



# **City & Guilds Level 3 Certificate of Competence in Aerial Tree Rigging (0039-32)**

**September 2025 Version 1.6**

**Assessment Pack – Centre and Candidate Version**

| Version and date   | Change detail                                                                  | Section                                      |
|--------------------|--------------------------------------------------------------------------------|----------------------------------------------|
| 1.0                | First version                                                                  |                                              |
| 1.1 August 2021    | Assessor instructions updated                                                  | Introduction                                 |
| 1.2 October 2021   | AO name added to qualification title                                           | Throughout                                   |
| 1.3 September 2022 | Formatting changes<br>Updated logo<br>Updated 'Sources of general information' | Throughout<br>Front cover<br>Appendix 2      |
| 1.4 March 2025     | Formatting changes                                                             | Throughout                                   |
| 1.5 June 2025      | Typographical errors corrected                                                 | Practical<br>observation<br>descriptor table |
| 1.6 September 2025 | ROA paragraph updated, reference to ARAS form removed.                         | Introduction                                 |

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# Introduction

This assessment relates to the unit in the Qualification handbook. The assessment can be achieved at pass only. If any task is not yet met the candidate is unsuccessful.

General guidance on the requirements for assessment can be found in the Assessor Guidance document available on the City & Guilds web site **[www.nptc.org.uk](http://www.nptc.org.uk)**

The assessor must complete the Practical Table mark sheet for each candidate which should be kept by the assessor for a minimum period of twelve months.

## **Record of assessment (ROA)**

A prepopulated record of assessment must be completed by the assessor following an assessment and returned to the centre within two working days.

## **Assessment Time**

The expected assessment time for this qualification is 2 – 4 hours.

## **Site/workshop requirements:**

Trees of sufficient size and form to enable all assessment criteria to be assessed

Branches of a minimum diameter of 100mm

Vertical timber with a minimum diameter of 200mm.

## **Equipment/Machinery:**

LOLER compliant Mobile Elevated Work Platform (MEWP) if used

LOLER compliant climbing equipment with documented evidence, for the Candidate and the Assessor

LOLER compliant rigging equipment

Top handled or rear handled Chainsaw (max guide bar 15 inch) with maintenance tools

Handsaw

First aid kit

## **Consumables:**

Fuel and chainsaw oil

This is not an open book assessment, however additional technical information may be sought from the relevant manufacturer's operator manuals or any other appropriate training or safety publication.

## Practical observation descriptor table

### 303 Aerial tree rigging

| Activity number and description from check list |                                                                                                            | Assessment criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.                                              | Identify the hazards, risks and controls associated with the site, task and machine                        | Identify hazards, risks and controls relevant to the site task and machine                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2.                                              | State the emergency procedures relevant to the site                                                        | Emergency procedures relevant to the work site                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3.                                              | State industry guides and information relevant to aerial tree rigging                                      | Industry guides relevant to aerial tree rigging: <ul style="list-style-type: none"> <li>• AA Technical Guide 1 Tree climbing and aerial rescue</li> <li>• AA Technical Guide 2 Use of tools in a tree</li> <li>• AA Technical Guide 3 Rigging and dismantling</li> <li>• AA Technical Guide 5 Use of Mobile elevating work platforms in tree work</li> <li>• Evaluation of current rigging and dismantling practices used in arboriculture HSE RR668</li> <li>• Tree work recommendations BS3998</li> </ul> |
| 4.                                              | Perform a tree condition assessment of the tree and work at height assessment prior to commencing the work | Potential hazards that may be encountered may include: <ul style="list-style-type: none"> <li>• evidence of cavities, decay or decay fungi</li> <li>• deadwood and broken branches</li> <li>• dead or flaking bark</li> <li>• v shaped unions</li> <li>• cracks</li> <li>• nesting insects</li> <li>• the presence of power lines or telephone wires</li> <li>• targets and obstacles underneath the tree</li> </ul>                                                                                        |
| 5.                                              | Discuss a working at height assessment                                                                     | Working at height assessment may include: <ul style="list-style-type: none"> <li>• can the work be carried out from ground level</li> <li>• the use of a mobile elevating work platform (MEWP) to prevent a fall</li> <li>• The use of suitable equipment minimise the distance and consequence of a fall</li> </ul>                                                                                                                                                                                        |

