Revised

1

DEPARTMENT OF EMPLOYMENT AND TRAINING

SYLLABUS

FOR

INDUSTRIAL SCHOOLS

NAME OF THE TRADE : MECHANIC GENERAL ELECTRONICS

DURATION : 1 Year.

COVER

SYLLABUS (TRADE NAME) : MECHANICGENERAL ELECTRONICS Electronics.

UNDER CODE OF REGULATION FOR INDUSTRIAL SCHOOL

AS APPROVED BY

DEPARTMENT OF EMPLOYMENT AND TRAINING

CHEPAUK, CHENNAI- 600 005.

.....2005

LIST OF COMMITTEE MEMBERS AND TRADE EXPERTS

COMMITTEE MEMBERS	Thiru **T. SUNDARAJ** B.Tech., Regional Joint Director of Training Offfice of Regeional Joint Director Guindy, Chennai-60032
	Thiru **P. DWARAKA** D.P.Tech., Assistant Director. Regional Joint Director of Training Offfice of Regeional Joint Director Guindy, Chennai-60032
TRADE EXPERTS	Thiru **P.PRABHAKAR** B.Tech. (IT) Training Officer, Govt. Industrial Training Institute, Ambattur, Chennai-600 098
	Tmt. **D.THULASI** B.Tech(I.T)., Assistant Training Officer, Govt. Industrial Training Institute, Ambattur, Chennai-600 098

COURSE DETAILS

Name of Trade	**: MECHANIC GENERAL ELECTRONICS**
Qualification	**: 10^{TH} PASS / FAIL**
Age	**: 14-40 Years**
Duration	**: 1 Year**
Number of Trainees	**: 20**
Number of Practical hours	**: 32 hrs. per week**
Number of Theory Hours	**: 8 hrs. per week**
Number of Workshop Calculation hours	**: 2 hrs. per week.**
Number of Engineering Drawing hours	**: 2 hrs. per week**
Space Required	
Workshop	**: 400 sq. feet**
ClassRoom	**: 200 sq. feet**
Power Required in KW	**: 3 k.w.**

DEPARTMENT OF EMPLOYMENT AND TRAINING

INDUSTRIAL SCHOOL

SYLLABUS FOR THE TRADE

MECHANIC

~~COURSE:~~ GENERAL ELECTRONICS

No. of Weeks	Syllabus list	Expansion		Engg.Drawing	W/Shop Cal. & Science
		Theory	Practical work		
1	2	3	4	6	7
1.	Institute and its origin Essentiality & Over view of Technical courses & Introduction to Safety precautions	Technical Courses & their Development. Courses in Electrical & Electronics Types of work, Responsibility of trainees. Safety precaution and Elementary First aid	Visit to existing Lab facility and available Electrical and Electronics supported wiring in and around buildings. Elementary first Aid and artificial respiration.	Free hand sketching of straight lines, rectangles, squares, Circles and Polygons etc.	Introduction to Integers, rational & Irrational Numbers, Decimal umbers. Addition, Subtraction, Multiplication and Division
2.	Hand tools	Identifications, uses and maintenance of hand tools	Handling of different kinds of tools and fixers, screws, nuts ,bolts, washers,clamps, rivets,taps,conn ectors etc. Simple fittings Simple sheet metal works.	Reading of simple drawing. Free hand sketch ing with dimensions of simple solids such as cubes, cuboids, cylinders,etc.	Conversion of decimals to common fractions and vice versa.
	Introduction to electricity	Conductors, insulators and semi-conductors. voltage ,current and resistors basic meters, ohms law, specific resistance, standard sizes, current ratings. S.W.G., metric gauge and wire	Identifications of conductors, Insulators, uses of wire gauge and use of soldering irons. Simple soldering and de-soldering practice.	Free hand sketches of nuts and bolts with dimensions from samples Circuits and wiring diagram.	Brief description of manufacturing process of steel, copper, aluminum, metric system, metric weights and measurements, units, conversion factors. Manufacture of plastic & resins.

