

New Zealand Certificate in Motorcycle Engineering (Level 4) [Ref: 3447]						
Level	4		Credits	161		
Assessment standards aligned with qualification outcomes						
Outcomes		Assessment Standards				
Outcome 1 Monitor the workplace and respond to issues as required to maintain a safe and effective workplace (Credits 15)		31065 - Demonstrate knowledge of estimates and quotations in the automotive industry (Level 4, credits 3) 22789 - Demonstrate knowledge of warranties and guarantees that apply to the automotive industry (Level 4, credits 4)				
Outcome 2 Apply the appropriate precautionary measures when servicing and repairing high risk motorcycle systems (Credits 10)		31439 - Demonstrate knowledge of a pre-delivery inspection on a vehicle or machine (Level 3, credits 3) 31436 - Carry out a pre-delivery inspection on a vehicle or machine (Level 4, credits 3) 31064 - Describe the operation of vehicle electronic braking systems (Level 4, credits 4)				
Outcome 3 Diagnose and repair common faults in motorcycle engines and driveline systems (Credits 55)		30886 - Diagnose the mechanical condition of an engine (Level 4, credits 4) 31194 - Demonstrate knowledge of carburettor operation (Level 3, credits 5) 31051 - Replace an automotive clutch assembly (Level 4, credits 8) 31050 - Diagnose and repair automotive driveline system faults (Level 4, credits 10) 31056 - Demonstrate knowledge of engine management system fault diagnosis (Level 4, credits 4) 31048 - Diagnose and repair engine management system faults (Level 4, credits 10) 30887 - Replace an automotive timing belt or chain (Level 4, credits 4) 31125 - Diagnose and repair vehicle or machine cooling system faults (Level 4, credits 6) 31437 - Diagnose and repair faults in a motorcycle engine (Level 4, credits 8)				
Outcome 4	30881 - Describe automotive scan tools and oscilloscopes (Level 4, credits 5)					



Diagnose and repair common faults in motorcycle electronic and electrical	30873 - Carry out diagnostic procedures using an automotive scan tool (Level 4, credits 8)		
systems (Credits 45)	31057 - Demonstrate knowledge of diagnosing automotive emission control system faults (Level 3, credits 4)		
	31049 - Diagnose and repair automotive emission control system faults (Level 4, credits 10)		
	31435 - Diagnose and repair faults in manual starting systems (Level 4, credits 2)		
	31128 - Demonstrate knowledge of automotive wiring harness design and manufacture (Level 3, credits 4)		
	30435 - Demonstrate knowledge of vehicle emissions (Level 3, credits 4)		
	30436 - Demonstrate knowledge of electronic fuel injection (EFI) system (Level 3, credits 2)		
	30876 - Diagnose and rectify faults in vehicle or machine charging and starting systems (Level 4, credits 6)		
	30880 - Describe automotive electronic components, actuators, sensors and signals (Level 3, credits 5)		
Outcome 5 Diagnose and repair common faults in	30885 - Demonstrate knowledge of automotive diagnostic and repair procedures (Level 3, credits 5)		
motorcycle steering, suspension and braking systems (Credits 35)	31066 - Demonstrate knowledge of electronically controlled steering and suspension systems, and system fault diagnosis (Level 4, credits 6)		
(c.caita 33)	24429 - Demonstrate knowledge of motorcycle frame, steering, and suspension systems (Level 4, credits 6)		
	24442 - Remove and replace motorcycle steering and suspension components (Level 4, credits 4)		
	31063 - Demonstrate knowledge of hydraulic brake system fault diagnosis (Level 4, credits 2)		
	31055 - Diagnose and repair vehicle electronic braking system faults (Level 4, credits 8)		
	31054 - Diagnose and repair hydraulic braking system faults (Level 4, credits 4)		





