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for the engineered product; design solution for the engineered product; consider client feedback and responds	produces and partially applies a design specification.	produces and applies a design specification.	provides a detailed and justified analysis of the client brief; produces and fully applies a justified design specification.	Ma	
	produces and partially applies a design specification. [0 1 2 3] develops some design ideas using engineering drawings to current industry	produces and applies a design specification. [4 5 6] develops a range of annotated design ideas using appropriate engineering drawings to	provides a detailed and justified analysis of the client brief; produces and fully applies a justified design specification. [7 8 9] develops a wide range of annotated design ideas using appropriate engineering drawings to current		
gives some considered client feedback. appropriately. considers client feedback, respond appropriately and justify changes made. [11 12 13 14 15]	produces and partially applies a design specification. [0 1 2 3] develops some design ideas using engineering drawings to current industry standards; presents their selection of design solutions	produces and applies a design specification. [4 5 6] 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;	provides a detailed and justified analysis of the client brief; produces and fully applies a justified design specification. [7 8 9] develops a wide range of annotated design ideas using appropriate engineering drawings to current industry standards; presents and fully justifies their selection of design		

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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		
makes a prototype of the design s	solution.	makes a quality prototype of the design solution. [7 8 9 10		makes a co design solo		te, high quality prototype of the	Ma	rk
Has basic ability		Demonstrates an ability		Works co	mpete	ently with independence		
selects and safely uses appropria materials, parts and components, processes, tools and equipment;	,	selects and safely uses a range of appropriate materials, parts and comport processes, tools and equipment;	onents,		parts	ly uses a wide range of appropriate and components, processes, tools		
applies some quality control techr	niques.	appropriately applies a range of quality control techniques.	appropriately applies and details a range of quality control techniques.			Ma	rk	
	[0 1 2 3]		[4 5 6]			[7 8 9]		
suggests some modifications to the design solution giving some consideration to the use of modern materials, processes and technologies.		suggests modifications to the design sometime giving consideration to the use of moderaterials, processes and technologies	suggests detailed and justified modifications to the design solution giving consideration to the use of modern materials, processes and technologies.		giving consideration to the use of	Ma	rk	
[0 1 2 3]			[4 5 6]			[7 8 9]		
							Total/ 90	
If this work is a re-sit, please tick	Session	and Year of previous submission Jan	n / June	2 0		Please tick to indicate this work has bee	en 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.
- Add the marks for the strands together to give a total out of 90 Enter this total in the relevant box.

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