

Set assignment

DRAFT

LEVEL 3 CAMBRIDGE ADVANCED NATIONAL (AAQ) IN

# ENGINEERING

**Extended Certificate H127**

For first teaching in 2025

**F136: Computer Aided Manufacture (CAM)**

# Introduction

**This is Sample Assessment Material (SAM). It is an example set assignment that we publish alongside a new specification to help illustrate the intended style and structure of our set assignments.**

During the lifetime of the qualification, updates to the set assignment template may happen. We always recommend you look at the most recent set of past set assignments where available.

## Tell us what you think

Your feedback plays an important role in how we develop, market, support and resource qualifications now and into the future. Here at OCR, we want teachers and students to enjoy and get the best out of our qualifications and resources, but to do that we need honest opinions to tell us whether we're on the right track or not. That's where you come in.

You can email your thoughts to [ProductDevelopment@OCR.org.uk](mailto:ProductDevelopment@OCR.org.uk) or visit the [OCR feedback page](#) to learn more about how you can help us improve our qualifications.



Designed and tested with teachers and students



Helping young people develop an ethical view of the world



Equality, diversity, inclusion and belonging (EDIB) are part of everything we do

## Summary of updates

Date	Version	Page number	Summary of change
July 2023	1 DRAFT	All	Creation of document

# Teacher support

**We have a range of support services to help you at every stage, from preparation to delivery.**

Our teacher support is designed to make teaching our qualifications straightforward, whether you are an experienced teacher, new to teaching, new to OCR, or not a subject specialist of the qualification you are teaching.

We offer free access to services such as [Access to Scripts](#), [ExamBuilder](#) and [ActiveResults](#), and you'll find comprehensive teaching resources and a range of professional development courses on our teacher website, [Teach Cambridge](#).

Our [OCR subject advisors](#) provide support and information to centres, including:

- Specification and non-exam assessment advice
- Updates on resource developments and training opportunities
- Information on our subject networks giving an opportunity to share ideas and expertise.

## Further help and support

Visit our subject pages to find out more about the assessment and request trial access to [Teach Cambridge](#).

Not a registered or approved OCR centre? Discover the benefits of becoming one on the [OCR website](#).

Have more questions about teaching OCR qualifications? Explore our [Online Support Centre](#) or contact our [Customer Support team](#).

Contact details are available on the [final page](#) of the SAM.

## Work with us

As one of the major UK exam boards, OCR is responsible for creating and marking exams taken by over a million students each year. We work with over 10,000 professionals to create, check, mark and moderate our assessments.

If you would like to find out more about becoming an OCR examiner, please visit [our website](#) for more information.

# People and planet

**OCR is part of Cambridge University Press & Assessment, which has clear commitments to champion sustainability, diversity, trust and respect for our people and planet.**

We are committed to supporting a curriculum that helps young people develop an ethical view of the world. This enables them to take social responsibility, understand environmental issues and prepare them for the green jobs of the future.

Our equality, diversity, inclusion and belonging principles are that we:

- are respectful and considerate
- celebrate differences and promote positive attitudes to belonging
- include perspectives that reflect the diverse cultural and lifestyle backgrounds of our society
- challenge prejudicial views and unconscious biases
- promote a safe and supportive approach to learning
- are accessible and fair, creating positive experiences for all
- provide opportunities for everyone to perform at their best
- are contemporary, relevant and equip everyone to live and thrive in a global, diverse world
- create a shared sense of identity in a modern mixed society with one humanity.

**To learn more, including our work on accessibility in our assessment materials, visit our [People and planet page](#).**



Oxford Cambridge and RSA

# OCR-set Assignment

## Sample Assessment Material

OCR Level 3 Cambridge Advanced National (AAQ) in Engineering  
(Extended Certificate)

Unit F136: Computer Aided Manufacture (CAM)

Scenario Title: Stepper motor mount bracket **OR** Hose barb fitting

This is a sample OCR-set assignment which should only be used for practice.

This assignment **must not** be used for live assessment of students.

The live assignments will be available on our secure website, 'Teach Cambridge'.