		tables, insulating materials and effects of current, heat, power, temp, coefficients, N.T.C. resistors, circuits, symbols-thermistor.			
4	Battery	Cell, Battery, Types of Batteries,Lead Acid Accumalaor Maintenace of Batteries, SMF, Semi MF, Wheatstone Bridege Charging and Discharging, Series and Parallel connection, Button cells	Maintenance of batteries, measuring low and high resistances, ohmmeter and wheatstone bridge. Building resistor to specific values and testing them, measurement of inteernal resistance of battery.	Explanation of simple orthographic projection 1st angle.	The weight of a body, units of weights, shop problems. Percentage and its applications, shop problems. C.G.S. and N.K.S.system. their conversionn problems.
5to 6	Resisters	Construction of carbon resistors colours code, all types of metal. Wooden linear & non linear wire wound resisters. Thermistor potentiometer (carbon wire wound, linear and logarithmic) series and parallel connection of resisters, gang resisters, resistance current & power rating, Kirchoff'sLaw and application.	Differents types of resistors, colour code, reading value of resistance Verification of ohm's. Calculation of parallel resistance and verification.	Explanation of simple orthographic projection 3rd angle views.	Meaning of tenacity, elasticity, malleability brittleness, xompressibility and ductility examples. Effect of alloying elements on properties of ferrous and nonferrous metal. Square root of perfect square and square roots ofwhole numbers with a decimals.

7 to 8	Magnetism	Magnetism, magnets (different permanent magnets) Magnetic field, Electro-magnetism, coil with iron core, permeability, different magnetic materials and properties. Relay Specification	Electro-magnets solenoid relay assembly and repair.	Simple isometric drawings, isometric views of simple objects such as square cubes and rectangular block etc. Detailed diagram of Electro magnet etc.	Ratio and proportion shop problems, plotting and reading of simple graphs. Work unit of work, energy, power, unit of power. Applied problems. Algebra, algebraic symbols, addition, multiplication, and division.
9 to 10	Simple meters.	M.I & M.C meters (Principle constructions and special feature) and accessories universal meter, Voltmeter, Ammeter, AVO meter, Watt meter multiplier, sensitivity , MULTIMETER Analog & Digital	Rules to use ohm meters, and Ammeters. Measurement of R.V.&A. in a typical circuits, Using of Fractional Values in Meters.	Ammeter volt meter & Multimeter sketching. Extension of meters Range. Sketches of components.	Staandard algebric formula e.g.(a+b)2(a-b)2etc. simple simultaneous equations with two unknow quantities. meaning of friction examples, meaing of centre of gravity specific gravity and balancing examples.
1 to 2	Alternating current	What is AC. Induced voltage and current. Faraday's principles. Lenz's Law self induction, AC Generator, Fleming's three finger rule, frequency peak, average RMS. values, phase, cycle, dynamo, Resistance on AC and DC fractional HP motor.	Verify induction and Lenz's law, measurement of Alternating current, Voltage & Frequency using Oscilloscope	Use of drawing instruments, T_square and drawing board. Constructions of simple figutrs and solids as mentioned in prepage dimension and titles. Use of different types of scales in inch. &millimrtrs. Lettering numbers and alphabets.	Mensuration: Areas of rectangles, circles regular polygons etc. Calculation of areas. Calculation of volme & weight of simple solid bodies such as cubes, square and hexagonal prisms shop problems. Heat and temperature the thermometric scale Fahrenheit and centigrade scales and their

					conversion. Kelvin scale, reamers Celsius.
13 to 14	Inductance	Coil-concept of reactance, Power factor, Coil or Inductor, Mutual Inductance, & Self Inductance Series-Parallel connection of coils, Transformer (Turns ratio),Types, Different coils (V.H.F, LF, H.F., & various frequencies	Choke coils, H.P & A.F. check transformer (mains output HF, LF etc.)winding coil specification. Transformer and their Construction.	Lay out arrangements of DC motor panel board with controlling starting metering and protecting devices.	Meaning of of stress, strain modules of elasticity & ultimate strength example BH curves
15 to 16	Capacitance	What is capacitance, Electrostatic action-Capacity Dielectric Constant losses, series & parallel connection of capacitors in A.C Circuits. Different types of capacitors and their constructions Colour and Numerical codes, Tolerance values.	Checking of different types of capacitors, coding testing, values, leakage and functions. Resistance Behavior of capacitance and different frequencies.	Free hand sketching plan and elevation of simple objects like hexonal bars, square bar, circular bar tappered bar, hollow bar etc.Circuit of capacitor.	Simple problems on angles, triangles and circles.
	Resonance	Circuit element series and LC circuits, resonance curves tuning and voltage gain, Parallel LC circuit, tuning and current Gain.	Determine resonance characteristics of Series and Parallel LC circuits. Tuning of circuits to given frequency.	Reading of simple circuits.	Calculation areas of triangles and polygons with the add of trigonometry.

