

Working with Machines & Materials

Consumables List- Electronics & Mechatronics

S. No.	Item	Specifications	Quantity
1	9V Battery	9-12V 2000 to 2500 mAh rechargeable battery with two chargers. Equivalent or better	5
2	A4 Size Sheet	70-75 GSM 1 Bundle - 500 Sheets	1
3	Active Buzzer	Medium Buzzer 5 Volts	8
4	Battery clip/Cap	9V battery connector	5
5	Berg Strips	Female Berg Strip, 2.54mm pitch, 40 pins single row, breakable pin	8
6	Berg Strips	Male Berg Strip, 2.54mm pitch, 40 pins single row, breakable pin	8
7	Capacitor	ceramic 0.1 mf, electrolytic 10 mfd.	16
8	Cardboard	1 Roll Medium Size	2
9	Chart Papers	Big Size Sheets	40
10	Coin Cell	3.3 Volts	40
S. No.	Item	Specifications	Quantity
11	Conductive Tape or Aluminium Foil	Copper Tape with medium thickness - Box of 12 pieces or Aluminium Foil used in kitchen for food wrapping 1 KG Roll	1
12	Cotton Thread	1 Roll - 50 meters.	2
13	Diode	1N4007	16
14	General Purpose Solderable Board	FR2 A Grade Material (140 x 90 mm)	16
15	Hand Tools Set	(Bits, Hammer, Hex, Keys, Knife, pliers, Ratchet, Screwdriver, Sockets, Spanners, Drilling machine and Bench Grinder)	2 sets
16	Hook Up Wire	Red & Black set 100 Meters each	2

17	Jumper Cable	Male-Male - 20 per 10 Students	80
18	Jumper Cable	Male-Female - 20 per 10 Students	80
19	Jumper Cable	Female-Female - 20 per 10 Students	80
20	LED	Regular 5mm 3–5-volt Range	80
21	Paper Cutter	With extra blades	2
22	Potentiometer	10K ohm with power cut switch on/off	5
23	Pulley	1 Inch with hook	4
24	Resistor Kit	One kit contains - 30 carbon film resistors of 20 different resistance values each, assorted, packaged together and labelled. Values: 0Ω, 1.5Ω, 4.7Ω, 10Ω, 47Ω, 100Ω, 220Ω, 330Ω, 470Ω, 680Ω, 1kΩ, 2.2kΩ, 3.3kΩ, 4.7kΩ, 10kΩ, 22kΩ, 47kΩ, 100kΩ, 330kΩ, 1MΩ	2
25	Safety Mask	Filtering efficiency ranging 80 percent when tested against 0.3-micron sodium chloride particle	100
26	Sand Paper	Grit Values - 80, 100, 120, 200, 300. 5 Nos of each	2
27	Toggle switch		6
28	Transistor	BC547, Bc548.	16

***Quantity (for a class of 40 students)**

*Please note that existing ATL/Agile ATL/Tinkering Labs may be leveraged for skill subjects such as electronics, mechatronics, automation, IoT, etc.