**The OCR administrative codes linked to this unit are:**

- unit entry code      F136
- certification code    H127

**The regulated qualification number linked to this unit is:**

TBC

### **Duration**

About 15 hours of supervised time (GLH)  
(work that **must** be completed under teacher supervised conditions)

**All** this material **can** be photocopied. Any photocopying will be done under the terms of the Copyright Designs and Patents Act 1988 solely for the purposes of assessment.

# Contents

<b>Information and instructions for Teachers</b> .....	3
<b>Using this assignment</b> .....	3
Information for delivering tasks.....	4
<b>Tasks for students and assessment criteria</b> .....	5
<b>Scenario</b> .....	5
Task 1: .....	6
Task 2: .....	8
Task 3: .....	10
Task 4: .....	12
Task 5: .....	14
Appendix A.....	16
<b>Teacher Observation Record Form – Task 3</b> .....	18
Guidance notes.....	19
<b>Teacher Observation Record Form – Task 4</b> .....	20
Guidance notes.....	21
NEA Command Words .....	22

# Information and instructions for Teachers

## Using this assignment

This assignment provides a scenario and set of related tasks that reflect how engineering companies might produce pre-production components to be evaluated by a client.

The assignment:

- Is written so that students have the opportunity to meet the requirements of all assessment criteria for the unit.
- Will tell students if their evidence must be in a specific format. If the task does not specify a format, students can choose the format to use.
- **Must** be completed under teacher supervision. Any exceptions to this will be stated in the assessment guidance.
- 

You **must**:

- Use an OCR-set assignment for summative assessment of students.
- Familiarise yourself with the assessment criteria and assessment guidance for the tasks. These are given at the end of each student task. They are also with the unit content in **Section 4** of the Specification. Assessment guidance is only given where additional information is needed. There might not be assessment guidance for each criterion.
- Make sure students understand that the assessment criteria and assessment guidance tell them in detail what they need to do in each task.
- Read and understand **all** the rules and guidance in **Section 6** of the Specification **before** your students start the set assignments.
- Make sure that your students complete the tasks and that you assess the task fully in line with the rules and guidance in **Section 6** of the Specification.
- Give your students the engineering **Student guide to NEA assignments** **before** they start the assignments.
- Complete the **Teacher Observation Record** for **Task 3 and Task 4**. You **must** follow the guidance given when completing it.

You **must not**:

- Use live OCR-set assignments for practice or formative assessment. This sample assessment material **can** be used for practice or formative assessment.
- Use this sample assessment material for live assessment of students.
- Allow group work for **any** task in this assignment.
- Change any part of the OCR-set assignments or assessment criteria.

## Information for delivering tasks

Task	Requirements
All	<ul style="list-style-type: none"><li>Only <b>one</b> of the two components listed has to be made. This is to enable centres greater flexibility when delivering this unit in terms of the machinery they have available (e.g. CNC milling machine or CNC lathe). Students can make both components if they wish but only one will be assessed.</li></ul>

**Pages 1-4** are for teachers only. Please do **not** give **Pages 1-4** to your students.

You can give **any** or **all** of the pages **that follow** to your students.



## Tasks for students and assessment criteria

### OCR Level 3 Cambridge Advanced National (AAQ) in Engineering (Extended Certificate)

#### Unit F136: Computer Aided Manufacture (CAM)

#### Scenario Title: Stepper motor mount bracket OR Hose barb fitting

##### Scenario

You are an engineer with Cambridge Engineering, a small manufacturing company.

A client wants to investigate the use of both additive and subtractive CAM processes to manufacture prototypes of some new components.

Your supervisor has asked you to choose either Component A or Component B to work with.

The client has placed an order to manufacture two versions of one prototype component using two different Computer Aided Manufacturing (CAM) processes.

The component to be manufactured is **either**:

- Component **A**: a stepper motor mount bracket, **OR**
- Component **B**: a hose barb fitting.

An orthographic engineering drawing of Component A and Component B is given in Appendix A. For both components:

- the client has specified four functional dimensions (shown in **bold** text) that **must** be kept
- other remaining dimensions can be adapted as part of the design for manufacturing process and/or you will need to decide upon yourself.

Before you choose one component to manufacture please read all the tasks.

## Task 1: Subtractive and additive Computer Aided Manufacturing (CAM) processes

Topic Area 1 is assessed in this task.

Choose **one** of the components from the scenario.

