

AICTE IDEALAB **NEWS LETTER**

(Jan - Feb 2024)

2024 - 2025



IES Campus, Ratibad Main Road, Bhopal - 462044, Madhya Pradesh, India.
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VISION

The institute in association with AICTE-IDEA lab aspires to serve the society and nation in developing an ecosystem to execute innovative ideas of young minds with holistic knowledge, catering socio economic needs thus nurturing and encouraging entrepreneurship in student community.

MISSION

- Providing all facilities under one roof for the transformation of an idea into a prototype
- Training in skills, critical thinking, problem solving, interdisciplinary collaboration etc.
- Making engineering students more curious, imaginative and creative IDEA lab will be centered around activities and events to promote multidisciplinary education and research

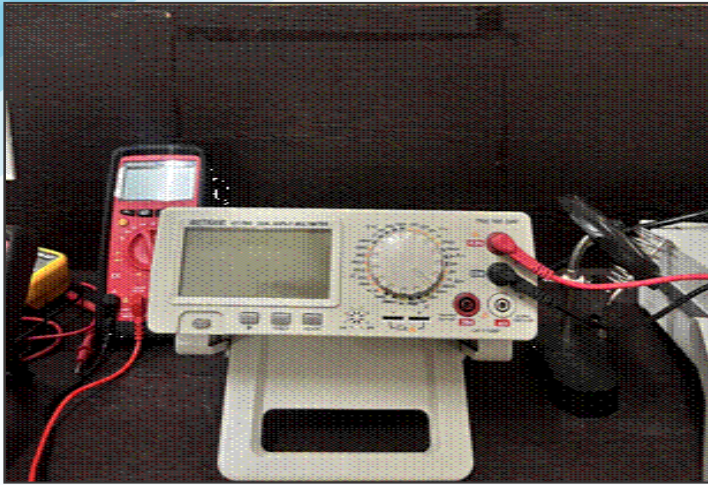
AICTE STEERING COMMITTEE

S.No	Internal / External	Name of Expert	Designation & Institute
1	Management Chair	Mr. Devansh Singh	Treasurer, Infotech Education Society, Bhopal
2	External Academic Member	Dr. N P Patidar	Prof., MANIT, Bhopal
3	External Academic Member	Dr. Thirth Prasad	Prof., VTU, Bangalore
4	External Academic Member	Dr. Krishnakant Dhakad	Idea Lab, Prof., SGSITS, Indore
5	External Industry Member	Dr. Prashant Mishra	Founder TechXR Ltd.
6	External Industry Member	Dr. Manoj Modi	CEO, Nexcity Solution
7	External Industry Member	Dr. Ashok Patel	Founder CEO, Maa Sharda Electrostamping Pvt. Ltd. & Patel Fab Machine & Manufacturer
8	External Industry Member	Mr. Shyam Zambre	HR & CI Expert EICHER VOLVO
9	Chief Mentor	Dr. Anuprita Mishra	Principal, IES College of Technology, Bhopal
10	Faculty Coordinator CSE	Dr. Nikhat Raza	Prof., IES College of Technology
11	Faculty Coordinator ME	Dr. Amit Kumar	Assistant Prof., IES College of Technology, Bhopal
12	Faculty Coordinator ECE	Dr. Rajesh Nema	Prof., IES College of Technology
13	Alumni, Dept. of Computer Science	Mr. Ojas Sisodiya	Founder CEO, Lyzum Associates

STUDENT AMBASSADOR

1. Mr. Mohit Kumar, 6TH Sem EC
2. Amit Kumar Kushwaha , 6TH Sem EC
3. Neeraj Kumar, 4TH Sem EX

Major Equipments AICTE Idea Lab



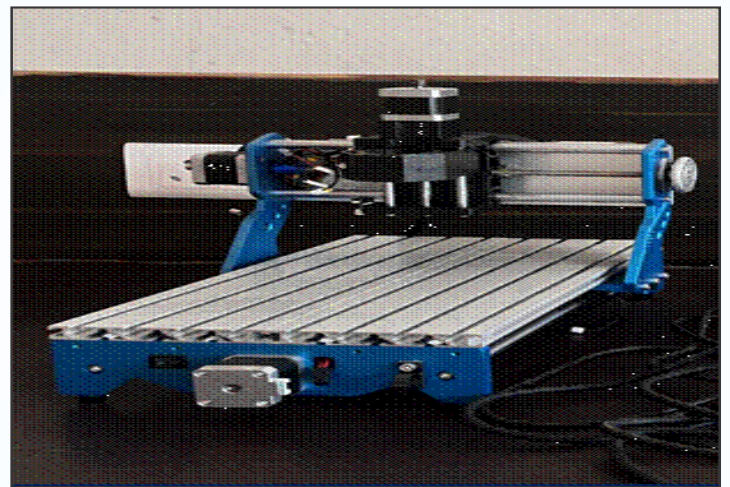
Benchtop Multimeter



DC Regulated Power Supply



Drilling Machine



Grinder Machine



High Speed Drilling Machine (15000RPM)



