

## **Cambridge National in Engineering**

OCR Engineering Design Unit R106

## 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 Product	analysis ar	nd re	search		Unit Code	R106	Series Jan / June	Year	2	0		
Centre Name							Centre Number					
Candidate Name						Candidate Numbe	r					
Marking Criteria – Total Marks for this unit is 60												
Mark Band 1			Mark Band 2 Mark Band 3			Teacher Comment				Page		
LO1: Know how commercial production methods, quality and legislation impact on the design of products and components									lark			
Demonstrates <b>limited</b> knowledge of how commercial production methods and manufacturing processes impact on product/component design. <b>Basic</b> description of how product end of life considerations can influence product/component design. Demonstrates a <b>limited</b> knowledge of the importance of conformity to legislation and standards <b>1 – 4 marks</b>		ods pact end e ge	Demonstrates <b>some</b> knowledge of how commercial production methods and manufacturing processes impact on product/component design. Describes in <b>some</b> detail how product end of life considerations can influence product/component design. Demonstrates a <b>sound</b> knowledge of the importance of conformity to legislation and standards <b>5 – 8 marks</b>	Demonstrates <b>det</b> how commercial p and manufacturing product/componer <b>Comprehensively</b> product end of life influence product/o Demonstrates <b>det</b> the importance of and standards	roduction metho processes imp at design. describes how considerations component desi <b>ailed</b> knowledg conformity legis	ods pact on / can ign. e of	n					
LO2: Be able to research existing products												
Provides a <b>basic</b> des strengths and weakne products.		sting	Provides an <b>adequate</b> description of strengths and weaknesses of existing products.	Provides a <b>compr</b> of strengths and w products.			- Mark					
Uses <b>few appropriate</b> methods to provide a <b>brief</b> summary of research of existing products.			Uses <b>some appropriate</b> methods to provide a <b>detailed</b> summary of research of existing products.	Uses <b>appropriate</b> methods to provide a <b>comprehensive</b> and <b>detailed</b> summary of research of existing products.								
	1 – 6 ma	arks	7 – 12 marks		13 –18	marks						

LO3: Be abl	Teacher Commen	t Page		
Requires regular assistance to follow manufacturer's instructions/manual /disassembly procedure. Requires <b>prompting</b> to follow special instructions.	Works competently with occasional assistance to follow manufacturer's instructions/manual/disassembly procedure, <b>mostly</b> adhering to special instructions.	Works <b>independently</b> and competently to follow manufacturer's instructions/manual /disassembly procedure, adhering to special instructions.	Ν	/ark
With guidance uses tools and equipment safely and shows <b>limited</b> awareness of potential hazards and safety considerations.	Uses tools and equipment effectively and shows <b>some</b> understanding of potential hazards and safety considerations.	Uses tools and equipment <b>effectively</b> and shows a <b>well-developed</b> understanding of potential hazards and safety considerations.		
Draws upon <b>limited</b> skills/knowledge/ understanding from other units in the specification (Unit R105).	Draws upon <b>some relevant</b> skills/knowledge/ understanding from other units in the specification (Unit R105).	<b>Clearly</b> draws upon <b>relevant</b> skills/knowledge/ understanding from other units in the specification (Unit R105).		
1 – 6 marks	7 – 12 mark	s 13 – 18 marks		
Carries out a <b>limited</b> analysis of an existing product showing a basic understanding of some components, assembly methods, materials, production methods and maintenance. 1 – 4 marks	Carries out a <b>detailed</b> analysis of an existing product showing an <b>adequate</b> understanding of components, assembl methods, materials, production methods and maintenance. <b>5 – 8 mark</b>	s components, assembly methods, materials, production methods and maintenance.	Ν	<b>Nark</b>
			Total/60	
If this work is a re-sit, please tick Sess	on and Year of previous submission Jan / Ja	une <b>2 0</b> Please tick to indicate this work h	as been standardised internally	y

## 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.

**R106/URS**