The client has asked how this component could be manufactured commercially using a subtractive and an additive CAM process. The client wants to order 10,000 metal components.

As it is for **commercial** manufacture you should consider the most appropriate processes, not just the ones available in your centre.

### The task is:

To investigate subtractive and additive processes for manufacturing the component commercially taking into account:

- how the component will be safely manufactured
- sustainability
- the order volume.

Your evidence **must** include:

- A written report

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
<b>P1: Describe</b> how the component can be manufactured using subtractive CAM processes.	<b>M1: Explain</b> what sustainability considerations should be applied in the manufacture of the component using subtractive and additive CAM processes.	<b>D1: Evaluate</b> the suitability of subtractive and additive CAM processes to manufacture the component.
<b>P2: Describe</b> how the component can be manufactured using additive CAM processes.		

## Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P1	<ul style="list-style-type: none"><li>Students must cover more than one subtractive process for commercial manufacture.</li><li>Students could consider using images to support their descriptions of the processes.</li></ul>
P2	<ul style="list-style-type: none"><li>Students must cover more than one additive process for commercial manufacture.</li><li>Students could consider using images to support their descriptions of the processes.</li></ul>
D1	<ul style="list-style-type: none"><li>Students must consider the advantages and disadvantages of subtractive and additive processes for the component chosen and the order volume. They need to make a recommendation about the best subtractive process to use and the best additive process to use.</li></ul>

**Task 2:****Produce three dimensional (3D) Computer Aided Design (CAD) models of a component**

Topic Area 2 is assessed in this task.

You do **not** need to use the same component selected in Task 1.

The client would like to see some CAD models of prototypes for **one** of the components and how these might differ for subtractive and additive manufacturing.

In this task you will produce 3D CAD models of your chosen component to use in Tasks 3 and 4.

You **must** retain the functional dimensions specified by the client, as shown in **bold** text on the engineering drawing. Other remaining dimensions can be adapted as part of the design for manufacturing process and/or you will need to decide upon yourself.

**The task is:**

To produce 3D CAD models for the prototype component which retain the functional dimensions specified by the client and can be used for subtractive and additive manufacturing.

Your evidence **must** include:

- Annotated screen shots of the 3D CAD models
- Annotations and/or notes of any adaptations made for manufacturing.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
<b>P3: Produce</b> an accurate 3D CAD model of the prototype component from the given engineering drawing.	<b>M2: Adapt</b> the 3D CAD model showing appropriate consideration of DFAM.	<b>D2: Justify</b> the DFAM and DFAM adaptations to the 3D CAD models of the prototype component.
	<b>M3: Adapt</b> the 3D CAD model showing appropriate consideration of DFAM.	

## Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P3	<ul style="list-style-type: none"><li>Students need to produce an initial 3D model which reflects the engineering drawing given and retains the functional dimensions specified by the client.</li></ul>
M2	<ul style="list-style-type: none"><li>Students must adapt the 3D model from P3 to make it suitable for subtractive manufacturing with reference to Topic Area 2.2.</li></ul>
M3	<ul style="list-style-type: none"><li>Students must adapt the 3D model from P3 to make it suitable for subtractive manufacturing with reference to Topic Area 2.2.</li></ul>
D2	<ul style="list-style-type: none"><li>Students must give valid reasons for how the adaptations made in M2 and M3 make the design more suitable for each manufacturing process.</li></ul>

**Task 3:****Manufacture a component using a subtractive process**

Topic Area 3 is assessed in this task.

The client now wants to see some manufactured prototypes of your chosen component produced using both a subtractive and an additive process.

You will first need to write a production plan for the manufacture of the component you modelled in Task 2 using a subtractive process. You then need to use the production plan to complete the manufacture of the prototype component.

As these are prototypes they can be made from any suitable metal or polymer.

**The task is:**

To plan for and safely complete the manufacture of a prototype of your chosen component using a subtractive process, including importing your 3D CAD model from Task 2 into the CNC machine and simulating the program.

