Automotive – On-boarding

City & Guilds Level 2 Technical Award in Vehicle Technology for key stage 4
Agenda

1. City & Guilds Technical Award in Vehicle Technology
2. Support and resources
3. Delivery models
4. Assessment
5. Marking the synoptic assignment
6. How Technical Awards are graded and Performance Tables
7. Where to find further support
## Key Stage 4: What’s available and when?

<table>
<thead>
<tr>
<th>City &amp; Guilds qualification number</th>
<th>QAN</th>
<th>Qualification title</th>
<th>GLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>4292-20</td>
<td>603/0310/4</td>
<td>City &amp; Guilds Level 2 Technical Award in Vehicle Technology</td>
<td>120</td>
</tr>
</tbody>
</table>

Approved by the DfE to appear on Performance Tables

for information visit: [cityandguilds.com/dfe](http://cityandguilds.com/dfe)
How to register learners

• You will need to register your learners by the end of October. Registrations should be done in Walled Garden for which you will have:
  • a user name (your email address) and a password.
• To register a learner, click on Catalogue in Walled Garden, then:
  • Click on catalogue in the second navigation bar
  • Select City & Guilds
  • Select qualification by title or code (e.g. 4292-20 or Level 2 Technical Award in Automotive)
  • Click on green bar – Place an order
• Click on named registration, then for each candidate:
  • Click on add candidate details
  • Enter the first name, last name, date of birth and gender
  • When you have finished, click on added to basket, then click confirm
• A series of “how to” guides including one on registration, can be found here:
  • http://www.cityandguilds.com/help/help-for-centres/walled-garden
Support and resources
Resources and support

Preparation: Have you read these resources?

- Marking and Moderation Guide
- Teaching, Learning and Assessment guide
- Technicals Welcome Pack
- Exam Timetable

All generic resources can be found on our technical webpage: https://www.cityandguilds.com/techbac/technical-qualifications/resources-and-support
Preparation: Have you got all your resources?

Resources:
- Technical Awards: information for new centres
- Qualification handbook
- Reports
- Qualification
- Chief examiner
- Principal moderator
- Synoptic assignment
- FAQs
- Sample synoptic assignment

- Sample question papers and mark scheme
- Exam Guide document
- Read all the resource documents and guides
- The delivery of the assessment components is down to you
- You can split the theory exam and synoptic assessment across different academic years dependent on your delivery model
- BUT Remember to book learners on the synoptic assessment and theory exam in the correct year.
Delivery Models
Helping you plan your delivery and assessments

Sample one-year programme

• We understand that you may be delivering the City & Guilds Technical Awards over one, two or three years in years 9, 10 or 11. This means that you can select when your learners take their theory exam and synoptic assessment

• Each Technical Award has one theory exam and one synoptic assessment

• There are two opportunities in each academic year for learners to sit the theory exam and one 12 week window in the spring/summer

  • terms when learners can undertake the synoptic assessment

  • The theory exam can be taken in the spring or summer term. A spring theory exam sitting allows a resit/retake opportunity in the summer term, if required

  • Synoptic assessment must be completed in the 12 week window between Feb-May. There is no resit opportunity for the synoptic assignment in the same academic year

<table>
<thead>
<tr>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb/Mar</th>
<th>April</th>
<th>May</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Teaching delivery</td>
<td>First Exam Date</td>
<td>Second Exam Date</td>
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<td></td>
<td></td>
<td>Synoptic assessment</td>
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</tr>
</tbody>
</table>
Helping you plan your delivery and assessments

Sample two-year programme

- The theory exam and synoptic assessment can be taken in the first or second academic year
- A summer theory exam sitting in year 1 allows a resit/retake opportunity in the spring or summer terms in year 2, if required
- A theory exam sitting in the spring term of year 2 allows a resit/retake opportunity in the summer term, if required
- Synoptic assessment can be completed in the 12 week window between Feb-May in the second year, giving centres four terms to prepare learners for the assessment

<table>
<thead>
<tr>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
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<th>Feb/Mar</th>
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<th>May</th>
<th>June</th>
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<tbody>
<tr>
<td></td>
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<td></td>
<td>Teaching delivery</td>
<td>Exam</td>
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<tr>
<td>Sept</td>
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<td>May</td>
<td>June</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>Teaching delivery</td>
<td>Exam</td>
<td>Exam</td>
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<td></td>
<td></td>
<td></td>
<td>Synoptic assessment</td>
</tr>
</tbody>
</table>
Command verbs

For more guidance on Command Verbs and other aspects of teaching City & Guilds Technical Qualifications:

• Guide to teaching, learning and assessment
• Exam Guidance
## Key dates in the academic year

<table>
<thead>
<tr>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval in place</td>
<td>Registrations of learners</td>
<td>Exam and synoptic assessment booking window</td>
<td>Synoptic assessment window</td>
<td>First exam date</td>
<td>Centre marks and evidence for synoptic assessment submitted</td>
<td>Moderation report</td>
<td>Results issued</td>
<td>Certificate issued</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Synoptic assignment released to centres**

- Important to remember only to book the assessments/exams in the academic year learners will be actually sitting the exams. All information is available in the welcome pack on our website.
Assessment
Delivering City & Guilds Technical Awards

You may be delivering City & Guilds Technical Awards over one, two or three academic years in years 9, 10 or 11. This means that you can select when your learners take their theory exam and synoptic assessment.

