

OPERATE A VEHICLE COMBINATION

SAGA Unit Standard ID	123254
NQF Level	4
Credits	20
Duration	5 Days

Course fee per Learner R3 200.00

Includes Course material, assessment,
light lunch and registration

REG No. 1970/002982/07
VAT Reg. 4030240818
SDL 630701599
TETA03-008

OVERVIEW

The purpose of learning is to ensure safe, professional operation of vehicle combinations with a gross vehicle mass exceeding 3,5 tons, and consisting of a drawing vehicle and trailer/s. Credited learners can drive a specific vehicle combination in accordance with legal, safety, manufacturer and other relevant requirements and reflect on the manner in which the vehicle is operated.

▶ CREDITED LEARNERS ARE CAPABLE OF

- Preparing a vehicle combination for road transport trips according to specification.
- Driving a vehicle combination in accordance with specified requirements.
- Ensuring the maintenance of road transport service quality.
- Handling unexpected situations according to specified procedures.
- Parking vehicle combination in accordance with specified requirements.
- Coupling and uncoupling a drawing vehicle and trailer/s according to specified procedures.

▶ LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

It is assumed that learners have already attained NQF Level 2 Mathematic literacy and Communication and Language competence. It is also assumed that the learner can already drive a light vehicle (less than 3,5 tons gross vehicle mass), and can plan road transport service delivery.

▶ THE SCOPE OF THIS UNIT STANDARD INCLUDES

The combination vehicle must consist of a drawing vehicle and trailer, or two vehicles, one of which has a gross vehicle mass of less than 3,5 tons. The trailer must be less than 75% of the gross vehicle mass of the vehicle.

- Trailer refers to one of the following:
 - > Drawbar trailer with a turntable
 - > Semi-trailer (i.e. a trailer coupled through a 5th wheel)
- Articulation point refers to any coupling point either through:
 - > A fifth wheel
 - > A turntable of a drawbar trailer
 - > Couple interface between drawbar and drawing vehicle.
- Competence on the driving outcome for vehicles over 3,5 tons gross vehicle mass, should be assessed on:
- At least one of the following gearbox types:
 - > Synchro-mesh
 - > Non-synchro mesh
 - > Automatic
- At least 1 of the following retardation systems (refers to a braking system fitted on a vehicle, in addition to brake systems, as required by law).
 - > Engine brakes
 - > Driveline retarders (electro-magnetic and Hydraulic).
 - > Exhaust brakes
- Service brake system.
- Competence should be proven on a loaded vehicle. Loaded implies a vehicle loaded with goods and/or passengers to at least 25 percent of its rated capacity.

- The learner's portfolio should prove that the learner has accumulated at least 100 logged hours of driving which includes the following compulsory conditions:
 - > Night driving - at least 5 hours
 - > Driving in wet weather conditions - at least 5 logged hours
 - > Freeway driving - at least 20 logged hours
 - > Driving in low and high-density traffic - at least 20 logged hours
- The relevant driving license will have to be obtained, before the learner can be credited against this unit standard.



UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE

Credited learners understand and can explain:

- Vehicle components location, characteristics and functionality.
Range: Relevant vehicle components include the electrical system, cooling system, lubrication system, fuel, clutch, gearbox, differential lock, brake system, tyres, retardation devices, and cab instruments and warning devices.
- Road Traffic Act 1993 pertaining to operating a vehicle combination.
- The effect that weather, road and traffic conditions have on a vehicle's performance, as well as driver actions.
- Coupling and uncoupling procedures.
- Procedures for and reporting of emergencies.
- Application of fire extinguisher fitted on vehicle.
- Operational rationale for vehicle inspections.
- Defect reporting procedure.
- Measures to minimize risk of hi-jacking.
- Measures to maximise cost-effectiveness and efficient operation of vehicle.
- Effects of psychological responses and physiological conditions on driving performance.
- Effect of the following aspects on the stability of the vehicle combination:
 - > Mass of individual units in the combination
 - > Speed of the combination
 - > Direction of travel
 - > Road surface
 - > Load distribution
- Procedures for coupling and uncoupling a drawing vehicle and trailer/s.
- Functionality of systems connecting trailer to drawing vehicle.