Your evidence **must** include:

- A written production plan
- Annotated screen shots of the simulation
- Annotated photographs of you safely using the CNC machine
- Photographs of the completed prototype component
- A teacher observation record completed by your teacher/assessor which accurately records your independence and competence when setting up, using and shutting down the machine.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
<b>P4: Produce</b> a production plan for the manufacture of the prototype component using a CNC subtractive process.		
<b>P5: Import</b> the model and simulate the program.	<b>M4: Interpret</b> simulation results and make appropriate improvements.	
<b>P6: Operate</b> and shut down a CNC machine safely for the subtractive manufacture of the prototype component.	<b>M5: Set up</b> a CNC machine safely, appropriately and independently.	<b>D3: Justify</b> the machine settings used.

## Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P4	<ul style="list-style-type: none"> <li>The plan must reflect Topic Area 3.2.1.</li> </ul>
P5	<ul style="list-style-type: none"> <li>Students must be able to import and run the simulation to check for errors.</li> </ul>
M4	<ul style="list-style-type: none"> <li>Students must make suggestions for improvements to the program rather than the CAD model at this stage.</li> <li>Students could make notes about any potential improvements which could be made to the CAD model in readiness for Task 5.</li> <li>If there are no improvements to make based on the simulation results, students must explain these results to achieve M4 (rather than suggest unnecessary improvements)</li> <li>Teacher/technician support is allowed to ensure that a working model is available so that subsequent tasks and criteria can still be achieved. <b>Where this support is needed M4 cannot be awarded.</b></li> </ul>
P6	<ul style="list-style-type: none"> <li>Students can still achieve this criterion even if some support is needed from staff, as long as the student is able to operate and shut down the machine safely with support and/or guidance.</li> </ul>
M5	<ul style="list-style-type: none"> <li>Students must have been able to operate in a safe and appropriate way <b>independently</b> without any support or intervention from staff to achieve this.</li> </ul>
D3	<ul style="list-style-type: none"> <li>Students must give valid reasons for the machine settings used and why they were chosen.</li> <li>This criterion could be evidenced within the simulation results or as separate written notes with screen shots of the settings.</li> </ul>

## Task 4:

### Manufacture a component using an additive process

Topic Area 4 is assessed in this task.

You now need to write a production plan for the manufacture of the component you modelled in Task 2 using an additive process. You then need to use the production plan to complete the manufacture of the prototype component.

As these are prototypes they can be made from any suitable metal or polymer.

#### The task is:

To plan for and safely complete the manufacture of a prototype of your chosen component using an additive process, including importing your 3D CAD model from Task 2 into the additive manufacturing machine and completing any finishing operations.

Your evidence **must** include:

- A written report including screen shots and annotated photographs
- Screen shots of the simulation
- Photographs of you safely using the CNC machine
- Photographs of the completed component
- A teacher observation record completed by your teacher/assessor which accurately records your independence and competence when setting up, using and shutting down the machine

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
<b>P7: Produce</b> a production plan for the manufacture of the prototype component using an additive manufacturing process.		<b>D4: Justify</b> the machine settings used.
<b>P8: Manufacture</b> the prototype component safely using the additive manufacturing machine, including set up, operation and shut down.		
<b>P9: Complete</b> prototype component removal and finishing operations.		



## Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P7	<ul style="list-style-type: none"><li>• The plan must reflect Topic Area 4.1.</li><li>• Production planning must include any simulation undertaken and alterations made in preparation for a successful additive manufacturing process.</li></ul>
D4	<ul style="list-style-type: none"><li>• Students must give valid reasons for the machine settings used and why they were chosen.</li><li>• This criterion could be evidenced within the production plan, as separate written notes, or as part of the annotated photographs of the manufacturing process.</li></ul>
P9	<ul style="list-style-type: none"><li>• Students must use relevant finishing operations for the additive process used to produce the final prototype.</li></ul>

## Task 5: Evaluating components manufactured using subtractive and additive manufacturing processes

Topic Area 5 is assessed in this task.

The client has asked for your assessment of the prototypes produced using both a subtractive and an additive process and how well the processes worked for the prototype components.

### The task is:

To analyse the two prototype components manufactured in Task 3 and Task 4.