• Each Technical Award is assessed via one theory exam and one synoptic assessment.
• Learners must pass both the theory exam and synoptic assessment to successfully complete the qualification.
• Only one re-sit is allowed. This is a DfE regulation for all technical qualifications.
Delivering City & Guilds Technical Awards

All City & Guilds Technical Awards have two assessment components. Both components must be achieved at a minimum of a pass to achieve the qualification.

**Synoptic Practical Assignment**
- Externally set
- Internally marked and standardised
- Externally moderated (City & Guilds)
- Contributes 60% to overall grade
One 12 week window in each academic year to complete the synoptic assignment.
Only one resit allowed.

**External assessment: Theory exam**
- Externally set
- Externally marked
- Contributes 40% overall grade
Two dated opportunities in each academic year to sit the theory exam.
Only one resit allowed.
# KS4: 14-16  Level 2 Technical 4292-20 structure 120 GLH

<table>
<thead>
<tr>
<th>Unit</th>
<th>Title</th>
<th>GLH</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>220</td>
<td>Underpinning Principles in Vehicle Technology</td>
<td>60</td>
<td>Develop an understanding of how maths and science are used in vehicle technology (supports core curriculum as per Ofsted requirements)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Linked to power units, vehicle braking, suspension and steering.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Introduction to Materials used in vehicles, electrical principles, component and circuit testing.</td>
</tr>
<tr>
<td>221</td>
<td>Vehicle Technology Systems</td>
<td>60</td>
<td>Introduce the learner to the various types of vehicle transmissions, drive train layouts and power units, allowing them to understand the underlying operating principles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Learn why different layouts and systems are used for - braking, suspension and steering system components (on a range of vehicle types)</td>
</tr>
</tbody>
</table>
The theory exam

The way the exam covers the content of the qualification is set out in the exam specification section of the qualification handbook.

Level 2 Technical Award in Automotive (4292-20)
Exam 020* - online
Exam 520* - paper

* Select one of these codes in Walled Garden to choose a paper or online theory exam

<table>
<thead>
<tr>
<th>Exam 020/520</th>
<th>Duration 120 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>Unit Title</td>
</tr>
<tr>
<td>220</td>
<td>Underpinning Principles in Vehicle Technology</td>
</tr>
<tr>
<td>221</td>
<td>Vehicle Technology Systems</td>
</tr>
<tr>
<td>N/A</td>
<td>Integration across the units</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>
Technicals exam document

The Exam Guide provides information on content to be assessed, its structure, Assessment Objectives and explanation/definitions of Command Verbs used in the exam.

It has been designed to help you in the preparation of your learners for the Exam.

Use the link to the Documents page of 4292-20 to find the Guide to the Examination

Synoptic assignment

- Demonstration of bringing together skills and knowledge
- Research activities
- Reflection and evaluation
- Moderation approach to ensure robust quality and rigour.
- 12-week window to complete – Feb to May
- Contributes 60% to the overall grade
- One resit opportunity (in next academic year)
- Graded D M P F - D* grade is achieved by a % aggregation of learners achieving top marks in the distinction grade (using an awarding process)
Helping you plan your delivery and assessments

- The synoptic assignment is externally set, internally marked and externally moderated.
- The assignment requires candidates to identify and use effectively in an integrated way an appropriate selection of skills, techniques, concepts, theories, and knowledge from across the content area.
- Candidates will be judged against the assessment objectives.

**Task 1**
Vehicle one owner has requested the tyres to be checked for pressure and tread depth. The following must be recorded:
- tyre pressures in Pounds per Square Inch (PSI) and Bar
- tyre tread depths in millimetres.

**Task 2**
You are required to take the following readings from the starter motor circuit on vehicle two and record the results:
- voltage at battery – static ignition off
- voltage at battery during cranking
- voltage drop across earth circuit
- current draw during cranking.

