



LAKSHMI NARAIN COLLEGE OF TECHNOLOGY EXCELLENCE

Approved by AICTE, New Delhi & An ISO 9001:2015 Certified Institute

Recognized by Govt. of M.P., Affiliated to RGPV & BU, Bhopal (M.P.)

UG Program Accredited by NBA

Tender Ref. No: LNCTE/ADM/2025/105

Date: 17-10-2025

Re-Tender Notice

Sealed/Online tenders are invited from reputed and experienced suppliers, manufacturers, or authorized distributors for the **supply, installation, and commissioning of equipment, tools, and machines** for setting up an **AICTE IDEA Lab** at our institute. The laboratory is to be developed as per the AICTE guidelines for promoting innovation, design thinking, and prototyping skills among students and faculty. The detailed specifications of the required items are enclosed with this document.

S. No.			
1	Single Nozzle 3D printer	Branded Company Product with at least three years product warranty	Printing Technology: Fused Filament Fabrication (FFF) or Fused Deposition Modeling (FDM). Printable Area: The minimum printable area should be at least 310 x 310 x 310 mm or above Printer Design: Core XY or Cartesian. Temperature Range: Hot end: Up to 300°C or above Heat bed: Up to 120°C. or above. Nozzle: Compatible with All polymers, 0.4, 0.6 and 0.8mm Steel Sheet: Provided with satin or smooth PEI surface. Filament Diameter: 1.75mm (supports PLA, PETG, ASA, ABS, etc.). Extruder: Gearbox with 1/10 ratio, Speed : 550 MM/Sec or above Stepper Drivers for smooth motion. or equivalent Stepper Motors: Choose between 1.8° or precise 0.9° X, Y stepper motors. LCD Screen: 3.5" graphic 65k color screen or larger. Connectivity: USB drive, LAN, or internet. Supported Materials: PLA, PETG, ASA, ABS, PP, PC, flexible filaments, and more. Wi-Fi Module: Built-in (network connectivity not required for setup or operation). Compatibility: Windows, macOS, Linux. Printer Dimensions: The maximum physical dimensions of the system 700 X 700 X 700 or above. Fully enclosed Machine
2	PCB Milling Machine	Branded Company Product with at least three years product warranty	Cutttable Materials: Modeling Wax, Chemical Wood, Foam, Acrylic, Poly Acetate, ABS, PCB, Copper glad, etc Table Size: 225 (X) × 150 (Y) mm or more Drive System: Stepping Motor (X, Y, Z Axis) Operating Speed: 800 mm/min Software Resolution: 0.01 mm/step Position accuracy : 0.01 to 0.02 mm Max Travel Speed (mm/sec)-58 (2.28 ") Drilling (mm)-0.2 -3.175 (8-125 mil) Maximum Drilling Cycles/ Min-50 Spindle Motor: DC Motor Type 380 or More

			Spindle Speed: Adjustable 20,000 and above rpm or more Tool Chuck Type: Collet Interface: USB or cable Control Commands: RML-1, NC code Power Supply: DC 24V, 2.5A (via AC 100–240V, 50/60Hz adapter) Power Consumption: Approx. 50 W or more	
3	CO ₂ Laser Cutting Machine	Branded Company Product with at least three years product warranty	Working Area: Min 600 x 900 mm or above Laser Type: CO ₂ DC Glass Laser Tube/RF Metal Laser Tube Laser Power: 80/100W Wave Length: Upto 10.6 Micrometer Cutting Speed: 30000 mm/min or more Engraving Speed: 64000 mm/min or more XY Axis: LM Guide Rail or equivalent Cooling: Air/ Water Cooling Supply Voltage: 230V/415 V Accessories: CO ₂ Focus Lens: 1 No. Mirror 25mm: 3 Nos. Acetone: 1 litre Acrylic sheet: 2 Nos	
4	Vinyl Printer	Branded Company Product with at least three years product warranty	Dimensions: 50 cm x 15 cm x 15 cm or above Weight: 15.4 lbs or less Max cut size using machine mat: 11.5 inch x 23.5 inch or more Cut speed: up to 14.1 ips	
5	3D Scanner	Branded Company Product with at least three years product warranty	Technology: Stereo camera structured light with focusable cameras or equivalent CPU: Quad-core 64-bit SoC, 1.5GHz with integrated GPU RAM: 4 GB Projector: DLP MEMS mirror or equivalent Camera Sensor: Sony 13 MP or better Scan Speed: 4 seconds or more Working Distance : Effective Working Distance: 160mm-1400mm Scan Speed : 980,000points/s, up to 14FPS Align Modes : Feature Alignment, Hybrid Alignment, Texture Alignment, Global Markers Safety : Eye-safe Texture Scan : Yes Interface : USB2.0 or above Outdoor Scanning : Yes Output Formats : OBJ; STL; PLY; P3; 3MF Scanning Environment: Indoor and outdoor (shaded) Texture / Color Scanning: Yes Minimum Capturable Feature Size: 0.2 mm or less Scanner Weight: 500 grams or less Scanner Dimensions: upto 240 × 60 × 60 mm Compatible OS: Any OS supporting a modern web browser	
6	Lathe Machine cum milling	Branded Company Product with at least three years product warranty	Centre Width: Up to 400 mm or better Height of Centers: Up to 88 mm Maximum Workpiece Diameter: Up to 100 mm Machine Base: Cross-ribbed surface, high-quality cast iron with ground prismatic guide, capable of fitting milling/drilling attachment Spindle: Supported with adjustable taper roller bearings Spindle Receiver: MK3 or compatible Spindle Drill Hole: Up to 22 mm or better Spindle Concentricity: Up to 5 microns or	

