

FAQs for Level 3 Cambridge Technicals in Engineering

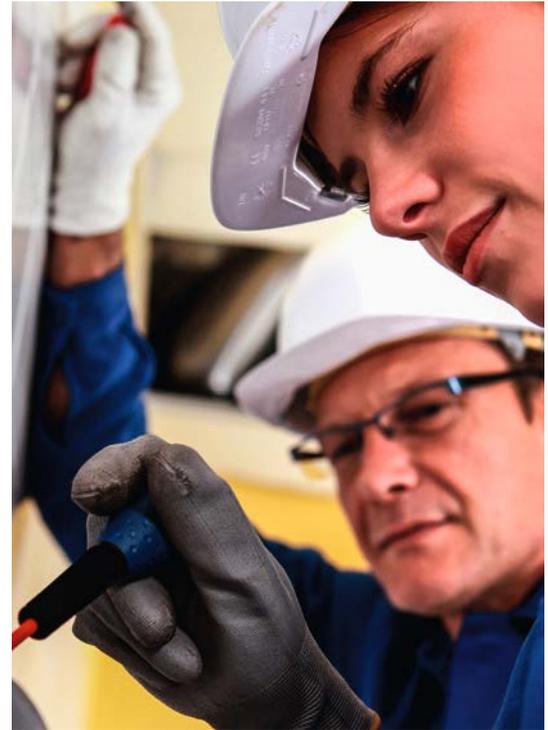
Externally Assessed Units

The Level 3 Cambridge Technicals in Engineering currently contains 5 externally assessed units:

Unit 1 – Mathematics for engineering

- 60glh unit
- 1 hour 30 minutes exam
- 60 marks
- Combination of short and long answer questions
- Available in both January and June series
- Paper-based assessment only

LO weightings:	
LO1	30-40%
LO2	10-20%
LO3	5-15%
LO4	10-25%
LO5	10-20%
LO6	10-20%



Unit 2 – Science for engineering

- 60glh unit
- 1 hour 30 minutes exam
- 60 marks
- Combination of short and long answer questions
- Available in both January and June series
- Paper-based assessment only

LO weightings:	
LO1	10-20%
LO2	10-20%
LO3	10-20%
LO4	10-20%
LO5	10-20%
LO 6	10-20%

Unit 3 – Principles of mechanical engineering

- 60glh unit
- 1 hour 30 minutes exam
- 60 marks
- Combination of short and long answer questions
- Available in both January and June series
- Paper-based assessment only

LO weightings:	
LO1	20-30%
LO2	10-20%
LO3	15-25%
LO4	10-20%
LO5	20-30%

Unit 4 – Principles of electronic and electrical engineering

- 60glh unit
- 1 hour 30 minutes exam
- 60 marks
- Combination of short and long answer questions
- Available in both January and June series
- Paper-based assessment only

LO weightings:	
LO1	10-20%
LO2	10-20%
LO3	10-20%
LO4	10-20%
LO5	10-20%
LO 6	10-20%



Unit 23 – Applied mathematics for engineering

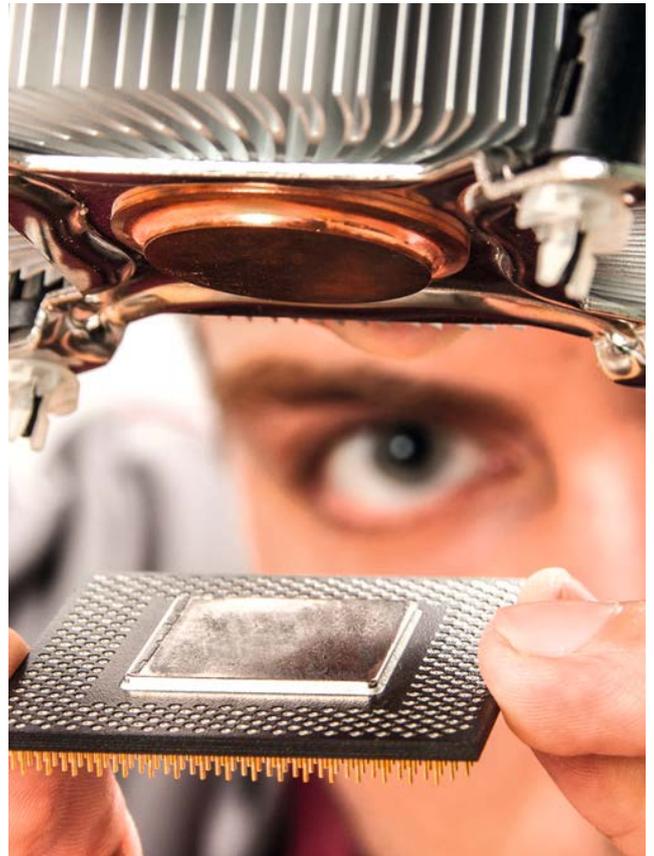
- 60glh unit
- 2 hour
- 90 marks
- Combination of short and long answer questions
- Available in both January and June series
- Paper-based assessment only