18.	Semi-conductor theory.	Difference between semi-conductor & conductors, Silicon Germanium and other type semi-conductors. L.D.R, V.D.R, Thermistors, P.N junction characteristic. Fabrication of P.N.junction	Measure the resistance of semi-conductor (L.D.R.)at different light and of Thermistor at different temp. Use of L.D.R., Thermistor and V.D.R.in voltage dividing net work and other circuits.	Symbols of L.D.R., V.D.R. and Thermistors, simple circuits using above semiconductor.	Calculation of current, voltage in voltage dividing net work using thermistor, V.D.D., &L.D.R.at different temperature, voltage & ligth intensity respectively.
19.	Semi-conductor Diodes.	Diode and their Types, Forward and Rerverse Biasing characteristics (Static and Dynamic) Effect of temp. Varactor, Zener, L.E.D. L.C.Ds as an circuit element in different circuits.	Diode characteristics, reverse and forward biased conditions. Variation of reverse current with temp, Determination of junction A.C. resistance.	Diode symbols, diode in circuits. Germanium and silicon diodes, typical characteristic curves.	To calculate current in different resistive net work using diode in forward and reverse biased conditions. Zener diode calculation.
) to	Transistor	Bi-polar junction devices. P.N.P. and N.P.N. transistor and dynamic curves. CE, CB, CC transistor circuits. Principle of F.E.T. transistor data book.	Comparison of characteristics of transistor for C.C., C.B., &C.E. circuits. Determination of C. E. hfb and hfe. F.ET. Characteristics. Referring data books.	Symbols of P.N.P.and N.P.N. transistors. Different Transistor Symbols (Low, Medium, High Power Transistors) FET.	Calculation in CB, CE, CC Circuits.

22.	Rectification and regulated power supply.	Use of diode as rectifier, Half wave and Full wave rectifier using transformers, Bridge rectifier and Effect of ripples. Use of Filters. L.C. and R.C. type typical power supply for radio receiver.	Measurements of output and regulation in half wave and full wave rectifiers.	Circuits of half wave, full wave rectifiers. Complete power supply.	Calculation of output voltage and current for different circuits determination of P.I.V.
23.	Filter	Introduction to filters. Types of filters HP,LP,BP,Band Stop	As required.	-do-	-do-
24	Radio signal transmission.	Carrier modulation, side bands, radio reception, band ,width, fidelity& quality at Receiving areas.	Test HF signal measure IF characteristics. Constructing simple receiving sets.	Exercise Reading, sketches & Circuit Diagrams,Block Diagrams with wave forms.	Calculation of BW, Gain current, Voltage and Power.
25	Detection	Detection using detector diodes Crystals Type of Detectors	Construction of Simple Crystal and diode Detector circuits	Free hand sketching of simple objects related to the trade and preparation of simple working drawing from the sketches.	Trignometry, Basic Ratios and their inverse. Problems using rt.angled Triangle.
26	Accoustics	Air Vibration, Wave length of sound and propagation of sound. Musical Instruments. Speaker and Microphones Recording, Reproduction .	Checking of Woofer, tweeter and Mid range speakers, Dual cone. Headphone Ear Phone Microphones and sockets and Jack of above.	Drawings of Loud Speakers, Microphones, Horn type and column type. P.A. System.	Some Trignometry Proofs with their Identies.

