

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 co motorcycle engines and systems (Credits 55)		4, credits 4 31194 - De 3, credits 5 31051 - Re 8) 31050 - Dia (Level 4, cr 31056 - De fault diagn 31048 - Dia (Level 4, cr 30887 - Re credits 4) 31125 - Dia faults (Level	monstrate knowle place an automot agnose and repair edits 10) monstrate knowle osis (Level 4, cred agnose and repair edits 10) place an automot agnose and repair el 4, credits 6) agnose and repair	nical condition of an engine (Level edge of carburettor operation (Level ive clutch assembly (Level 4, credits automotive driveline system faults edge of engine management system its 4) engine management system faults ive timing belt or chain (Level 4, vehicle or machine cooling system faults in a motorcycle engine (Level
Outcome 4		30881 - Describe automotive scan tools and oscilloscopes (Level 4, credits 5)		

Programme Guidance for Education Organisations



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)		
	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)		