LO weightings:	
LO1	10-20%
LO2	25-35%
LO3	20-30%
LO4	5-15%
LO5	15-25%

Unit 24 – Project management for engineers

- 90glh unit
- 2 hour
- 80 marks
- comprises short answer and extended response questions based on an engineering project scenario
- a calculator may be used
- Available in both January and June series
- Paper-based assessment only

LO weightings:	
LO1	10-30%
LO2	10-30%
LO3	7-23%
LO4	10-30%
LO5	10-30%
LO6	7-23%



Extended Diploma update:

2 further units are being developed for the Extended Diploma qualification; working titles are:

1. Project management for engineers (externally assessed)
 - 90GLH
 - 2 hour
 - 80 marks
2. Promoting continuous improvement (internally assessed)

Details of the format and content of the assessment are not yet available.

Examined content:

In all externally assessed units you should be aware that:

- A direct question can be asked about any content in the unit that follows an i.e.
- However, a direct question may not be asked about any content that follows and e.g. and students are able to use their own examples.
- A formula booklet is supplied, and a scientific calculator can be used. Note – no questions will be asked that require recall of a formula. Formulae will either be in the booklet, or in the question.

Exam dates:

Exam timetables will be published here:

www.ocr.org.uk/i-want-to/key-dates-and-timetables/

Pass mark / grade boundaries:

All externally assessed units must be passed in order to achieve the full qualification.

The first examination series for Cambridge Technicals takes place June 2016. Once marking has taken place all marks will be attributed a unit grade of Pass, Merit or Distinction, depending on the candidate's achieved mark out of the total marks for the question paper, for example XX/80 marks. The boundaries for this conversion will not be known until the first series has gone through a full awarding process.

Resits:

Students are able to have one resit opportunity for each externally assessed unit. If a student fails their re-sit attempt we will issue an unclassified for the full qualification.

However, students are able to re-enter for the full qualification.

Results:

Your students' outcome grade will be distributed to centres in:

- January series – March
- May/June series - August

Resources to support external assessment:

On each qualification page you'll find a variety of support materials for each externally assessed unit.

- Sample Assessment Material (SAM)
- Unit Delivery Guides
- Lesson Elements
- Resource Links

Once we've gone through our first live series we'll be able to start producing additional support materials:

- Examiner Report (on results day)
- Past Paper and Mark Scheme (on results day)
- Past Paper and Mark Scheme with Commentary (to follow)

Internally Assessed Units

The choice of internally assessed units will depend on the size of qualification or pathway your student is undertaking. Please refer to the Centre Handbook for more information.

Each internally assessed unit within the qualification must be passed in order for your students to achieve the full qualification.

Evidence:

Internally assessed units can be evidenced via whatever format the centre/learner deems suitable unless a specific format is stated in the Assessment Guidance section of the unit.

Holistic delivery:

Where possible, we would recommend you consider a holistic approach to delivery and assessment, covering a range of units/Learning Outcomes/Assessment Criteria through a task or project.

We will provide a project approach to delivery resource to help facilitate this.

Meaningful Employer Involvement (MEI):

Where possible, centres should engage employers in the delivery and assessment of the units and record how/when this occurred.

This can include work placements, guest lecturers etc. Ideas for Meaningful Employer Involvement are given in each of the unit documents.

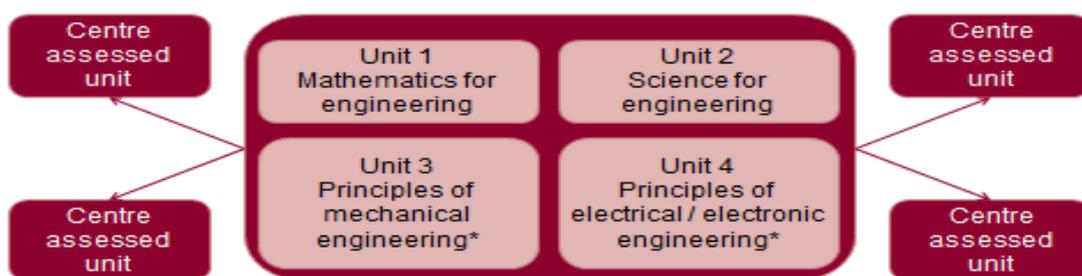
MEI is a mandatory requirement for qualifications submitted to the DfE in the Tech Level category.