27 to 28	AF & RF Amplifiers	AF and RF Ranges Transistor Configurations. Commonly used circuits for AF, Voltage and Power Amplifier Circuits. RF Stages and their Role in Reception.	Assembling of Voltage and Poewer Amplifier, Class A, B AB etc. IC Amplifiers	Drawing the circuits of AF Voltage Amp. RC, TC Amp. Power Amp. Push Pull, Using Single transformer and Using T1, T2 type.	Transistor Problmes Using Different Biasings. Ratio and Percentage Problems
29	Transmission & Reception	Transmitters and its Principles. Power , Distance Coverage etc. Receiver types AM and FM Receivers, Frequency of allocation for different Radio Stations. in MW, SW and FM etc.,	Testing of Transmitter Circuits. Assemble one AM And one FM Receivers with cabinet with Dialing Facilities for locating required stations	Circuits of Schematic Diagram of Different Stages in AM and FM Receivers. Block Diagram of Am and FM receivers with their proper active components name.	Network problems Calculation of Resistance Current and Voltages in the Circuits.
30	Tape Recorders and Two-in-One	principle of Tape Recorders. Play back and Recording. Effect in Sound. Fidelity Sensitivity etc. Two in one advantage and facilitates	Assmbling and testing of Play back recording and sound effects. Two in one operation and conversion of tape recorder into two in one.	Block Diagram and Schematic Diagram of Both Two in one and Tape recorder with and without ICs	Problems involving Matching transforms and the capacity to connect Loud Speakers.
31	CRT, CRO Picture Tube	Standard Cathode Ray Oscilloscope, Picture type Principle and operations	Practical using Picture tube, CRO	Block Diagram of CRO, Construction of Diagram of Picture tube both BW and Colour TV	Matrix and it problems with 3x3 matrix, Matrix addition substraction, Multiplication.

32	Advance Faults in Radio, Tape recorder, Two-in-One	Possible faults in Radio, Tape and two-in-one and their quick location and rectifying.	Create some defects and rectify them. Service the fault Radio sets and two in one.	Wave forms of Faulty sets as compared to the Good (original) set.	More Matrix Problems
33	Television	Television Principle, Scanning, Interlaced scannning, Monitor, Power supply Audio and Video Stages. Line output section and its role	Locating of stages and appropriate ICs in different stages. Testing of Power supplies, Signal Processing ICs & Remote Control and Sensors	Sketches of Scanning and Interlaced scanning Figures obtained due to faulty set	Graphs of Band with of RC Coupled Amplifier, using linear and Logarithmic Graph Sheets.
34	TV Antennas & Dish Antenna	Antennas and its Construction. Dish and other type of antennas to receive C, S Band Channels	Construct a T.V Receiver Antenna, Observe the Dish Antenna and study about its reception and various angle of rotation	Dipole, Director and Reflector Diagrams, Mast and its placement between elements. Free hand sketches of Dish Antenna.	Calculations involving Length, Distance between Element etc.
35 to 36	Colour TV	Principle of Colour TV. Picture Tube of Colour TV, Matrix Section or Chroma Signal Processing. Line Output Circuits in CTV	Testing of Colour TV IC Voltages of Power supply, Jungle IC, Audio and LOT Sections. Remote and is role in receiving Signals. Tuner and its Enhancement.	Sketches of Primary Colours, Derived colours. Other Checked, Vertical Bars (Colour) Horixontal bars etc.	Colour combination proportion. Names of colours obtained during mixing and their figurs
37	Fault finding in TV Receiver	What are the common faults Occurs in BW and Colour TVs. Causes and remedies of faults.	Creating fault in Different stages and rectify them. Service of faulty sets. Attaching of Higher Channel receiving tuners and corresponding	Practical Digarams	Problems Related to Practicals

38. Introduction to Communication Systems

39. Telephone, Telegraph, Radio. Photo, Trans-receivers UHF, VHF, HF & MICROWAVE. Radar and satellite Communication.

40. DC Motors applicable to Tape recorders (Micro Motos), VCRs, CD players and CDROMS and its regulator circuits to control Speed.

41. Wave Shaping Circuits:- Definition of Waves and Pulses, and their Amplitude, Frequency and Period. Rise time and fall time. Wave Shape (Sine, Square, Triangle, Saw Tooth, Rectangular, Sharp Narrow pulses, Spics etc)

42. Mult-ivibrators Timers:- AC timer and D.C Timers. Using Transistors and ICs, Time Constant (RC).

43. Digital Electronics:- Basic Logic Gaes-Boolean Algebra, AND, OR, NOT, NOR AND NAND Gates Truth table, IC and Transistor types.

44. Flip-Flop, Memory Conversion of Binary to Decimal and Decimal to Binary. Operation Amplifier using IC-741.

45. Photo Device:- Photo Resistors, Photo Diodes Photo Voltage Cell and Photo Switch.

46. Micro Processors and its minimum Instruction sets. Testing of addition subtraction using appropriate instruction sets.

