TENDER NOTICE

Tender No. MEC/AICTE/IDEA LAB/2025-26/01

Date: 17.07.2025

Mahendra Engineering College hereby invites tenders through a two-bid system (technical and commercial) from qualified and reliable suppliers and vendors for the supply and installation of machinery and equipment for the Establishment of a AICTE IDEA (Idea Development, Evaluation & Application) LAB at Mahendra Engineering College, Mallasamudram, Namakkal.

Prospective suppliers and vendors are requested to download the tender documents from our official website at <u>http://www.mahendra.info/</u>. Completed tenders, along with the requisite credentials must be submitted in hard copy format, enclosed in a sealed cover, to The Principal, Mahendra Engineering College, Mallasamudram, Namakkal 637503, Tamil Nadu, on or before 28th August 2025, by 5:00 pm.

Chief Mentor AICTE IDEA LAB

1) **OFFLINE SUBMISSION** — The bid should be submitted only in **OFFLINE**.

- a. The cover should contain all the prime eligibility documents along with all pages of the tender document with the signature of the tenderer and it should be tightly sealed.
- b. The envelopes should be superscripted at the top of the cover as "Establishment of a AICTE IDEA (Idea Development, Evaluation & Application) LAB at **Mahendra Engineering College**, **Mallasamudram, Namakkal**.
- c. The financial bid document should be removed from the tender document and covered with a sealed envelope with the name of the tenderer, super scripted the top as "Establishment of a AICTE IDEA (Idea Development, Evaluation & Application) LAB at Mahendra Engineering College under the All India Council for Technical Education (AICTE)."
- d. The completed tender forms along with the enclosures and the sealed cover containing the financial bid should be submitted in ONE cover and addressed to.
 Dr.V.Shanmugam,
 Principal,
 Chief- Mentor AICTE IDEA Lab
 Mahendra Engineering College,
 Mallasamudram,
 Namakkal
 TamilNadu–637503
 E-Mail Id:principal@mahendra.info
- e. Technical Bids will be opened as per the schedule given on critical dates in the presence of bidders or their authorized representatives. If the opening date happens to be a closed day/holiday, the tender will be opened on the next working day. Only one authorized representative from the firm shall be allowed to participate in the opening of technical bids / price bids.

2) ACCEPTANCEAND REJECTION

MAHENDRA ENGINEERING COLLEGE reserves the right to accept / reject any or all tenders and accept the whole or any part of the tender without assigning any reason. A tender that does not fulfill any of the terms and conditions of the tender or with incomplete documents in any respect will be rejected summarily.

3) TECHNICAL BID QUALIFYING CRITERIA

- a) A registered Company / Manufacturer / OEM or their Authorized Dealers should have similar work experience.
- b) The Bidder should have a valid License / Registration, GSTIN No., PAN Number, Bank Account and registered office in India.
- c) The Bidder should not have been blacklisted by any Govt. Dept. / Semi-Govt. / Dept. or any other organization.
- d) Information regarding experience in the Supply &Installation of the same /

similar Machinery & Instruments / machinery in India, Documentary Evidence to be supported by Purchase Orders and Project / installation completion certificates for the same.

- e) Bidders shall have sufficient manufacturing capacity / tie-ups and should have the after sales support infrastructure.
- f) In case, the Bidder offers to supply Machinery & Instruments, which are not manufactured by them, the Bidder should be duly authorized by the Head / OEM as an authorized dealer to supply the machines / Machinery & Instruments. Relevant documents to be submitted and also as per MAHENDRA ENGINEERING COLLEGE, format which should be informed on prior notice of atleast 15 days and shall proceed only after the acceptance of the same.
- g) Preference will be given to the Manufacturers / their authorized dealers having more than 3 years of association with the same manufacturers to ensure effective after-sales service support.
- h) If the Bidder has already supplied / received an order to supply any similar Machinery & Instruments / machine to any Government organization, the performance, time line and quality of supply and services will be considered as qualifying criteria.
- i) If the bidder is not an OEM then the Authorized Dealers should submit the necessary OEM documents / information etc.,

The selection of the Contractor will be made based on various parameters (as fixed by the Committee / Competent Authorities) like past service to Government Offices, after-sales support, Period of Warranty, AMC Support, feedback from the previous clients of the bidder etc.