Your evidence **must** include:

- A written report including:
  - Photographs of you measuring the components using appropriate equipment
  - Tabulated records of the measured dimensions
  - Written quantitative evaluation of the manufactured components' dimensions compared with the intended dimensions
  - Any analysis of processes and recommendations.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
<b>P10: Measure</b> accurately the functional dimensions of the two manufactured prototype components using appropriate measuring equipment.	<b>M6: Analyse</b> the effectiveness of DFSS and DFAM applied to manufacture the prototype components.	<b>D5: Recommend</b> improvements to the drawings and manufacturing processes for each component you manufactured.
<b>P11: Determine</b> whether the functional dimensions of each prototype component are within tolerance.		

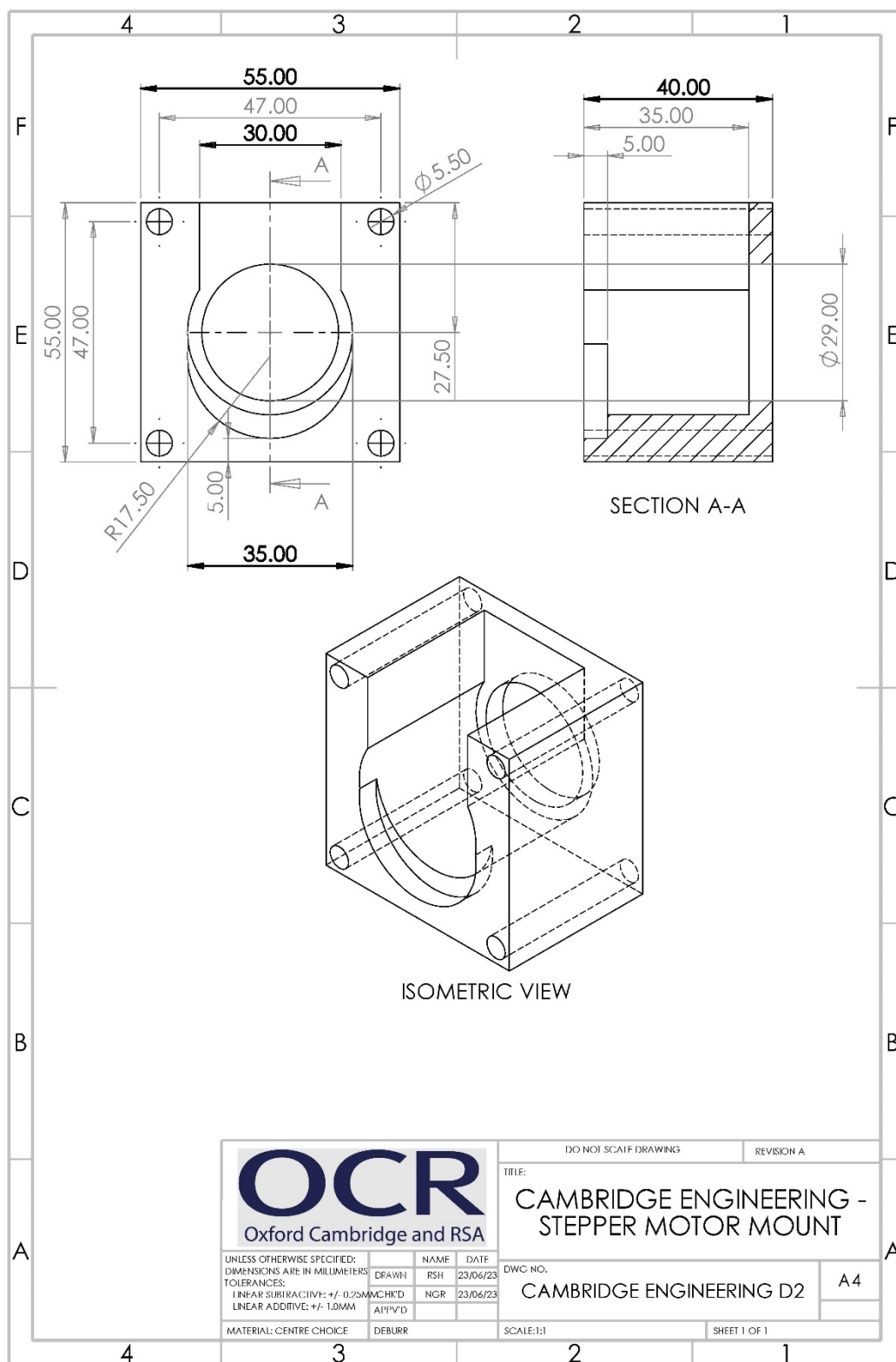
## Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