47. Other Control circuits: Level Controls, Transducers, Alarm Circuits etc

48. Specific Semi-Conductors:- UJT, FET, MOS-FET,SCR, DIAC, TRIAC.

49. Half Adders, Full Adders, Half and Full Subtractos , Counters, Registers, Shift Registers.

50. Revision

51. Test.

52. COMMON TEST

Industrial School

Long Term Trade - Syllabus – Revised

Name of the Trade: MECHANIC GENERAL ELECTRONICS

Space required:

Workshop / Lab : 400 Sq. ft.

Class Room : 200 Sq. ft.

Trade Theory : NO CHANGE

Trade Practical : NO CHANGE

Work shop calculation : NO CHANGE

Engineering Drawing : NO CHANGE

TOOLS AND EQUIPMENT
FOR THE TRADE MECHANIC GENERAL ELECTRONICS:

Sl. No.	DESCRIPTION	QUANTITY REVISED
1.	COMBINATION PLIERS 15 cm S INSULATED.	10
2.	LONG NOSE PLIERS 15 cms. INSULATED	10
3.	DIAGONAL CUTTER 15 cms. INSULATED	10
4.	END CUTTING 15 cms. INSULATED	10
5.	TWEEZERS 10 cms. INSULATED	10
6.	HEAT SINK PLIERS,	10
7.	NEON TESTER	10
8.	KNOB SCREW DRIVER 19 cms.	10
9.	SREW DRIVER SET OF 6	10
10.	WATCH MAKERS SCREW DRIVER SET.	10
11.	KNIFE ELECTRICIANS	10
12.	ADJUSTABLE SPANNER OR SLIDE WRENCH (15-20 cms)	10
13.	FIRE EXTINGUISHER	2
14.	FIRST AID KIT.	1
15.	ARTIFICIAL RESPIRATION CHART.	4

Sl. No.	DESCRIPTION	QUANTITY REVISED
16.	WORK BENCHES 120X400X75 cm	4
17.	RUBBER 180X45 cm	3
18.	RUBBER GLOVES PAIR.	1
19.	STEEL RULE 30 cms	8
20.	SCRIBER 15 TO 20 cms	8
21.	CENTER PUNCH 10 cms.	8
22.	HAMMER CROS PAIN 110 gm. WITH HANDLE.	4
23.	HAMMER BALL PEIN 220 gm. WITH HANDLE.	4
24.	SPANNERS DOUBLE ENDED WHIT-WORTH 6 mm. TO 19 mm. BY 1.6 mm.	4 SETS.
25.	SPANNERS SINGLE ENDED 6 mm TO 25 mm. BY 16.mm	4 SETS.
26.	BOX SPANNERS SET OF (4-15) mm.	1
27.	MALLET 8 OZ.	2
28.	GIMLET.	2
29.	SAW TENNON 25 cms.	1
30.	CHISELS WOOD 15 cms. SET 6 mm TO 25 mm.	2 SETS
31.	BRADAWL.	2
32.	EECTRIC DRILL 10mm. WITH BITS ALL SIZES (WITH POLISHING & BUFFING ACCESSORIES)	2
33.	HACKSAW 20-25 cm. ADJUSTABLE WITH BLADES.	4
34.	JUNIOR SAW 20 cms.	2
35.	FILE FLAT 15 cms. BASTARED HANDLE.	4
36.	FILE HALF ROUND 20 cms. BASBARD HANDLE.	2
37.	FILE ROUND 20 cms. SECOND CUT WITH HANDLE.	4
38.	FILE ROUND 20 cms. WITH HANDLE	4
39.	INSTRUMENT FILE SET OF 12.	2
40.	VICE BENCE 10 cms. JAW.	2
41.	VICE BENCE 5 cms. JAW.	4
42.	INSTRUMENT SOLDERING IRON 35 W.	2
43.	SOLDERING IRON 250 W.	10
44.	SOLDERING IRON 60 W.	10
45.	SOLDERING IRON 10 W.	10