|     |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.  | State when tree rigging may be required and its limitations                                                   | <p>Rigging may be required when:</p> <ul style="list-style-type: none"> <li>• free fall techniques are not possible</li> <li>• other</li> </ul> <p>Limitations may include:</p> <ul style="list-style-type: none"> <li>• higher competency levels of staff required</li> <li>• potentially time consuming to set up and use</li> <li>• equipment intensive</li> <li>• other</li> </ul>                                                                                                                                                                                                             |
| 7.  | Discuss site zoning in relation to on site preparation                                                        | <p>Work site layout factors to consider may include:</p> <ul style="list-style-type: none"> <li>• work zone: an area where hazards may be encountered</li> <li>• drop zone: an area where it is anticipated materials may fall</li> <li>• exclusion zone: the overall operational area</li> <li>• other</li> </ul>                                                                                                                                                                                                                                                                                 |
| 8.  | Describe how to select compatible components to make up a rigging system appropriate for the anticipated load | <p>Selection of compatible components may include:</p> <ul style="list-style-type: none"> <li>• knowledge of loads that equipment may be subject to</li> <li>• consideration of strength loss due to configuration, age and condition</li> <li>• compatibility with any other components</li> <li>• other</li> </ul>                                                                                                                                                                                                                                                                               |
| 9.  | Select compatible components to make up the rigging system                                                    | <p>Candidate to select components which may include:</p> <ul style="list-style-type: none"> <li>• rigging blocks</li> <li>• rigging ropes</li> <li>• connectors</li> <li>• slings</li> <li>• strops</li> <li>• lowering devices</li> <li>• redirect pulleys</li> <li>• other</li> </ul>                                                                                                                                                                                                                                                                                                            |
| 10. | Use and maintain tools, equipment and personal protective equipment (PPE)                                     | <p>Candidate to select compliant PPE and safety clothing for tree climbing and chainsaw use to include:</p> <ul style="list-style-type: none"> <li>• tree climbing helmet</li> <li>• personal first aid kit</li> <li>• knife with retractable blade or handsaw</li> <li>• chainsaw protective footwear with good grip and ankle support</li> <li>• non- snag clothing</li> <li>• eye protection</li> <li>• hearing protection</li> <li>• chainsaw protective clothing</li> <li>• appropriate chainsaw with lanyard.</li> </ul> <p>Candidate to select appropriate compliant climbing equipment</p> |

|     |                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11. | Describe how to select suitable work positions and planned drop zones                                                   | <p>Factors to consider when selecting a work position may include:</p> <ul style="list-style-type: none"> <li>• minimising climbers risk</li> <li>• minimising potential equipment damage</li> <li>• available anchor points</li> <li>• risk assessment</li> <li>• other</li> </ul> <p>Factors to consider when selecting an appropriate drop zone may include:</p> <ul style="list-style-type: none"> <li>• suitable areas</li> <li>• identification of targets</li> <li>• access and egress</li> <li>• other</li> </ul> |
| 12. | Describe how to select suitable anchor points for the anticipated load without compromising the workers access position | <p>Suitable anchor points may be selected in terms of:</p> <ul style="list-style-type: none"> <li>• sufficient size and strength</li> <li>• tree form and condition</li> <li>• work to be completed</li> <li>• anticipated load</li> <li>• obstacles beneath</li> <li>• climbers position and anchor points</li> <li>• planned drop zone</li> <li>• other</li> </ul>                                                                                                                                                      |
| 13. | Explain how to calculate the mass of the load                                                                           | <p>Calculated the weight of the section and mass of the load:</p> <ul style="list-style-type: none"> <li>• Log mass chart (length x diameter = log mass x safety factor x species correction factor)</li> </ul>                                                                                                                                                                                                                                                                                                           |
| 14. | Explain how to calculate the peak load on the rigging pulley                                                            | <p>Calculation of the load for the rigging point when lowering timber may include:</p> <p>Rigging point above the load</p> <ul style="list-style-type: none"> <li>• log mass x 2 = load</li> </ul> <p>Rigging point below the load</p> <ul style="list-style-type: none"> <li>• log mass x 11 = load</li> </ul>                                                                                                                                                                                                           |
| 15. | Calculate the anticipated loads                                                                                         | <p>Calculate load:</p> <ul style="list-style-type: none"> <li>• above the load</li> <li>• below the load</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                       |
| 16. | Describe how to minimise shock loading in the rigging system                                                            | <p>Shock loading may be minimised by:</p> <ul style="list-style-type: none"> <li>• allowing sections to run</li> <li>• removing smaller sections</li> <li>• placing more rope in the system</li> <li>• reconfigure rigging system</li> <li>• other</li> </ul>                                                                                                                                                                                                                                                             |