4) EVALUATION CRITERIA AND FINAL SELECTION

- The committee constituted by the Principal of MAHENDRA ENGINEERING COLLEGE will examine the technical documents and decide the suitability as per the requirements of MAHENDRA ENGINEERING COLLEGE and the terms and conditions o f the tender. Only the technical bids of the firms, meets the listed criteria, would be taken up for detailed evaluation.
- 2) The technical committee will visit to verify the capacity and capability of the bidders to assess the performance of machinery Instruments / machinery supplied by them.
- 3) Selection of the bidders shall be based on a weighted criteria system to be derived from the submitted tender documents, experience etc., In the case of non-fulfillment of minimum pre- qualification criteria of the technical bid, the bid of the respective bidder shall be rejected. The competent authority will decide regarding the selection of Contractors.

5) AGREEMENT:

a. The successful tenderer will be required to execute an agreement in a nonjudicial stamp paper of appropriate value within the time frame stipulated by

MAHENDRA ENGINEERING COLLEGE

b. The **MAHENDRA ENGINEERING COLLEGE** reserves the right to add / delete / modify the clauses in the agreement without prior notice.

6) **PERIOD OF CONTRACT:**

- a. The supply of the Machinery & Instruments should be completed within 10 days from the date of issue of purchase order.
- b. Extension / non-extension will be the sole discretion of the authority and the Contractors cannot assume extension as the right.

7) TERMINATION OF CONTRACT:

- 1) The competent authority reserves the right to terminate the contract at any time without assigning any reason if it appears to the authority at any point of time that the services based on the quality of the machinery & Instruments.
- 2) At any time during the period of the contract, if it comes to the notice of the Mahendra Engineering College, that the contractor has misled this office by way of giving false / incorrect information which has been material in the award of the contract, the contract shall be liable to termination without any notice beside other legal action as per law.

Further, in case of any breach, the contract can be terminated without any notice.

1) GENERAL TERMS & CONDITIONS.

- a) The Bidder can apply for one Machinery & Instrument or more than one Machinery & Instruments as per their expertise and capabilities. However, only one tender has to be submitted.
- b) The Technical specifications of the Machinery & Instruments / machinery should of recent model & make and its spares should be available in the market for a minimum of 3 years.
- c) Details of the product offered shall be supported with complete specifications duly authorized along with documents i.e., Leaflet, catalogue, literature, test reports etc.
- d) Govt. of India guide lines in Make in India policy, Relaxation of Norms for Startup and Micro & Small Enterprises in Public Procurement will be followed.
- e) MAHENDRA ENGINEERING COLLEGE, reserves its right to relax the condition of prior turnover and prior experience for start-up enterprises subject to meeting quality & technical specifications. The decision of the MAHENDRA ENGINEERING COLLEGE in this regard shall be final.
- f) The rates quoted shall be inclusive of charges such as Insurance, transportation, installation, and training for the staff and all other taxes (excluding GST). Nothing extra shall be paid over the quoted rates.
- g) It is the responsibility of the tenderer to check any correction, or any modifications published subsequently on the website and the same shall be taken into account while submitting the tender.
- h) The Bidder submitting the tender would be deemed to have considered and accepted all the terms and conditions of the contract. No verbal or written enquiries will be entertained in respect of acceptance or rejection of the tender.