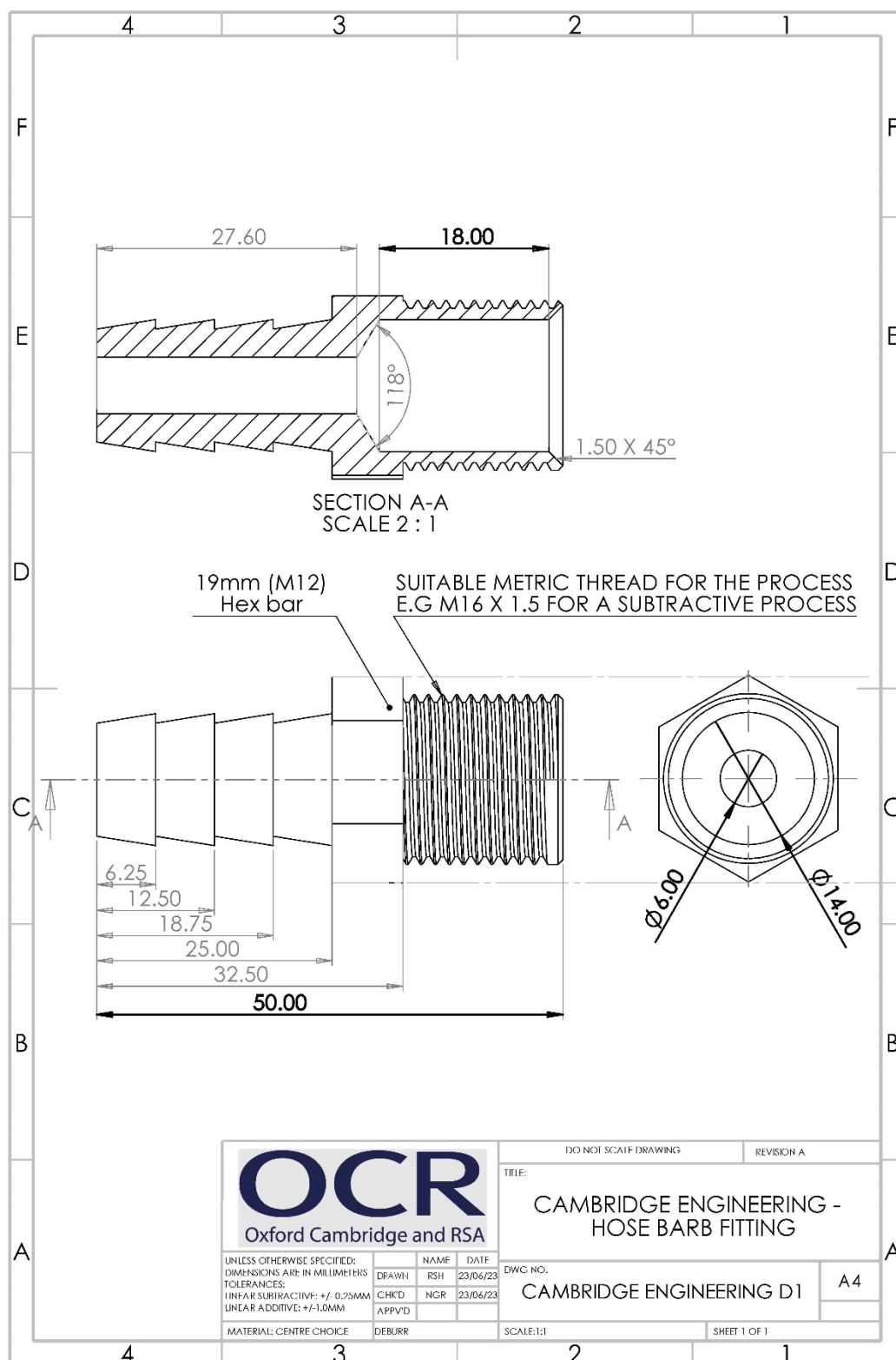
Assessment Criteria	Assessment guidance
P10	<ul style="list-style-type: none"> <li>Equipment is 'appropriate' if it enables an accurate measurement to be taken for the product and dimension in question.</li> </ul>
P11	<ul style="list-style-type: none"> <li>If students' measurements (P10) lack accuracy but the actual prototype is within tolerances P11 can be awarded based on the teachers measurements of the prototype.</li> <li>Conversely, P11 is <b>not</b> achieved if the students' measurements are within tolerances but the measurements are inaccurate.</li> </ul>
M6	<ul style="list-style-type: none"> <li>Students need to analyse what worked well and where there were issues with their DFSM (M2) and DFAM (M3) adaptations (Task 2) in relation to the prototypes produced.</li> </ul>
D5	<ul style="list-style-type: none"> <li>For D5 students must make recommendations which cover both drawings and manufacturing processes.</li> <li>'Drawings' can be related back to the original 3D CAD model (P3), and/or to adaptations in M2 and M3.</li> <li>Manufacturing processes can include any aspects of the production planning or manufacture of the prototypes, including set up and settings.</li> </ul>