			<p>better Chuck: 3-jaw chuck as per DIN 6386, centrally clamped, 100 mm diameter or better</p> <p>Run Out (without Chuck): Up to 10 microns Sleeve Receiver: MK2, retractable sleeve with scale</p> <p>Spindle Speed Range: Between 50 to 2500 rpm</p> <p>Speed Stages: 6-8 Motor Rating: 550W or better, induction motor, single phase 230V</p> <p>Traverse Cross: Up to 70 mm or better Traverse Longitudinal: Up to 300 mm or better Weight (Complete): Up to 55 kg or more</p> <p>Additional Accessories: Splash guard and chip collecting tray: 1 No. Cutter set with tungsten inserts: 2 Nos. Milling Attachment: 1nos Tungsten disposable tips ten-piece set: 1 No. Sample workpieces (Nylon Rod, Aluminium Rod) Desktop: 1 No.</p>	
7	CNC Router	Branded Company Product with at least three years product warranty	<p>Working Area: Min 1300 x 2500 mm Z Axis Working Area: 200 or above Resolution: $\pm 0.03/300\text{mm}$ or more</p> <p>CNC Spindle: 3KW or more Lathe Structure : Welding Steel Structure or equivalent XYZ Structure: Rack Pinion , Ball Screw Linear Rails Max Spindle Speed : Min 18000RPM Table: T-Slot/Vacuum Bed/Water Bed Repeatability: ± 0.03 Working Mode: Stepper Motor/Servo Motor Dust Collector : To be included by Vendor Voltage: AC 220V/415V, 50/60 Hz, 3 Phase</p>	
8	Wood Turning Lathe	Branded Company Product with at least three years product warranty	<p>Motor: 230V~50Hz, 550W, S2:15min or above Max. Disc Diameter: min 75 mm Max. Cutting Length: 450 mm or more Spindle Speed: 5 speeds such as 1600 / 2600 / 3200 RPM etc Material: Cast Iron Bed Height: 0.2 m Cable Length: 0.850 m</p>	
9	Computerized Sewing Machine	Branded Company Product with at least three years product warranty	<p>Motor: 120 W Max Sewing Speed: 860 SPM Power: 220 - 240 V Automation Grade: Automatic Max Stitch Length: 4mm Thread Type: Computerized Weight:7.6 kg Number of Stitches:120 Size/Dimension: 50.8 cm x 29.464 cm x 40.64 cm Maximum Stitch Width: 7 mm Number of Buttonhole Styles:7 LCD Screen Display: Yes Bed Type Free Arm/Flatbed convertible Bobbin Type Drop & Sew Bobbin System</p>	
10	Filament Dehydrator	Branded Company Product with at least three years product warranty	<p>Operating Temperature Range: Min 45°C–70°C Drying Time Setting: 0–48 hours or higher Hot-Air Heating: upto 360° circulation Moving Speed: 300 mm/s or more Power Rating: 160 W Shipping Weight: 2.5 kg</p>	
11	Reflow Oven	Branded Company Product with at least three years product warranty	<p>No. of Waves: 7 or higher Heating Type: Infrared IC Heater Max. PCB Width: 300×320 mm or more Power Supply: AC 220V / 50Hz Peak Power: 1500W Cycle Time: 1–8 min or less Temperature Range: 0°C–280°C Overall Dimensions: min 350×450 mm Machine Weight: upto 25 kg</p>	