- i) The bidder having their close relatives working in **MAHENDRA ENGINEERING COLLEGE** is not allowed to participate in the Tender, an affidavit confirming the same should be submitted in original to **MAHENDRA ENGINEERING COLLEGE**.
- j) The contractor shall not sublease full or part of the contract. If found subleased, it leads to blacklisting of the vendor and penalization by the Institute. No Subletting of construction work is permissible at any cost.
- k) The selected bidder will have to complete all the required formalities / obtain permits / licenses, if any, including agreement, etc. immediately within Five days after the award of the Purchase order.
- Canvassing whether directly or indirectly, in connection with tenders, is strictly prohibited and the tenders, submitted by the contractors, who resort to canvassing, will be liable for rejection.

2) SPECIAL TERMS & CONDITIONS

- a) The contractor shall take all precautionary measures to avoid any damage to adjoining property while installing the Machinery & Instruments. All necessary arrangements shall be made at his own cost.
- b) MAHENDRA ENGINEERING COLLEGE reserves the right to make any change, omission, additions (or) alterations to the original specifications of the Machinery & Instruments. Such changes, omissions, and substitutions shall be deemed to have been formed as work included in the original tender and the contractor shall be bound to carry out the work / adhere to the supply order.
- c) The Period of warranty for the Machinery &Instruments will be for two Years.
- d) The Contractor should extend Post Supply Support to the Institute in maintaining the Machinery Instruments.

3) PENALTYCLAUSES

a) Failure to construct in terms of quality, quantity, and as per the requirements will attract penalty. For not adhering to contractual conditions, **MAHENDRA ENGINEERING COLLEGE** shall be free to impose a monetary fine as deemed fit on the Contractor. Fines imposed shall be remitted by the contractor to the Institute account or else the same shall be adjusted from the Security Deposit.

b) If any consequential damages occur while carrying out the installation work, the damage incurred so should be borne by the tenderer. Quantum of liquidity damages assessed by the **MAHENDRA ENGINEERING COLLEGE** shall be final and non- challengeable by the contractor.

c) PENALTY FOR DELAY IN supply of Goods:-Supply of the Machinery & Instruments has to be completed within the schedule. For any delay in completing the work, a delay of every week or part thereof, an amount equivalent to 0.5%

subject to maximum of 12% of the contractor's claim made for the execution will be deducted from the amount payable in the settlement of the claim at the discretion of the management.

d) The Head, **MAHENDRA ENGINEERING COLLEGE** shall be the Competent Authority regarding the imposition of penalty and quantum of the penalty and his decision shall be final.

Details of technical specification to be followed

1. Technical Specifications 1. CO₂ Laser Cutting / Engraving Machine –Full Setup

Technical Specification	
XY Work Area	1200mm x 900mm
Laser Type	CO2
Maximum Table Width	1300mm
Maximum Table Length	Expandable
Drive System	Stepper Motors with Linear Guide
No. of Cutting Head	1
Laser Power	130W
Marking Speed	500mm/s
Cooling	Liquid
Resolution of Machine	0.01mm
Position Accuracy	0.05mm
Repeat Accuracy	0.015mm
Interface/UI	On-Board Controller / HMI Interface/Desktop
	_
Open-Source Compatible	YES
Customizable	YES
Upgradable	YES
Exhaust System	YES
Air Compressor	YES
Warranty	3 Years

2 Vinyl Cutter

- > The Cutting Plotter should be ideal for cutting all shapes labels.
- ➤ Cutting Speed: 10-800 mm/s or better
- ▶ Machine Dimension: 930*300*400 mm or better
- ➢ Media width: 700 mm or more
- ➢ Cutting width: 600 mm or more
- ➢ Interface: USB
- ▶ Force: 20-500 g or better
- Accuracy: ± 0.01 mm or better
- ➢ Feeding Accuracy:10 mm or better
- > It should support designing software's like Singmaster etc
- Driver Motor: Stepper motor

