

|  |
| --- |
| **OCR Level 1/Level 2 Cambridge National in Engineering Design** |
| Qualification J822  Unit R039 |
| Unit Recording Sheet |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | |
| Please read the instructions printed at the end of this form. A Unit Recording Sheet must be completed for each candidate and unit. | | | | | | | | | |
| Unit Title | Communicating designs | | | | Unit Code | R039 | Session | | Choose an item. | Year | 2 | | 0 |  | |  |
| Scenario Title | |  | | | | | | | | | | | | | | |
| Centre Name | |  | | | | | | | Centre Number | |  | | | | | |
| Candidate Name | |  | | | | | | | Candidate Number | |  | | | | | |
| Marking Criteria | | | | | | | | Teacher Comments | | | | Mark | | | Page No. | | |
| **Task 1 – Topic Area 1: Manual production of freehand sketches** | | | | | | | |  | | | |  | | |  | | |
| **MB1: 1 - 4 marks** | | | **MB2: 5 - 8 marks** | **MB3: 9 - 12 marks** | | | |
| Produces a **limited** range of creative freehand design proposals.  **Limited** consideration of the design specification.  Uses a **basic** range of techniques.  **[1 2 3 4]** | | | Produces an **adequate** range of creative freehand design proposals.  **Partial** consideration of the design specification.  Uses an **adequate** range of techniques.  **[5 6 7 8]** | Produces a **wide** range of creative and innovative freehand design proposals.  **Fully** considers the design specification.  Uses a **comprehensive** range of techniques.  **[9 10 11 12]** | | | |
| **/12** | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marking Criteria | | | Teacher Comments | Mark | Page No. |
| **Task 1 (continued) – Topic Area 1: Manual production of freehand sketches** | | |  |  |  |
| **MB1: 1 - 2 marks** | **MB2: 3 - 4 marks** | **MB3: 5 - 6 marks** |
| Evidence of analysis of design proposals with **limited** annotation.  Justification demonstrates **limited** understanding of needs and wants of the client/user.  **[1 2]** | Evidence of analysis of design proposals, with **some** annotation.  Justification demonstrating **some** understanding of needs and wants of the client/user.  **[3 4]** | Extensive evidence of analysis of design proposals that are **fully** annotated.  Justification demonstrating a **detailed** understanding of needs and wants of the client/user.  **[5 6]** |
| **/6** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marking Criteria | | | Teacher Comments | Mark | Page No. |
| **Task 2 – Topic Area 1: Manual production of freehand sketches – Design Development** | | |  |  |  |
| **MB1: 1 - 4 marks** | **MB2: 5 - 8 marks** | **MB3: 9- 12 marks** |
| Produces a **basic** freehand sketch of design proposal.  **Brief** explanation of the key features of a design proposal with **limited** annotation.  **Limited** consideration of the design specification.  **[1 2 3 4]** | Produces **adequate** freehand sketches of design proposal.  **Adequate** explanation of the key features of a design proposal with **some** annotation.  **Some** consideration of the design specification.  **[5 6 7 8]** | Produces **comprehensive** freehand sketches of design proposal.  **Detailed** explanation of the key features of a design proposal that is **fully** annotated.  **Fully** considers the design specification.  **[9 10 11 12]** |
| **/12** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marking Criteria | | | Teacher Comments | Mark | Page  No. |
| **Task 3 – Topic Area 2: Production of engineering drawings** | | |  |  |  |
| **MB1: 1 - 4 marks** | **MB2: 5 - 8 marks** | **MB3: 9- 12 marks** |
| Produces a **basic** orthographic drawing.  Produces an assembly drawing that is **limited** in detail.  **[1 2 3 4]** | Produces an **adequate** and accurate orthographic drawing.  Produces an assembly drawing with **some** detail.  **[5 6 7 8]** | Produces a **comprehensive** orthographic drawing.  Produces a **fully** detailed assembly drawing.  **[9 10 11 12]** |
| **/12** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marking Criteria | | | Teacher Comments | Mark | Page No. | | |
| **Task 4 – Topic Area 3: Use of Computer Aided Design (CAD)** | | |  |  | |  |
| **MB1: 1 - 6 marks** | **MB2: 7 - 12 marks** | **MB3: 13- 18 marks** |
| Use of CAD to produce a **simple** model of the design proposal.  A **simple** 3D virtual model consisting of a very limited number of components.  **[1 2 3 4 5 6]** | Use of CAD to produce an **adequate** model of the design proposal.  An **adequate** 3D virtual model consisting of some components.  .  **[7 8 9 10 11 12]** | Use of CAD to produce a **complex** model of the design proposal.  A **detailed** 3D virtual model consisting of many components.  **[13 14 15 16 17 18]** |
| **/18** | |
| **Total** | | | | /**60** | |  |

|  |  |
| --- | --- |
| Please tick to confirm this work has been standardised internally |  |

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)).   
A Centre Authentication form (CCS160) **must** be completed for each submission to the moderator. This **must** be held in your centre to be available on request at centre inspection.

Guidance on Completion of this Form

1 One form should be used for every candidate.

2 Please make sure that all parts 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/highlight the mark awarded for each strand of the marking criteria in the appropriate box.

5 Enter the circled/highlighted mark in the 'Mark' column.

6 Add the marks for the strands together to give a total out of 60. Enter this total in the relevant box.

7 For Paper-based submissions, one of these sheets, suitably completed, should be attached to the assessed work of each candidate.

8 For Electronic Internal submissions, prior to submitting ‘candidate evidence’ to OCR (via the Repository/SfA or via a USB), the Centre should add a separate folder containing the Unit Recording Sheets.