**Task 3**
You have been presented with a mild steel bar of a minimum dimension of 80 mm long with a diameter of 8 mm. You will be required to fabricate an exhaust support bracket.
- Bend the bar to a 90 degree angle, 20 mm from one end
- Cut an M8 thread that is 30 mm long
- Fit an appropriate nut to the thread
Synoptic assignment

• Learners have to complete a piece of work which they carry out independently

• Tutors cannot provide feedback to learners during the summative assessments for the assignment,

• as it is learners’ independent performance that is being assessed

• Learners may only be supported in understanding what they have to do and given general pointers, without specific feedback on actions to take or comments on the quality of work. If support is provided, this must be recorded on the Candidate Record Form

• Time allowed for the synoptic assessment is given in the synoptic assignment pack which is produced each year. Further information can be found in City & Guilds Qualification Handbooks

• The time allowed gives learners time to plan, prepare, complete the tasks and produce the evidence.
# Level 2 Technical Award in Automotive (4292-20)

## Assessment Objective

20

**AO2 Understanding of concepts theories and processes relating to the LOs**

- Does the candidate make connections and show causal links and explain why?
- How well are theories and concepts applied to new situations/assignment?
- How well chosen are exemplars – how well do they illustrate the concept?

### (1-4 marks)

- Some evidence of being able to give explanations of concepts and theories. Explanations appear to be recalled, simplistic or incomplete.
- Misunderstanding, illogical connections, guessing.

### (5 - 8 marks)

- Explanations are logical. Showing comprehension and generally free from misunderstanding, but may lack depth or connections are incompletely explored.
- Logical, slightly disjointed, plausible.

### (9 - 12 marks)

- Consistently strong evidence of clear causal links in explanations generated by the candidate. Candidate uses concepts and theories confidently in explaining decisions taken and application to new situations.
- Logical reasoning, thoughtful decisions, causal links, justified.

**Examples of types of understanding expected:** Vehicle electrical principles, relationship between electrical and mechanical components, selection of appropriate tools and equipment, properties of materials and components, use of testing procedures.

- Limited understanding of connections and links between theory and practical application.
- Limited comprehension of task; can locate and use information but does not show depth of understanding.
- Does not follow a holistic approach, limited logical process; indifferent approach to prescribed sequences or pre-set processes.

- Has an awareness of connections but lacks depth when linking theory to practical application. Some independent interpretation is evident.
- Shows understanding but is inconsistent; able to select appropriate equipment.
- Follows a systematic approach with some order but lacks detail.

- Fully understands connections and links between theory and practical application and demonstrates good depth of understanding.
- Clear and concise, ‘to the point’ explanations given.
- Follows a systematic approach; makes links across tasks.
- Able to demonstrate understanding when approaching new topics or contexts.

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1. The assigned weighting for the qualification.
2. Assessment Objective
3. Questions to use as prompts to focus the marking.
4. The minimum and maximum marks that are available to allocate in the band.
5. A generic description of performance quality for the band.
6. Qualification specific guidance as to what the quality of performance might look like for this qualification.
Marking the synoptic assignment
Tutors responsibilities for marking the synoptic assignment

- Tutors should: [https://www.youtube.com/watch?v=rhwcTszssc0&feature=youtu.be](https://www.youtube.com/watch?v=rhwcTszssc0&feature=youtu.be)
- Ensure they are familiar with the Marking and moderation guide
- Comment on the quality of work produced and only allocate marks (NOT grades) against each assessment objective.
- Total the marks for each learner out of a possible 60 marks.
- Submit the marks for the whole cohort.
- Submit learners’ evidence for the sample, depending on the size of the cohort:

<table>
<thead>
<tr>
<th>Number of learners</th>
<th>Sample size</th>
<th>The sample must include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 or fewer</td>
<td>All</td>
<td>The highest marked learner</td>
</tr>
<tr>
<td>13-100</td>
<td>12</td>
<td>The lowest marked learner</td>
</tr>
<tr>
<td>101-200</td>
<td>15</td>
<td>A range in between</td>
</tr>
<tr>
<td>More than 200</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Ensure that all evidence to be uploaded is collated in a logical order and named with the relevant Task. E.g. Task 1 – Report. For further information and guidance refer to the Marking and Moderation Guide. [http://www.cityandguilds.com/technical-qualifications/resources-and-support](http://www.cityandguilds.com/technical-qualifications/resources-and-support)
Tutors responsibilities for marking the synoptic assignment

• Learners do not have to complete the assignment in one day. Centres can plan the schedule for the synoptic assignment according to the volume of learners, timetabling, the physical resources and tutors available.

• The assignments are internally marked by tutors.

• Tutors should use the following forms:
  - Candidate Record Form
  - Centre Standardisation Declaration Form
  - Declaration of Authenticity Form
  - Personal Interest Form
  - Practical Observation Form.