3. Rapid Prototyping Machine –FDM 3DPrinter–Single Extruder

Technical Specification	
Build Volume(in mm)	260*260*330 mm
Print Technology	FDM
Printer Type	Delta
Filament Diameter	1.75mm
Nozzle Diameter	0.2,0.4,0.6,0.8,1.0
Bed Levelling	Full Automatic
Position Accuracy	10 micron
Linear Guide	Hiwin LM GUIDE
Printing Speed	200mm/s
Layer Thickness	20-800micron
Bed Temperature	0-110C
Nozzle Temperature	0-260C
Geared Feeder	YES
Heated Build Plate	YES
Touch Screen	YES
Touch Screen	COLOR3.2inch
Network Connectivity	YES
Dual Extrusion	UPGRADABLE
Flow Sensor	YES
Swappable Nozzle	YES
Heat up Time	<2min
3 rd Party Filament Compatible	YES
Warranty	3 Years

4. Rapid Prototyping Machine – DLP 3D Printer with Post Processing Station

Technical Specification	
Print Technology	DLP
Resolution	8K
Light Source	10.1-inch8KMono LCD
Build Volume	219 x 123 x 235 mm
Z Axis Accuracy	0.005mm
XY Resolution	0.0285mm
Slicer Software	CHITUBOX
Printer OS	TBD
Bed Levelling	Automatic
Resin VAT Film	FEP
Linear Guide	Hiwin LM GUIDE
Printing Speed	70mm/hr
Layer Thickness	10-300micron
Touch Screen	YES
Touch Screen Size	COLOR5 inch
Network Connectivity	YES
Camera	YES
App Support	YES
3rdPartyResin Compatible	YES
Standalone Washer	YES
Stand alone Curing Chamber	YES
Warranty	1 Year

5 3D Scanner

- Handheld Portable 3D Scanner
- ▶ It should Achieve detailed scans with an accuracy of up to 0.05mm
- ► Accuracy: 0.05mm or better
- \blacktriangleright Resolution: 0.1 0.2 mm or better
- Detecting Range: 200x100mm or better
- ➢ Working Distance: 150-400mm or better
- Scanning range(°) 15x15x15mm
- Light Source LED+NIR
- Output Formats OBJ/STL/PLY
- ➢ Speed 10 fps
- Length (mm) 150 x Width (mm) 80 x Height (mm) 40 or better

6. CNC 3-Axis Router Machine–Full Setup

Technical Specification	
XY Work Area	1200mm x 1200mm
Z Work Area	250mm
Maximum Table Width	1500mm
Maximum Table Length	1500mm
Drive System	Stepper Motors with Linear Guide
Travel Speed	8000mm/min
No. of Spindle	1
Spindle Power	3kW
Cutting Speed	3000-24000rpm
Spindle Cooling	Liquid
Resolution of Machine	0.01mm
Position Accuracy	0.05mm
Repeat Accuracy	0.015mm
Interface/UI	On-Board Controller / HMI Interface / Desktop
Open-Source Compatible	YES
Customizable	YES
Upgradable	YES
Dust Collector	YES
Warranty	3 Years

7 Mini Desktop Lathe cum Milling

Mini Lathe, Max Spindle Speed: 1000-2000 rpm, Electric

➤ 700x300x300 mm

8 Benchtop Grinder Machine

- > Powerful 373 watts motor
- > Cotton buffing and wire brush wheels
- > Sturdy cast iron base with rubber mounts
- ➤ No Load Speed: 3450 RPM and above

9 Desoldering M/c

- ▶ Power: 80 W
- Temperature Range : 100 to 500 W
 Accuracy: ± 35 Deg
- Air Flow: 30-120 L/Min

10 Wood Lathe

➢ Power: 550W, 220V/50Hz

- Distance Between Centers: 18" (457 mm)
- Swing Over Bed: 12" (300 mm)
- ➤ Tool Rest: 6" (150 mm)
- ➢ Face Plate: 3" (75 mm)
- Taper of Spindle Bore: MT2
- > Range of Spindle Speeds: 650-3800 RPM infinitely variable
- Taper of Tailstock Quill: MT2
- ➢ Gross Weight: 40 kg