It's a good idea to read our MEI page on the website.

Synoptic learning and assessment:

Centres should consider synoptic learning and assessment during the delivery and assessment of the qualification. Each unit document highlights where opportunities are for synoptic learning/assessment.

Synoptic learning and assessment – centre assessed unit



All centred assessed units include at least one pass criterion, in one Learning Outcome, which applies knowledge learned in one of the Mandatory core units

Resources to support delivery:

We've produced a range of teaching and delivery resources for the qualifications including:

- Delivery Guides
- Lesson Elements
- Resource Links
- Project Delivery Approach

Our Guide to Resources will provide you details of all the materials to support Cambridge Technicals:

www.ocr.org.uk/Images/275035-a-guide-to-resources.pdf

Resources to support internal assessment:

We have a number of resources to support the assessment of internal units:

- Model Assignments
- Command Verbs Definitions
- Unit Recording Sheets
- Witness statement
- Candidate Authentication

Model Assignments

We are in the process of creating a model assignment (MA) for each mandatory unit within the specification.

These can be found on the subject page:

You don't have to use the MA if you don't want to, or you could opt to change it to meet your local area needs. There's detail in the MA and Centre Handbook about this.

Or you could create your own MA for you students to use.

If you'd like us to check your MA for you we can do that too. There's a charge for this optional service and can found on our CPD Hub:

www.cpdhub.ocr.org.uk/DesktopDefault.aspx?e=fjefcbdbhgnidcponia&CATN_ID=3

Unit Recording Sheets

Each unit has a Unit Recording Sheet that must be used to record the assessment decisions of your students. These must be included with the students' portfolio of evidence.

Command Verbs Definitions

This will help you and your students gain a better understanding of the command verb in the Assessment Criteria.

Both of these support resources can be found on the Internal Assessment section of the qualification page.

Internal Standardisation:

To help you and colleagues with internal standardisation it's a good idea to read our generic guide.

There's also more information about Internal Standardisation in the Cambridge Technicals Centre Handbook.



Administration processes:

You should read the Centre Handbook in order to assist with the administration of the Cambridge Technicals:

We also have a range of support materials and training to support you.

Moderation:

You'll receive two free visits per subject area per academic year. If required, you may request additional moderation visits – these will be charged at the standard visit fee, as described in the OCR Fees List.

If your students require their Cambridge Technical results in time for university entrance or to coincide with GCSE results release, we strongly recommend the latest date for a moderation visit is 30 June. To make sure your moderation visit is completed by this date please book it by 1 June.

Please note that your moderation visit cannot take place between the last two weeks of August.

It's a good idea to

1. Watch the Internal Assessment video:
www.cpdhub.ocr.org.uk/DesktopDefault.aspx?e=eeefkacmhpbIncfpgfbpepipilgfojgdoedcbkofjonlkjl
2. Attend our Live Webinar Training for Internal and External Assessment Processes/Administration – please see the CPD hub for further detail.
3. Read our PowerPoint slides to support the training.

These will help you understand the moderation process and how it works.

As Cambridge Technicals uses moderation visits rather than a purely external quality assurance model, all students that you want certification for at a visit must be in a 'claim' on OCR Interchange. There is not Accredited Centre Status/Direct Claim Status available so all learners (that you want certification for at that point) must be submitted in a claim in advance of the moderation visit. Details of the certification claims process can be found on our [website](#).

Re-submission of internally assessed units:

After the result for an internally assessed unit has been confirmed, your students are still able to resubmit the unit again at a higher grade (once further or revised work has been produced for the unit). This would require a new claim for the unit at a later moderation visit but will not require a new entry nor attract an additional fee.

When allowing students to revise work for resubmission after certification, the guidelines on feedback in Section 8 of the centre handbook should still be applied.

To find out more <http://www.ocr.org.uk/cambridgetechnicals>
call our Customer Contact Centre on **02476 851509**
Alternatively, you can email us on vocational.qualifications@ocr.org.uk