• Technical qualifications centre forms can be found under section 3 on this webpage: http://www.cityandguilds.com/techbac/technical-qualifications/resources-and-support

• A different assignment will be provided each year, but the evidence produced will be internally marked using the same marking grid each year, in order to support comparability across versions.
The moderation portal

City and Guilds moderation portal allows tutors to upload marks and evidence for the synoptic practical assessment.

The key contact in the centre will be given a password to access the administrator account and create marker accounts for tutors so they can input marks and upload evidence.


The moderation process

The moderation process involves a remark by City & Guilds of the centre’s marking of the synoptic assessment. For Technical Awards, this is done remotely (as opposed to visiting moderation).

The outcome of the moderation process will confirm whether the centre’s marks are:

- Accepted – as this is an agreement of the centre marking, no challenge to the marking can take place
- Adjusted (ie marked too leniently or too harshly)
- Subject to a full remark and the moderator’s marks are accepted.

Centres will be notified of the outcome of moderation and will receive confirmation of final marks for learners and feedback on the accuracy of the centre’s marking.
How Technical Awards are graded and Performance Tables
Assessment and grading

- The results of the theory exam, synoptic assignment and overall grade are made available to centres in Walled Garden. The overall qualification grade will be calculated based on the aggregation of the points awarded for the learner’s achievement in the (theory) exam and the synoptic assessment (which are converted into grades).

- Technical Awards are graded as Fail, Pass, Merit, Distinction and Distinction*

- Both assessments (the exam and the synoptic assignment) must be achieved at a minimum of Pass for the qualification to be awarded.

- Learners who fail to reach the minimum standard for the Pass grade for an assessment will not have a qualification grade awarded and will not receive a certificate.

- There is no set pass mark published in advance as this is decided by an expert panel using an awarding process. Although we will be able to indicate the pass grade boundaries from the previous year

- The contribution of assessments towards the overall qualification grade is set out in each Qualification Handbook.
Comparing with GCSE

<table>
<thead>
<tr>
<th>GCSE Grading</th>
<th>City &amp; Guilds Technical Award Grading (GCSE equivalencies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5</td>
<td>Distinction *</td>
</tr>
<tr>
<td>7</td>
<td>Distinction</td>
</tr>
<tr>
<td>5.5</td>
<td>Merit</td>
</tr>
<tr>
<td>4</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Ofqual may alter these grades in line with GCSE grading 9-1 where a formula may be applied to allocate the percentage of learners who can be awarded a distinction*. 
Discounting codes

• Technical Awards are given a discounting code by DfE if they have significant overlap with the content of other GCSEs and/or Technical Awards.

• This means that two qualifications with the same discounting codes cannot both count in the Progress 8 and Attainment 8 performance measures.

• If a learner passes two qualifications with the same discounting codes, they will receive two certificates of achievement. However, only one qualification will count in the school or college’s performance tables.

• Information about discounting codes can be found here:
https://www.gov.uk/government/publications/key-stage-4-qualifications-discount-codes-and-point-scores
Key stage 4 performance points

- Information on calculating key stage 4 performance points for 2016 to 2018 is contained in the document ‘Progress 8 and Attainment 8: Guide for maintained secondary schools, academies and free schools’.


It has a link in it to:


which will provide information on how to calculate key stage 4 Attainment 8 and Progress 8 performance measures.

- All City & Guilds Technical Awards will count in key stage 4 performance tables from 2018 onwards, including 2020 performance tables.
Resource and support reminder
Support resources

City & Guilds Technical qualification resources

Resources and support

Here you'll find all the key information and resources for exam officers and tutors in colleges and other institutions offering City & Guilds Technical Qualifications.

We're here to support you at every stage – find out what you need to deliver our qualifications effectively, from curriculum planning, implementation, programme delivery and resources to support you at every stage.
Support resources

Handbooks, sample tests and qualification reports


- Past papers and past assignments 2018
- Sample tests and Synoptics
- Examiner and qualification reports
- Past Papers
The Technicals & Moderation Support Team are available Monday to Friday 9am to 5pm to offer dedicated support with general queries regarding the moderation process for Technical Qualifications. The team provide support with:

- Where to find the right documents and information
- General queries about technical qualifications
- Timeline for registrations, bookings and the moderation process
- Technical Qualification Approvals (QAPs)
- Exam timelines
- Moderation timelines
- Support and guidance with the Moderation Portal
Technical Advisor

E: Paul Tunnicliffe: paul.tunnicliffe@cityandguilds.com

The Technical Advisor is available to offer dedicated industry support for queries on the operation and assessment of Technical Qualifications.

- Understanding qualification content and requirements
- On-boarding to help tutors prepare for curriculum delivery
- Key assessment criteria and exam preparation
- Timeline for registrations, bookings and exam timelines
- Industry specific technical queries
Thank you