Hot Air Gun



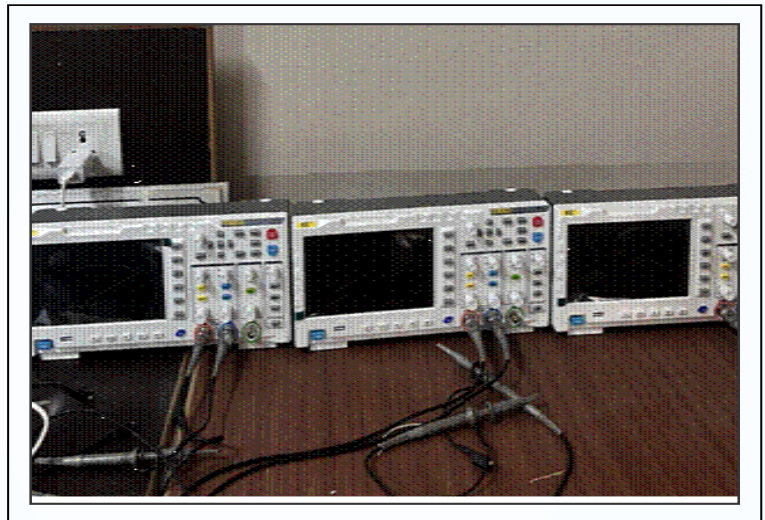
Vinyl Cutter



Soldering Iron



Laser Cutter



Mixed Signal Oscilloscope



PCB Milling Machine



Vernier Scale



Digital Multimeter



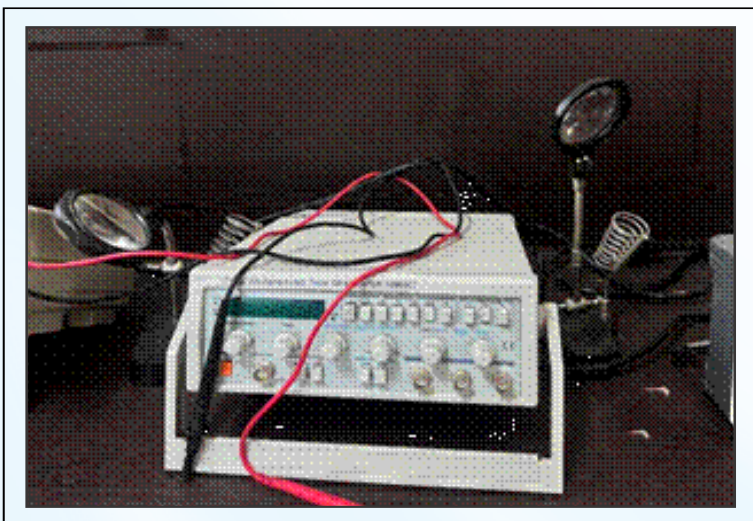
3D Printer



Cordless Drilling Machine



Hot Air Blower with Soldering Iron



Signal Generator



Caliper



3D Scanner



Cloth Iron



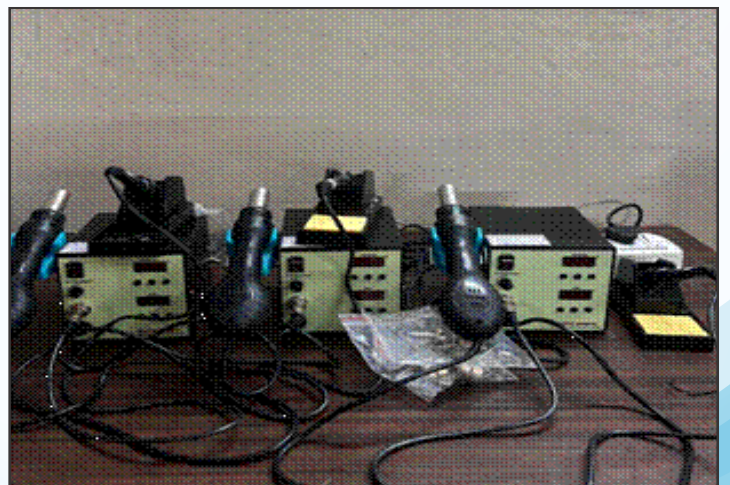
Digital Multimeter



3D Printer



Cordless Drilling Machine



Hot Air Blower with Soldering Iron

Projects completed in AICTE-IDEA Lab

Sr. No	Nature of Project	Project coordinator Type	Student IDEALAB ID	Project Guide IDEALAB ID	Name of the coordinator	Name of the Project Guide	Title of the Project	Stream of the project (Programme)
1	Prototype making	Host institute Student	IDEAL0493SAC110370	IDEAL0493FAB12743	Sandeep kumar jaiswal	Dr. Amit Kumar	PCB Drilling Machine	Mechanical Engineering
2	Prototype making	Host institute Faculty	IDEAL0493FAB12742	IDEAL0493FAB11696	Dr. Sonali Paunikar	Archita Rai	A-23 Level Asymmetric Inverter with Fewer Switches	Electrical & Electronics
3	Prototype making	Host institute Student	IDEAL0493SAC197505	IDEAL0493FAB12743	Sahil Gautam	Dr. Amit Kumar	Pneumatic Punching Machine System	Mechanical Engineering
4	Prototype making	Host institute Student	IDEAL0493SAC197522	IDEAL0493FAA8541	Shadab Hussain	Dr. Rajan Kumar	Electricity Generation Through Breaker	Mechanical Engineering
5	Prototype making	Host institute Student	IDEAL0493SAC197520	IDEAL0493SAC197520	Arif Ansari	Ashish Jain	Pedal Operated Water Pump System	Mechanical Engineering
6	Prototype making	Host institute Student	IDEAL0493SAC184183	IDEAL0493FAB11797	Ashutosh Kumar	Pragati Gajbhiye	Smart Hydraulic Lift System	Mechanical Engineering
7	Prototype making	Host institute Student	IDEAL0493SAC110375	IDEAL0493FAB11795	Nitish Kumar Yadav	Padmakar Pachorkar	Electromagnetic Engine	Mechanical Engineering