11 Πορταβλε Ωελδινγ Μαχηινε

- Usage/Application: Industrial
- Phase: SINGLE
- Automation Grade: Automatic
- Power Source: DC WELDING
- Output Current: 200-300 A
- ➤ Capacity: 20-250
- ➢ Voltage:230 V
- ➤ Temperature:45°C
- Frequency: 50/60
 - Wire Diameter 3.15 mm
- 12. Refrigerator
 - ▶ 184L

13 Normal and Microwave Oven

> 20 L Stainless steel cavity Solo Microwave Oven

14 Digital Microscope

- Product Name: Industrial grade trinocular stereo microscope
- Product Model: D75T-PRO
- Product Size: 195*253*225mm
- Magnification: Standard 0.7-4.5X(Optional 2.1X-180X)
- ► Eyepiece: 0.5X CTV HD electron microscope
- ➢ Objective Len: 0.7X-50X
- Eyepiece: WF10X22 High Eyepiece

15 Mixed Signal Oscilloscopes

- > 70 MHz, 100 MHz, 200 MHz bandwidth models
- ➤ 12-bit high resolution
- Real-time sampling rate up to 2 GSa/s
- ➢ Memory depth up to 50/100 Mpts
- Waveform capture rate up to 500,000 wfm/s (Sequence mode)
- > 7-inch touch screen, support for external mouse and keyboard

16 Digital Storage Oscilloscope

- > Analog Channels -2
- ➤ 10M Record Length
- ➤ 1GSa/s
- ➢ Display: 8x16 div
- ➢ Support: USB
- > 100MHz Bandwidth

17 Signal Generator

- OutputChannels:2 channels or better
- Maximum Frequency: 20MHz or better
- Sine: 1μ Hz 20 MHz, Square: 1μ Hz 10 MHz or better
- ➤ Triangle/Ramp: 1µHz 200 kHz, Pulse:1µHz -
- > 10MHz or better
- Display: 7'' Colour Display or better

18 Variable Power Supply

- 3 independent high precision outputs: two 32 V /3.2 A, one 2.5 V / 3.3 V / & 5 V / 3.2 A, total 220 W power
- > 4 digit voltage and 3 digit current display, min resolution: 10 mV, 10 mA
- > Three output modes: independent, series and parallel
- > 100/120/220/230 V compatible design, to meet the needs of various power grids

19 Benchtop Multimeter

- Display: 55000 Counts, 3.5-inch TFT LCD with resolution 480*320, Dual line display supported
- > Interface: USB or RS232 PC Interface support for Data Analysis
- DC Current: 500µA/5000/50mA/500/5A/10A
- ➤ Accuracy: ±0.15% + 10
- ➤ AC Current (T-RMS): 500µA/500mA/5A/10A
- > Accuracy: $\pm 0.5\% + 20$
- DC Voltage: 50.000mV/500.00/5.0000V/50.000/500.00/1000.oV
- ➤ Accuracy: ±0.025% + 5
- ➢ AC Voltage (T-RMS): 500mV/750V
- Accuracy: $\pm 0.5\% + 30$
- > Resistance: $500\Omega/5k\Omega/50/500/5M\Omega/50M\Omega$
- Accuracy: $\pm 0.1\% + 5$
- ► Capacitance: 50nF/500µF/5mF/50mF
- Accuracy: $\pm 2.5\% + 5$
- ➢ Frequency: 10.000Hz/60MHz
- ➤ Accuracy: ±0.2%+8
- Dimensions: 200 x 86.5 x 64 mm
- ➢ Weight: 0.45kgs

20 Projectors

Smart LED Projector with Dolby Audio, 5500 lumens, 4K Support, 180 Inch Screen Size, Supports Miracast, Bluetooth, USB, HDMI, WiFi, APP Support, 1080p Native

21 PCB Milling Machine

- Automation: Semi-Automatic
- Accuracy: High Accuracy
- ➢ Type: Pick and Place Machine
- Model Number: NH-3030
- ➢ Voltage: 220 V
- Phase: Single Phase
- ► Frequency: 50 Hz