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|-----|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17. | Describe methods of adding friction into the rigging system | <p>Methods of adding friction may include:</p> <ul style="list-style-type: none"> <li>• natural tree structure</li> <li>• rigging bollard</li> <li>• capstan</li> <li>• figure of eight</li> <li>• rigging rings</li> <li>• other</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 18. | State the considerations for selecting friction devices     | <p>Considerations for the selection of friction devices may be:</p> <ul style="list-style-type: none"> <li>• size/mass of the load</li> <li>• availability of anchor points</li> <li>• safety being compromised</li> <li>• simplicity of operation</li> <li>• potential of equipment damage</li> <li>• other</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 19. | Explain how to remove tree sections                         | <p>The basic principles of various rigging techniques may include:</p> <p>Tip tie techniques:</p> <ul style="list-style-type: none"> <li>• rope attached to tip end of branch</li> </ul> <p>Butt tie techniques:</p> <ul style="list-style-type: none"> <li>• rope attached to butt end of branch</li> </ul> <p>Balance/ cradle:</p> <ul style="list-style-type: none"> <li>• use multiple attachment points to suspend a horizontal load</li> </ul> <p>Snatching:</p> <ul style="list-style-type: none"> <li>• section tied above rigging point</li> </ul> <p>Speed line:</p> <ul style="list-style-type: none"> <li>• after removal of tree section the load is transferred to the speed line to be moved to the designated drop zone</li> </ul> <p>Lifting techniques:</p> <ul style="list-style-type: none"> <li>• during the removal of a tree section the load is lifted by an appropriate lifting device</li> </ul> |

|     |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20. | Describe how, when and where to use                        | <p>Rigging systems to include:</p> <p>Drift load transfer line:</p> <ul style="list-style-type: none"> <li>• moving suspended loads from one place to another</li> </ul> <p>Spider leg:</p> <ul style="list-style-type: none"> <li>• used to create a multiple attachment</li> </ul> <p>Speedline:</p> <ul style="list-style-type: none"> <li>• transport a suspended load</li> </ul> <p>False anchor points:</p> <ul style="list-style-type: none"> <li>• to create an artificial anchor</li> </ul> <p>Pull/ tag line:</p> <ul style="list-style-type: none"> <li>• assist the removal of a section</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 21. | Demonstrate tying of knots that may be used in rigging     | <p>Demonstration of the following knots must be demonstrated during the assessment:</p> <ul style="list-style-type: none"> <li>• timber hitch</li> <li>• cow hitch</li> <li>• running bowline</li> <li>• clove hitch</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 22. | Use access and positioning methods appropriate to the tree | <p>All anchor points selected taking into consideration:</p> <ul style="list-style-type: none"> <li>• size, strength and structure</li> <li>• position in relation to the parts of the tree to be accessed</li> <li>• use of equipment to minimise damage to the tree if appropriate</li> </ul> <p>Candidate establishes their initial anchor points taking into account:</p> <ul style="list-style-type: none"> <li>• suitability of the techniques used</li> <li>• accurate installation of equipment</li> <li>• organisation of ropes</li> <li>• safety and position of the anchor points</li> <li>• testing of the anchor points by thorough loading prior to ascent</li> </ul> <p>Technique used takes into account:</p> <ul style="list-style-type: none"> <li>• efficient use of technique chosen</li> <li>• candidate is attached to the tree at all times in accordance with industry good practice</li> <li>• appropriate selection of anchor points</li> <li>• appropriate route taken up the tree</li> <li>• correct use of systems when changing anchor points</li> <li>• thorough load testing of new anchor points</li> <li>• risk of a fall is managed at all times</li> <li>• correct use of equipment</li> </ul> <p>An appropriate MEWP if applicable is set up and used in accordance with AA technical guide 5 use of mobile elevating work platform</p> |