8	Prototype making	Host institute Student	IDEAL0493SAC110365	IDEAL0493FAB12162	Anuj Kumar Singh	Vikash Arya	Precision Mini Lathe	Mechanical Engineering
9	Prototype making	Host institute Student	IDEAL0493SAC197508	IDEAL0493FAB11800	Kishan Kushwah	Rajan Khare	Fully Automatic Fire Extinguisher	Mechanical Engineering

Activities Organized under AICTE IDEA LAB:

IES College of Technology, Bhopal				
AICTE IDEA LAB Events Details July- Oct 2024				
S.No.	Event Title	Event Duration	No. of Days	Event Type
1	Circuit Design using Xilinx and Spice Simulator	10th Feb 2025 to 15th Feb 2025	6 Days	Faculty Development Programme
2	CAD-CAM	14 th TO 24th Feb 2025	12 Days	Bootcamp
3	Two Month Internship	Date 4 Jan 2025 to 10 March 2025	2 Months	Sample Preparation for Machining (For Mechanical Students)
4	Two Month Internship	Date 4 Jan 2025 to 10 March 2025	2 Months	Prototype and Product Designing (For Electronics Students)
5	National Seminar on "How to become a drone pilot	27-Feb-25	1 Day	Other

Events Details

Circuit Design using Xilinx and Spice Simulator



Development Programme on “Circuit Design using Xilinx and Spice Simulator” from 10th Feb 2025 to 15th Feb 2025 organized by Department of Electronics and Communication Engineering in association with Chips to Startup (C2S) Programme, IETE Bhopal Centre & AICTE Idea Lab.

The objective of circuit design using Xilinx and SPICE Simulator is to develop, simulate, and verify electronic circuits and digital systems to ensure they meet performance, functionality, and reliability requirements. The combination of these tools enables designers to cover both digital and analog circuit aspects efficiently. Outcome:

- Functional and verified circuit designs.
- Improved design accuracy and reduced development time.
- Hardware-ready designs for FPGA implementation.
- Enhanced understanding of both digital and analog circuit behavior.