22 Smart Board

- > Multi-Touch Support- touch gestures, annotations, and multimedia integration.
- > Must be suitable for classrooms, meeting rooms, and collaborative workspaces.
- Collaborative Work:- Must facilitate teamwork by allowing multiple users to work together on the same screen
- Connectivity:- Must include various connectivity options for connecting external devices and peripherals and Must support wireless screen casting from other devices.
- ➢ Size : 75"

S. No.	Name of Equipment	Qty No(s)
1	Laser Cutter	1
2	Vinyl Cutter	1
3	3D Printer	1
4	3D Scanner	1
5	CNC Router	1
6	Mini Desktop Lathe cum Milling	1
7	Drilling M/c 1 HP Motor	1
8	Handheld High Speed Drilling M/c: 15000 RPM with accessories - 2 Nos.	2
9	Benchtop Grinder Machine	1
10	Solder Stations (5 Nos.)	5
11	Desoldering M/c	1
12	Advanced, Motorized Sewing Machine	1
13	Wood Lathe	1
14	Power Tools	1
15	Portable Welding M/c	1
16	Refrigerator	1
17	Normal and Microwave Oven	1
18	Magnifying Glass with Stand - 2 Nos.	2
19	Digital Microscope	1
20	Mixed Signal Oscilloscope	1
21	Digital Storage Oscilloscope	1
22	Signal Generator	1
23	Variable Power Supply	1
24	Benchtop Multimeter	1
25	Projector	1
26	Heavy Duty Laser Printer	1
27	PCB Milling Machine*	1
28	Smart Board	1
29	Computer Workstation in Networking - 5 Nos.	5
	A. Total	Rs

Technical Items A. List of Mandatory Equipment in AICTE IDEA lab

S. No. Name of item Qty No(s) Vacuum Cleaner 1 1 2 Hot Air Gun - 5 Nos. _ Measuring Equipment (Vernier caliper (0-200/0.01), Vernier height gauge (0-1000mm), Micrometer 0-50, 50-3 1 100/0.001 inside and outside)), Metal Scale etc Fire Extinguisher 4 1 5 First Aid Box 1 5 6 Digital Multimeter (5 units) 7 5 Clothes Iron (5 units) Electronic Component Repository (LCR Meter, Variac 8 1 etc) Depending on the printer - 2 9 3D printer Filament* rolls 2mm, 3mm, 4mm, 5mm All of 10 Acrylic Sheets* area 8ft x 4ft -2 sheets each 8mm, 10mm, 12mm, 15mm All Foam Sheets* 11 of area 8ft x 4ft - 2 sheets each 8mm, 12mm, 18mm All of area Ply Boards* 12 8ft x 4ft -2 sheets each 12mm, 15mm, 18mm, 25mm 13 Nylon Rods* All of length 1m - 5 each 3mm, 4mm, 5mm, 6mm, 8mm, 14 Nuts 10mm, 12mm – 100 each Dia (3mm, 4mm, 5mm, 6mm, 15 Bolts 8mm, 10mm, 12mm), length (1", 1.5", 2", 2.5") – 100 each Screws 3mm, 4mm, 5mm – 100 each 16

B. List of Mandatory Consumables in AICTE IDEA Lab

S. No.	Name of item	Qty No(s)
17	Washers	3mm, 4mm, 5mm, 6mm, 8mm, 10mm, 12mm – 100 each
18	Studs	6mm, 8mm, Length 1m – 5 each
19	Nails	1", 2", 3" – 100 each
20	Adhesives	M-Seal, Fevicol, Fevi Bond – 10 each
21	2Way Tapes	20 rolls
22	PVC Pipes	0.75", 1", 1.5", 2.5", 3" Length 10ft – 1 each
23	Aluminum Channels	L, C, Box, Strip Length 12ft – 2 each
24	PCB Drill Bits	0.5mm, 0.8mm, 1mm – 20 each
25	Drill Bits*	3mm, 4mm, 5mm – 20 each
26	Drill Bits*	8mm, 10mm, 12mm – 5 each
27	Carpentry Boring Bits	Entire Kit – 1 kit
28	Electronic Active and Passive components	Resistors, Capacitors, diodes and transistors – 10 each
29	USB Cables	For connecting Arduino and other development boards – 10 no's
30	Radium Cutter Knives	10
31	Glue Sticks	50
32	Hack Saw Blades	6" and 12"
33	9V Battery Snaps	20
34	LAN Cables	For connecting Raspberry Pi – 5 Nos
35	9V Batteries	20