|            |                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>23.</b> | Remove tree sections using suitable rigging and appropriate cuts                                                         | <p>Tree sections removed using the following techniques:</p> <ul style="list-style-type: none"> <li>• tip tie</li> <li>• butt tie</li> <li>• cradle</li> <li>• vertical free fall</li> <li>• vertical lowered section</li> </ul> <p>Taking the following points into account:</p> <ul style="list-style-type: none"> <li>• suitable anchor points for climbing and lowering lines</li> <li>• relative positions of climbing and lowering lines</li> <li>• appropriate equipment selected for the anchor point of the lowering line</li> <li>• use of a craning fork where appropriate</li> <li>• appropriate means for the control of friction employed in the lowering system</li> <li>• manageable sections selected</li> <li>• position and method of attaching rope to the section</li> <li>• use of pull line if appropriate</li> <li>• appropriate safe and secure working position attained</li> <li>• characteristics and properties of the wood considered</li> <li>• correct position, depth and accuracy of cuts</li> <li>• chain brake applied or saw switched off whilst lowering sections</li> <li>• the climber must direct the ground operations</li> <li>• limbs are lowered under control</li> </ul> |
| <b>24.</b> | Dispose of waste in line with work specification                                                                         | All waste produced from activities is disposed of in line with legislation, good practice and/or site requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>25.</b> | Communicate appropriately with ground staff                                                                              | communication between climber and ground staff maintained when appropriate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>26.</b> | Applied pruning specification                                                                                            | Pruning specifications executed as per industry good practice and job specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>27.</b> | Used appropriate tools, equipment and personal protective equipment (PPE)                                                | All tools, equipment and personal protective equipment is used in line with industry good practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>28.</b> | Carried out work to minimise environmental damage                                                                        | It is ensured that any possible environmental damage is minimised at all times                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>29.</b> | Worked in a way which maintains health and safety and is consistent with relevant legislation and industry good practice | All activities must be completed in a way which protects the operator and those around them                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## Appendix 1 Practical table

### 303 - Aerial tree rigging

All criteria must be achieved.

| Activity number and description                                                                                              | Achieved |
|------------------------------------------------------------------------------------------------------------------------------|----------|
| 1. Identify the hazards, risks and controls associated with the site, task and machine                                       |          |
| 2. State the emergency procedures relevant to the site                                                                       |          |
| 3. State industry guides and information relevant to aerial tree rigging                                                     |          |
| 4. Perform a tree condition assessment of the tree and work at height assessment prior to commencing the work                |          |
| 5. Discuss a working at height assessment                                                                                    |          |
| 6. State when tree rigging may be required and its limitations                                                               |          |
| 7. Discuss site zoning in relation to on site preparation                                                                    |          |
| 8. Describe how to select compatible components to make up a rigging system appropriate for the anticipated load             |          |
| 9. Select compatible components to make up the rigging system                                                                |          |
| 10. Use and maintain tools, equipment and personal protective equipment (PPE)                                                |          |
| 11. Describe how to select suitable work positions and planned drop zones                                                    |          |
| 12. Describe how to select suitable anchor points for the anticipated load without compromising the workers access position  |          |
| 13. Explain how to calculate the mass of the load                                                                            |          |
| 14. Explain how to calculate the peak load on the rigging pulley                                                             |          |
| 15. Calculate the anticipated loads                                                                                          |          |
| 16. Describe how to minimise shock loading in the rigging system                                                             |          |
| 17. Describe methods of adding friction into the rigging system                                                              |          |
| 18. State the considerations for selecting friction devices                                                                  |          |
| 19. Explain how to remove tree sections                                                                                      |          |
| 20. Describe how, when and where to use                                                                                      |          |
| 21. Demonstrate tying of knots that may be used in rigging                                                                   |          |
| 22. Use access and positioning methods appropriate to the tree                                                               |          |
| 23. Remove tree sections using suitable rigging and appropriate cuts                                                         |          |
| 24. Dispose of waste in line with work specification                                                                         |          |
| 25. Communicate appropriately with ground staff                                                                              |          |
| 26. Applied pruning specification                                                                                            |          |
| 27. Used appropriate tools, equipment and personal protective equipment (PPE)                                                |          |
| 28. Carried out work to minimise environmental damage                                                                        |          |
| 29. Worked in a way which maintains health and safety and is consistent with relevant legislation and industry good practice |          |

## Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. To download the documents and to find other useful documents, go to the **Centre Document Library** on [www.cityandguilds.com](http://www.cityandguilds.com) or click on the links below:

### **Quality Assurance Standards: Centre Handbook**

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on

- Centre quality assurance criteria and monitoring activities
- Administration and assessment systems
- Centre-facing support teams at City & Guilds / ILM
- Centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the Centre Contract.

### **Quality Assurance Standards: Centre Assessment**

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements, or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre-assessments.

### **Access arrangements - When and how applications need to be made to City & Guilds**

provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **Centre Document Library** also contains useful information on such things as:

- Conducting examinations
- Registering learners
- Appeals and malpractice

### **Useful contacts**

Please visit the Contact Us section of the City & Guilds website, **Contact us**

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

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The City & Guilds Group is a leader in global skills development. Our purpose is to help people, organisations and economies develop their skills for growth. We work with education providers, employers and governments in over 100 countries across the world to help people, businesses and economies grow by shaping skills systems and supporting skills development.

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