# Appendix A

**Stepper Motor Mount Bracket** – Functional dimensions are shown in **bold**.



**Hose Barb Fitting** - Functional dimensions are shown in **bold**.



# Teacher Observation Record Form – Task 3

Use this form to record what is observed.

Read the **guidance notes** below the form **before** you complete the form.

## OCR Level 3 Cambridge Advanced National (AAQ) in Engineering (Extended Certificate)

Unit number:	F136
Unit title:	Computer Aided Manufacture (CAM)
Task number:	3
Task title:	Manufacture a component using a subtractive process

Student's name:	
Date the activity was completed:	

What extra evidence is attached to the form?	
--	--

The **teacher** fills in this section:

What Assessment Criteria does this activity relate to?	
How does the activity meet the requirements of the Assessment Criteria? You <b>must</b> describe: <ol style="list-style-type: none"> <li>1. what the student did</li> <li>2. how it relates to the relevant Assessment Criteria</li> </ol>	
Teacher's name:	
Teacher's signature:	
Date:	

The **student** fills in this section:

I agree with my teacher's description of how I completed this activity		Yes <input type="checkbox"/>
Use this space to make any extra comments.		
Student's signature:		
Date:		

## Guidance notes

**Both** the teacher **and** the student are responsible for completing this form.

The **teacher must**:

- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
- sign and date the form as evidence of agreement.

The **student must**:

- reach agreement with the teacher before the work is submitted for moderation.
- use the form to show that they agree with the teacher's record of the activity observed
- sign and date the form as evidence of agreement.

The form **must**:

- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:

- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.
- be used to evidence achievement of a whole unit or task in isolation.

# Teacher Observation Record Form – Task 4

Use this form to record what is observed.

Read the **guidance notes** below the form **before** you complete the form.

## OCR Level 3 Cambridge Advanced National (AAQ) in Engineering (Extended Certificate)

Unit number:	F136
Unit title:	Computer Aided Manufacture (CAM)
Task number:	4
Task title:	Manufacture a component using an additive process

Student's name:	
Date the activity was completed:	

What extra evidence is attached to the form?	
--	--

The **teacher** fills in this section:

What Assessment Criteria does this activity relate to?	
How does the activity meet the requirements of the Assessment Criteria? You <b>must</b> describe: <ol style="list-style-type: none"> <li>1. what the student did</li> <li>2. how it relates to the relevant Assessment Criteria</li> </ol>	
Teacher's name:	
Teacher's signature:	
Date:	



The **student** fills in this section:

I agree with my teacher's description of how I completed this activity		Yes <input type="checkbox"/>
Use this space to make any extra comments.		
Student's signature:		
Date:		

## Guidance notes

**Both** the teacher **and** the student are responsible for completing this form.

The **teacher must**:

- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
- sign and date the form as evidence of agreement.

The **student must**:

- reach agreement with the teacher before the work is submitted for moderation.
- use the form to show that they agree with the teacher's record of the activity observed
- sign and date the form as evidence of agreement.

The form **must**:

- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:

- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.
- be used to evidence achievement of a whole unit or task in isolation.

# NEA Command Words

The table below shows the command words that may be used in the NEA assignments and/or assessment criteria.

