

41346 Operate a quad bike safely in complex riding conditions

Kaupae Level	3
Whiwhinga Credit	7
Whāinga Purpose	This standard is for people working, or intending on working, in an agribusiness operation. They will be able to operate a quad bike safely in complex riding conditions, with limited supervision. This skill standard is aligned to the New Zealand Certificate in Farm Skills (Level 3) [Ref: 5678].

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Operate a quad bike safely in complex riding conditions.	a. Operate a quad bike safely while following planned routes.
	b. Use active riding techniques to control and manoeuvre a quad bike.
	c. Use vehicle controls and mechanical functions of a quad bike to manage complex riding conditions.
	d. Ensure mounted loads and trailed equipment is securely attached and balanced, as appropriate.
	e. Maintain the stability of quad bike, mounted loads, and trailed equipment, while riding and turning.
	f. Report near misses, accidents, or new hazards encountered while operating quad bike.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications

All activities must be carried out in accordance with workplace health and safety requirements, workplace procedures, legislative requirements, regulatory requirements, licencing requirements, and manufacturer's requirements.

Providers must give due consideration to embedding ngā kaupapa (principles) o Te Tiriti o Waitangi when designing delivery activities relevant to this standard. These principles are outlined in [Guidelines for Providers: Embedding Tirohanga Māori](#).

Providers must give due consideration to the needs and values of Pacific peoples and other cultural groups when designing delivery activities relevant to this standard, ensuring practices are inclusive and equitable.

It is recommended that ākonga/learners hold skill standard 41343, *Carry out pre-start checks and plan routes for an agribusiness vehicle*, or demonstrate equivalent knowledge and skills before undertaking assessment against this standard.

Ākonga/learners should be assessed against this standard in a real-life context using naturally occurring evidence. A verifier's checklist with appropriate comments confirming competency is acceptable if accompanied by evidence that includes examples from the ākonga/learner's performance which may include but is not limited to – work diaries, riding logs, machine hour records, GPS data, photographic or video evidence.

If assessment occurs outside the ākonga/learner's workplace, assessment conditions must reflect, as closely as practicable, the complexity and operating conditions likely to be encountered in the learner's intended workplace context.

Assessment must consider the ākonga/learner's behaviour while operating a quad bike, including compliance with safety requirements and workplace procedures.

Ākonga/learners must maintain control of a quad bike under five complex riding conditions. These conditions must include factors that materially affect vehicle handling and may include, but are not limited to:

- terrain (e.g. slopes, uneven ground)
- surface conditions (e.g. wet, loose, rough, or changing surfaces)
- load or equipment effects (e.g. mounted loads, trailed equipment, non-static loads)
- environmental factors (e.g. weather, visibility, lighting)
- operational constraints (e.g. confined spaces, obstacles, livestock, or proximity to hazards).

Complex riding conditions may arise individually or in combination and must require demonstrable adjustments to speed, positioning, control inputs, or vehicle configuration to maintain safe operation.

Where access to specific terrain-based conditions is limited, alternative conditions that create equivalent complexity in vehicle control, stability, traction, or hazard management may be used.

The size and/or weight of the mounted load and trailed equipment must be significant enough to affect the ākonga/learner's riding technique but must be within manufacturer's specifications and must not impede the ākonga/learner's ability to ride safely.

Evidence must demonstrate consistent and reliable performance across multiple operating occasions and under conditions that materially affect vehicle stability, traction, and hazard response. Evidence must not be limited to repeated performance in substantially similar operating conditions and should include meaningful variation in factors affecting vehicle control, decision-making, or risk.

Ākonga/learners must provide a verifiable record of operating experience that demonstrates sufficient duration and frequency of practice to support the credit value of this standard. This will typically involve approximately 40 hours of quad bike operation, which may be accumulated through current and/or prior experience. Evidence derived from a single or limited-duration event is unlikely to be sufficient to demonstrate the consistency and range of performance required for this standard.

Definitions

Behaviour refers to actions demonstrating compliance with safety requirements and workplace procedures. Examples include – wearing a helmet, operating the quad bike in a manner that minimises risk to self and others, avoiding 'no go' areas, and following instructions regarding care and maintenance of vehicles.

Complex riding conditions refers to environmental, operational, and load-related factors that increase the difficulty of controlling a vehicle and require the ākonga/learner to actively adjust riding technique to maintain stability, traction, and safety.

Mounted load refers to equipment or a load mounted on the front or rear carriers of a quad bike. Examples of mounted loads may include – spray tanks, a toolbox, fertiliser bags, stock feed. Mounted loads may contain non-static contents.

Quad bike refers to a vehicle, typically used in a rural workplace for off road use, that is fitted with handlebars and thumb operated throttle controls. For this standard, a quad bike excludes racing quad bikes or quad bikes modified for other purposes.

Trailed equipment refers to an implement attached to, and trailed behind, the quad bike. Examples of trailed equipment may include – calf trailer, weed sprayer, mineral spreader, mobile milk feeder. Trailed equipment may contain loads that are static, loads with non-static contents, and live loads.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Quad bike operation

- active riding techniques, e.g. weight transfer, stability, body position, balance, head and eye position
- emergency abandonment
- functional controls, e.g. throttle control, braking, gear selection, differential-lock, steering, manoeuvrability, reversing, parking, forward hill start
- design differences that affect riding, e.g. differential-lock engagement, transmission systems, synchronised gearboxes, suspension systems
- complex conditions, e.g. uphill, downhill, traversing a slope, wet, loose surfaces, rough terrain, change of surfaces
- completing operational activities within workplace timeframes
- operating a quad bike safely, e.g. safety for self, others and livestock, appropriate speed.

Trailed equipment and mounted loads

- effect of mounted loads and trailed equipment on quad bike stability and dynamics
- effect of non-static loads and live loads on quad bike stability and dynamics
- load security
- pre-ride checks, e.g. load security, load balance.

Rauemi | Resources

- [Health and Safety at Work Act \(2015\)](#)
- [Land Transport \(Driver Licensing\) Rule \(1999\)](#)
- [Land Transport \(Road User\) Rule \(2004\)](#)
- [Safe use of quad bikes](#) – fact sheet (WorkSafe New Zealand)
- Workplace Standard Operating Procedures
- Manufacturer's specifications.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Food and Fibre Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Agriculture, Forestry and Fisheries > Agriculture > Agricultural Vehicles and Machinery
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0052

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	30 July 2026	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standards 24559, 24561 and 24563.		
Rā arotake Planned review date	31 December 2031		

Please contact the Food and Fibre Industry Skills Board at info@foodandfibreisb.nz to suggest changes to the content of this skill standard.