12	Digital Microscope	Branded Company Product with at least three years product warranty	Specification: Magnification: 1600X Light source: 8 LED lights Resolution: 1920×1080, 640*480 Pixel: 30W Focal length: 3-40mm manual adjustment Support Android 4.2 or above/widows/Mac system	
13	Smart Board	Branded Company Product with at least three years product warranty	Display Size: Approx 75Inch (190 cm) Up to Resolution: 4KUHDorHigher Brightness: Min 350 nits; Typ400nitsApprox Contrast Ratio: Typ 1200: 1Upto Response Time: Approx 8ms Viewing Angle: Approx178DegreesWide WorkingFrequency:1.5GHzNominal RAM:4GBOrMore InternalStorage:32GBMin OS: Android Based HDMI: 3Ports USB: 2Ports Sensing Type: Infrared Touch Frame Surface Protection: 4mm Toughened Glass Or Equivalent Infrared Touch Points: 20Approx Voltage:DC+5V±5%Range OPS: Optional	
14	Projector	Branded Company Product with at least three years product warranty	Projection Tech: RGB liquid crystal shutter projection (3LCD) Up to Connectivity: USB Type B: 1port (FirmwareUpdate/Copy OSD) Approx AnalogInput:D-Sub15pin:1port Digital Input: HDMI:1port Projection Lens: Type: No Optical Zoom/Focus (Manual)Nominal FocalLength:16.70mm Approx FNumber:1.44 Nominal Zoom:1.44-1.95 Ratio (Wide to Tele) ThrowRatioRange:1.00–1.35(Digital Zoom Approx)	
15	Desktop	Branded Company Product with at least three years product warranty	CPU: INTEL CORE I7-12THGEN or Higher RAM:8GB+512GB SSD or more, 8GB or more GPU Conn: LAN+WIFI+BLUTOOTH+KEYMOUSE Display:20" DESKTOP MONITOR	

Terms and Conditions

The following Terms and Conditions apply to all bidders participating in the tender for the supply, installation, and commissioning of equipment, tools, and machines for the establishment of an AICTE IDEA Lab. All prospective vendors are required to read and comply with these terms in their entirety.

1. General Information

All equipment and materials must be delivered in the quantities and specifications as mentioned in the purchase order issued by the purchaser. The delivery location will be specified in the purchase order (e.g., Lakshmi Narain College of Technology Excellence, Kalchuri Nagar Raisen Road, Bhopal-462022). The entire contract shall remain valid for a period of three (3) months from the date of award.

Quotations submitted by bidders must remain valid for a minimum of 90 days from the final date of submission. Any quotation that does not meet this validity period will be considered non-compliant.

2. Bid Submission Guidelines

Bids may be submitted either via email (digitally signed) or in hard copy form, as specifically mentioned in the tender notice. All quotations must be printed on the bidder's official letterhead and duly signed by an authorized representative.

Each bid must be complete in all respects and must include the following mandatory documents:

- Detailed Profile of the Bidder, highlighting experience and key competencies.
- Copy of the Company/Firm Registration Certificate.

- Copy of valid GST Registration Certificate.
- Copy of submitted GST return (at least up to November 2024).
- Copy of valid PAN Card.
- Chartered Accountant's Certificate for turnover for FY 2021-22, 2022-23, and 2023-24.
- CA-certified and audited Balance Sheets and Financial Statements (Form 3CB/3CA) for the last three financial years.
- Copies of Work Completion or Experience Certificates of similar completed works.
- Valid Shop Establishment License or Factory License.
- Genuine Manufacturer Authorization Form (MAF), which will be subject to verification with the respective OEM.
- Bidder should provide an Escalation Matrix for service and after sales support.
- Valid EPF, ESIC, and Professional Tax Registration Certificates (where applicable).
- Income Tax Return Acknowledgements for FY 2021-22, 2022-23, and 2023-24.
- Declaration/Affidavit (on ₹500/- Stamp Paper) regarding no blacklisting from IITs/NITs/Govt. Offices/PSUs/Autonomous Bodies.
- Complete, signed, and stamped tender document including amendments and deviation sheets, if any (to be uploaded online only).
- Declaration of agreed specifications on company letterhead, duly signed and stamped.
- Any other documents in support of technical eligibility.

