

MATHIOYA TECHNICAL & VOCATIONAL COLLEGE
MECHANICAL&AUTOMOTIVE ENGINEERING

FOR ALL TRAINEES UNDERTAKING AUTOMOTIVE TECHNICIAN FULL COURSE
LEVEL 4, LEVEL 5 AND LEVEL 6

DRAWING EQUIPMENT

1. Drawing Board or MDF (60cm By 50cm)
2. T-Square (1M Long)
3. Set Square (60 & 45) plastic
4. Drawing Set
5. 1 Roll of Masking Tape
6. Drawing papers 1 Ream or drawing book, and Pencils HB, H, 2H 3H, Eraser's
7. A4 200 Pages exercise books (Depends on no. of units per level)
8. Scientific Calculator
9. SMP Mathematics Table for college (for craft certificate and diploma only)
10. Overall/ Dust-Coat – Navy Blue
11. Industrial boots/safety boots

SHORT COURSES TOPICS AND MATERIAL

AUTOMOTIVE SHORT COURSES							
COURSES	ELECTRONIC MECHANICS	GAS WELDER	LIGHT VEHICLE MECHANICS	PANEL BEATER	SPRAY PAINTER	ARC WELDER	MOTOR BIKE MECHANICS
TOPICS							
	<ul style="list-style-type: none"> • Workshop and personal Safety • Introduction to automobile • Charging system • Starting system • Electronic fuel injection system • Lighting system • Vehicle electrical auxiliary system 	<ul style="list-style-type: none"> • Workshop and personal Safety • Introduction to gas welding • Types of gas welding • Tools and equipment used • Gas welding techniques • Gas cutting tools 	<ul style="list-style-type: none"> • Workshop and personal Safety • Introduction to automobile • Vehicle layout • Types of engines • Transmission systems • Suspension system • Steering system • Braking system • Wheels and tires • Cooling system 	<ul style="list-style-type: none"> • Workshop and personal Safety • Introduction to panel beating • Tools and equipment • Chassis and body defects • Panel beating procedures. • Filler application and sanding • Materials handling and waste disposal. 	<ul style="list-style-type: none"> • Workshop and personal Safety • Introduction to spray painting • Types of paints and thinners • Types of painting guns • Methods of surface preparations • Spray paintings sequences • Quality control and waste disposal 	<ul style="list-style-type: none"> • Workshop and personal Safety • Types of arc welding machines • Arc welding joints • Arc welding techniques • Arc welding metals • safety 	<ul style="list-style-type: none"> • Workshop Safety • Introduction to motor cycle • Types of motor cycle engines • Maintenance of motor cycle • Cyclist familiarization • Personal protective gear.

AUTOMOTIVE SHORT COURSE MATERIALS							
COURSES	ELECTRONIC MECHANICS	GAS WELDER	LIGHT VEHICLE MECHANICS	PANEL BEATER	SPRAY PAINTER	ARC WELDER	MOTOR BIKE MECHANICS
TOPICS							
1.	Dust coat/ overall	Dust coat/ overall	Dust coat/ overall	Dust coat/ overall	Dust coat/ overall	Dust coat/ overall	Dust coat/ overall
2.	Safety boots	Safety boots	Safety boots	Safety boots	Safety boots	Safety boots	Safety boots
3.	Tester	Gas welding goggles	Assorted spanners	Clear goggles	Clear goggles	welding goggles	Assorted spanners
4.	Multi-meter	Leather apron		A packet of latex gloves	A packet of latex gloves	Leather apron	Screw drivers
5.	Screw drivers			Dust masks	Dust masks		
6.	Assorted spanners			Assorted spanners	Assorted spanners		
7.	Insulating tapes			Screw drivers	Screw drivers		