Sl. No.	DESCRIPTION	QUANTITY REVISED
46.	WIRE GAUGE SET.	2
47.	FEELER GAUGE SET.	2
48.	PERMANENT MAGNETS 15 cms. BAR.	2
49.	SOLENOID WITH CORE.	2
50.	ELECTRIC BELLS.	10
51.	ELECTRONIC BELLS.	4
52.	BATTERY ELIMINATOR.	8
53.	BATTERY STORAGE (LEAD-ACID) 6 w.	2
54.	HYDROMETER.	2
55.	BATTERY CHARGE.	1
56.	RHEOSTATS, VARIOUS VALUES AND RATINGS.	10
57.	VARIABLE RESISTANCE OR POTENTIOMETER W/W	25
58.	FRACTIONAL HORSE POWER MOTOR, SYNCHRONOUS/INDUCTION TYPE	1
59.	FRACTIONAL HORSE POWER MOTOR DC.	1
60.	TRANSFORMERS, CONTANT VOLTAGE 500 VA.	4
61.	COIL WINDING MACHINE (MACHINE)	1
62.	DC AND AC AMMETER 0-50/A	2
63.	DC AND AC AMMETER 0-500/A	2
64.	DC AND AC AMMETER 0-1 ma.	4
65.	DC AND AC AMMETER 0-5 ma.	4
66.	DC AND AC AMMETER 0-500 ma.	2
67.	DC AND AC AMMETER 0-1 a.	2
68.	MULTIMETERS (SMALL) VOLTAGE, CURRENT AND RESISTANCE (5-10K-D/V)	10
69.	DC AND AC AMMETER 0-50 ma.	2
70.	MULTIMETER (BIG) (20-50-KD/V)	4
71.	MOVING IRON METER 0-1 a.	1
72.	MOVING IRON METER 0.10a.	1
73.	THERMO-COUPLE METER (RF)-100 ma.	1
74.	THERMO-COUPLE METER (RF)-500 ma.	1
75.	DC AND AC VOLTMETER 0-5 V.	4
76.	DC AND AC VOLTMETER 0-10 v.	2
77.	DC AND AC VOLTMETER 0-50v.	2
78.	DC AND AC VOLTMETER 0-5 00v.	3
79.	DC AND AC VOLTMETER 0-1000v	2

Sl. No.	DESCRIPTION	FOR TRAINEES
80.	WATT METER 5/250 V,150 VA	1
81.	PA AMPLIFIER 20 W TRANSISTORISED.	1
82.	COMMERCIAL RECEIVERS, TRANSISTOR TYPE, AM FM PORTABLE.	4
83.	LOUDSPEAKERS, CONE TYPE, PM, DIFFERENT VARIETIES.	8
84.	MICROPHONE (CARBON-1, DYNAMIC-1, RIBBON-1, CRYSTAL-1, CONDENSER-1).	5
85.	HEAD PHONE AND EAR PHONE.	4 EACH
86.	RECEIVING AERIAL KITS.	2
87.	TRANSISTORS ALL TYPES ASSORTED	1
88.	ELECTRICAL COMPONENTS FOR ASSEMBLY.	4
89.	INSULATION TESTER 250 V/200V.	4
90.	SERVICE OSCILLATOR.	4
91.	SIGNAL TRACER	4
92.	A.F.OSCILLATOR.	4
93.	FREQUENCY MODULATOR	2
94.	C.R.O. (ONE WILL BE UPTO 10 MEGA CYCLES)	2
95.	POWER SUPPLY 0-30 VOLTS, 0-300 VOLTS.	2 EACH.
96.	TV CAMERA (MONOCHROME/625 LINES WITH MODULATED OUTPUT AND PAI COLOUR, 625 LINE-ONE EACH)	2
97.	A.C BRIDGE.	3
98.	TAPE RECORDER, TWO IN ONE, CAR STEREO (WITH HAVING AUTO REVERSE SYSTERM)	1
99.	MILLE-VOLMETER AC (0-1 mv) UPTO 0-300V.	4
100.	TV RECEIVER (SOLID STATE, COLOUR AND B/W).	4
101.	PATTERN GENERATOR B/W ANTI COLOUR, 2 EACH.	1
102.	SIGNAL GENERATOR (AM/FM).	1
103.	TRANSISTOR TESTER.	2
104.	STEEL CABINET 120*60*45 cm.	2
105.	STEEL LOCKERS WITH 8 DRAWER (STANDARD SIZE).	2
106.	SIGNAL INJECTOR (TRANSISTORISED)	2
107.	LOUD SPEAKERS COLUMN TYPE.	2

ACHIEVEMENT

- This course is the modern course in the world and takes the student to the electronic world
- Student can learn basic electrical and electronics gadgets and their principle of operation
- Systems like radio, TV, tape recorders, and video games, VCD players can be operated and service and maintenance.
- Computer systems and other will be highlighted
- This Is a gateway for the new electronic projects
- Students can be benefited through self employment on assembling, sales and service.