		0
S. No.	General & Mechanical Tool Name	Quantity
1	Hacksaw	5 Nos.
2 3	Micro Chisel Set	3 Nos.
	Pliers	3 Sets
4	Manual PCB Drilling Machine	3 Nos.
5	PCB Power Drilling Machine	3 Nos.
6	Cordless Drilling Machines	2 Nos.
7	Jigsaw Machines	2 Nos.
8	Power Circular Saw	2 Nos.
9	Files Set	2 Sets
10	File Handles	5 Nos.
11	Needle Files	2 Sets
12	Pipe Vice	2 Pcs
13	Mini Hacksaw	5 Nos.
14	Ball Peen Hammer	5 Nos.
15	Steel Shaft Claw Hammer	5 Nos.
16	Nylon Mallet	5 Pcs
17	Rubber Mallet	5 Pcs
18	Allen Key Set	3 Sets
19	Dremel Multi Tool Kit	2 Nos.
20	Double Ended Spanner Sets	2 Sets
21	12 Piece Open Ended Spanner Set	2 Sets
22	Belt and Disc Sanding Machine	1 No.
23	Scroll Saw Machine	1 No.
24	Tool Wall Covering Perforator	3 Pcs
25	Dremel Moto Saw	1 No.
26	Bench Grinding Machine	1 No.
27	Power Return Measuring Tape	5 Nos.
28	Tri Square 8"	5 Nos.
29	Stainless Steel Rule	5 Nos.
30	Digital Vernier Caliper	5 Nos.
31	Spirit Level	5 Nos.
32	Dremel Cordless Rotary Tool	1 No.
33	Power Router	1 No.
34	Sewing Machine	1 No.
35	Impact Drill	3 Units
36	Ratchet Set	2 Units
37	Router Bit Starter Kit	1 No.
38	Scroll Saw	1 No.

C. List of Mandatory Tools in AICTE IDEA Lab

D. Electrical Tools

S. No.	Electrical Tool Name	Quantity
1	Hot Air Blower With Soldering Iron	5 Nos
2	Tin Cutter with Spring	10 units
3	Centrifugal Blower	1 No.
4	Screwdriver Sets	2 sets
5	Cutting Mats	5 Nos
6	Vacuum Cleaner	2 Nos
7	Hot Air Gun	5 Nos
8	Micrometer	5 Nos
9	Glue Gun	5 Nos
10	Air Compressor	1 No.
11	Allen Set Wrench	5 sets
12	Tongue and Groove Pliers	5 pcs
13	Non-contact Voltage Tester	5 pcs
14	Wire Stripper	5 pcs
15	Fish Tape	2 pcs
16	Flashlights	2 pcs
17	DC Regulated Power Supply	3 units
18	Solder Wick*	10 pcs
19	Filament Dehydrator*	1
20	Reflow Oven	1
21	Glass Cutter	1
22	Gypsum	10 kg
23	Digital Multimeter	5 units
24	Clothes Iron	5 units
25	Oscilloscope	4 units

E. Networking Tools

S. No.	Networking Tool Name	Quantity
1	C-Clamp	10 pcs
2	Ratchet Clamp 8 inches / 200 mm	10 pcs
3	Baby Vice 60 mm	5 pcs
4	Bench Vices	5 units
5	Anvil	1 unit