Command Word	Meaning
<b>Adapt</b>	<ul style="list-style-type: none"> <li>Change to make suitable for a new use or purpose</li> </ul>
<b>Analyse</b>	<ul style="list-style-type: none"> <li>Separate or break down information into parts and identify their characteristics or elements</li> <li>Explain the pros and cons of a topic or argument and make reasoned comments</li> <li>Explain the impacts of actions using a logical chain of reasoning</li> </ul>
<b>Assess</b>	<ul style="list-style-type: none"> <li>Offer a reasoned judgement of the standard or quality of situations or skills. The reasoned judgement is informed by relevant facts</li> </ul>
<b>Calculate</b>	<ul style="list-style-type: none"> <li>Get a numerical answer, showing how it has been worked out</li> </ul>
<b>Classify</b>	<ul style="list-style-type: none"> <li>Arrange in categories according to shared qualities or characteristics</li> </ul>
<b>Compare</b>	<ul style="list-style-type: none"> <li>Give an account of the similarities and differences between two or more items, situations or actions</li> </ul>
<b>Conclude</b>	<ul style="list-style-type: none"> <li>Judge or decide something</li> </ul>
<b>Describe</b>	<ul style="list-style-type: none"> <li>Give an account that includes all the relevant characteristics, qualities, or events</li> </ul>
<b>Discuss</b> (how/whether/etc)	<ul style="list-style-type: none"> <li>Present, analyse and evaluate relevant points (for example, for/against an argument) to make a reasoned judgement</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>Make a reasoned qualitative judgement considering different factors and using available knowledge/experience</li> </ul>
<b>Examine</b>	<ul style="list-style-type: none"> <li>To look at, inspect, or scrutinise carefully, or in detail</li> </ul>
<b>Explain</b>	<ul style="list-style-type: none"> <li>Give reasons for and/or causes of something</li> <li>Make something clear by describing and/or giving information</li> </ul>
<b>Interpret</b>	<ul style="list-style-type: none"> <li>Translate information into recognisable form</li> <li>Convey one's understanding to others, e.g. in a performance</li> </ul>
<b>Investigate</b>	<ul style="list-style-type: none"> <li>Inquire into (a situation or problem)</li> </ul>
<b>Justify</b>	<ul style="list-style-type: none"> <li>Give valid reasons for offering an opinion or reaching a conclusion</li> </ul>
<b>Research</b>	<ul style="list-style-type: none"> <li>Do detailed study in order to discover (new) information or reach a (new) understanding</li> </ul>
<b>Summarise</b>	<ul style="list-style-type: none"> <li>Express the most important facts or ideas about something in a short and clear form</li> </ul>

We might also use other command words but these will be:

- commonly used words whose meaning will be made clear from the context in which they are used (e.g. create, improve, plan)
- subject specific words drawn from the unit content.

# Examine *with* us

- Build confidence supporting your students with assessment
- Enhance subject knowledge
- Great for professional development



Join our team: [ocr.org.uk/assessor](https://ocr.org.uk/assessor)

**OCR**  
Oxford Cambridge and RSA

These are draft documents and some aspects may not be fully accessible. If you have any problems with the accessibility of this format, please [contact us](#).

**Contact the team at:**

☎ **01223 553998**  
✉ **support@ocr.org.uk**  
🌐 **ocr.org.uk**  
📘 **facebook.com/ocrextams**  
🐦 **twitter.com/ocrextams**  
📷 **instagram.com/ocrextaminations**  
🌐 **linkedin.com/company/ocr**  
📺 **youtube.com/ocrextams**

To stay up to date with all the relevant news about our qualifications, register for email updates at **[ocr.org.uk/updates](https://ocr.org.uk/updates)**

Visit our Online Support Centre at **[support.ocr.org.uk](https://support.ocr.org.uk)**



OCR is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. ©OCR 2023 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

OCR operates academic and vocational qualifications regulated by Ofqual, Qualifications Wales and CCEA as listed in their qualifications registers including A Levels, GCSEs, Cambridge Technicals and Cambridge Nationals.

Cambridge University Press & Assessment is committed to making our documents accessible in accordance with the WCAG 2.1 Standard. We're always looking to improve the accessibility of our documents. If you find any problems or you think we're not meeting accessibility requirements, please [contact us](#).

OCR acknowledges the use of the icons by appleuzr, sourced from gettyimages.co.uk.