All bidders are required to quote for all the items listed in the BoQ. Partial or item-wise quotations will be summarily rejected. Each bidder is allowed to submit only one quotation per package; multiple submissions from a single bidder will lead to disqualification.

3. Technical Documentation and Compliance

The bidder must furnish complete technical documentation for each quoted item. This includes detailed product specifications, installation manuals, operation and maintenance manuals. The bidder is also required to submit a layout/design proposal aligned with the lab setup requirements, highlighting compliance points against the tender specifications.

Original technical brochures or scanned versions of product catalogs should be submitted with the bid. Wherever available, URLs to the OEM's official product page should also be provided for cross-verification.

Each bidder must clearly mention the make, model, and complete technical specifications for the equipment being offered. A compliance sheet responding to each technical requirement outlined in the tender must be prepared and duly signed.

4. Eligibility and Qualification Criteria

All bidders must be OEMs or authorized partners/distributors with valid authorization for the products they are quoting. Authorization letters must be submitted on the OEM's official letterhead.

Bidders must demonstrate relevant experience by submitting a minimum of three Purchase Orders (executed within the last five years) for similar equipment supplied to academic, R&D, or industrial institutions. A list of at least five institutional clients (with contact information) must be provided as a reference.

It is mandatory that the bidder or OEM has a registered support office in India to provide warranty and after-sales support. In the case of imported equipment, either the OEM or their authorized seller must submit a certificate confirming the presence of such a service support facility in India. The OEM must also submit a declaration confirming the availability of spare parts for the quoted products for a minimum of one year and authorize the bidder to participate in the tender.

5. Financial Criteria

Each bidder must have an average annual turnover of ₹5 Crores or more over the last three financial years (FY 2022–23, 2023–24, 2024–25). The turnover must be supported by a CA certificate or audited financial statements.

Prices quoted must be inclusive of all taxes (GST, customs, etc.), transportation, packaging, insurance, unloading, installation, commissioning, and training charges. There shall be no extra claim under any circumstances after the finalization of the bid.

The quoted prices must be firm and fixed

6. Evaluation and Award of Contract

All bids will be evaluated on the basis of compliance with the technical specifications, completeness of submitted documentation, financial eligibility, and price competitiveness. The contract shall be awarded to the bidder whose offer is determined to be technically responsive and lowest in cost.

The purchaser reserves the absolute right to reject any or all bids without assigning any reason. The final decision on selection will be at the sole discretion of the purchaser and shall be binding on all parties.

7. Warranty and After-Sales Service

All equipment must carry a minimum onsite warranty of at least **three years** from the date of successful installation and commissioning. During this warranty period, the bidder shall repair or replace any defective items at no additional cost to the purchaser. All associated transportation, testing, and labor costs shall be borne by the bidder.

In case of any service delay or failure to resolve issues during the warranty period, the purchaser reserves the right to invoke penalties or reject future business from the vendor.

8. Payment Terms

Payment shall be released only after the successful supply, installation, and commissioning of the equipment. Final inspection and acceptance will be carried out by the purchaser's technical committee.

No payment shall be made for equipment that is received in damaged condition, is non-functional, or fails to meet the required specifications. The bidder must submit all necessary documentation (delivery challans, installation report, warranty documents, training certificate, invoice, etc.) to process payment.

9. Other Conditions

No bidder shall be given preference based on category, class, or affiliation. The procurement may be extended to additional phases (e.g., Phase II) depending on availability of funds and institutional requirements.

Delayed delivery or installation may result in cancellation of order or imposition of penalties, as deemed fit by the purchaser. The scope of the supply and service must be entirely as per the BoQ and technical specifications. Bids with partial compliance or deviations shall not be entertained.

10. Submission Deadline and Contact Details

All quotations must be submitted by 31-10-2025, 5:00PM to the email ID lnctebhopal@lnct.ac.in or sent in hard copy to:

Lakshmi Narain College of Technology Excellence

Kalchuri Nagar Raisen Road, Bhopal-462022

Contact: Prof. Devendra Bisen, 9630451003 Email: devendrab@lnct.ac.in