Hands-on training on Xilinx Simulator



Hands-on training on Spice Simulator



Two-Month Internship on Sample Preparation for Machining

Duration: 4th January 2025 – 10th March 2025

For: Mechanical Engineering 7th Sem Students

This two-month internship program provides hands-on training in sample preparation for machining, a crucial step in manufacturing and material testing. Participants will gain practical exposure to various machining techniques, material properties, and industry-standard preparation methods. The program is designed to bridge the gap between theoretical knowledge and industrial applications.

Objectives

- To understand the fundamentals of material selection and preparation for machining.
- To develop skills in cutting, grinding, and finishing operations.
- To learn about surface treatment and quality inspection techniques.
- To enhance knowledge of industry-standard machining processes.
- To provide hands-on experience with modern tools and equipment.

Outcomes

By the end of the internship, students will:

- Have a strong understanding of machining fundamentals.
- Be proficient in sample preparation techniques.
- Gain experience with industrial tools and equipment.
- Develop skills in precision measurement and quality control.
- Enhance their readiness for careers in manufacturing and mechanical engineering.

This internship provides mechanical engineering students with valuable hands-on experience in machining sample preparation, equipping them with industry-relevant skills. It serves as a stepping stone toward careers in manufacturing, machining, and production engineering.



Hands-on Session on AutoCAD in the Internship Program

Boot Camp on CAD-CAM



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Department of Mechanical Engineering
In Association with



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiative)

Organizes

Bootcamp on CAD-CAM

for Faculties of Mechanical, Civil & Electrical Engineering



14th to 28th Feb 2025

Venue : CAD Lab, IES Campus, Ratibad Main Road, Bhopal

The Boot camp on CAD-CAM from AICTE Idea Lab is designed to provide faculty members of Mechanical and Civil Engineering with hands-on training in Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM). This intensive program aims to enhance teaching methodologies by integrating industry-relevant CAD-CAM tools, ensuring that faculty members stay updated with the latest technological advancements in design and manufacturing. The Boot camp on CAD-CAM serves as a valuable initiative to equip faculty members with industry-ready skills, enhancing their ability to teach, research, and innovate in the fields of Mechanical and Civil Engineering. By bridging the gap between academics and industrial practices, this program contributes to the advancement of engineering education and the professional growth of educators.



Hands on training on CAD by faculty member

National Seminar on “How to become a drone pilot” on 28th Feb 2025

IES College of Technology, Department of ECE organized a National Seminar on “How to become a drone pilot” on 28th Feb 2025 under the aegis of IETE Student Chapter and AICTE Idea Lab. Expert were Mr. Vijay Tambe Business Development Manager and Mr. Siddhartha Singh Marketing Manager FIDTR, Institutional Area, Guru gram Haryana.



Session Drone Technology

The object of a drone technology expert session is to provide valuable insights, foster collaboration, and enhance the skills of attendees in the ever-evolving drone industry. Whether aimed at beginners or advanced professionals, the session would serve as a knowledge-sharing platform to improve understanding of drone capabilities, challenges, and innovations.



Student interaction Session Drone Technology



Mr. Vijay Tambe Business Development Manager interaction Session Drone Technology

**Two Month Internship on Prototype and Product Designing
Date 4 Jan 2025 to 10 March 2025 (For Electronics Students)**

IES College of Technology, Bhopal organized Two Month Internship on Prototype and Product Designing Date 4 Jan 2025 to 10 March 2025 (For Electronics Students)

Program Structure:

- Focused on foundational knowledge, including design thinking, prototyping methodologies, and tool familiarization.
- Hands-on sessions are conducted where participants develop their prototypes, receive feedback, and iterate on their designs.
- Resources: Product Prototyping: For insights into rapid prototyping, consider reading articles like "From Concept to Reality: How to Make Real Product Prototypes in Two Weeks," which offers practical steps and proven methods.
- Project Planning: Developed a clear roadmap and project plan to guide participants through the prototyping process. An example can be found in the article "Prototype Roadmap, Project Plan and Iterations."
- Networking and Collaboration: Engage with industry professionals and academic institutions to provided mentorship and real-world insights during the program.



Hands-on session on Prototype designing drilling and soldering Session

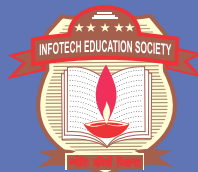


Hands-on session on Prototype designing



"All of us do not have equal talent.
But, all of us have an equal
opportunity to develop our talents."

Dr. APJ Abdul Kalam



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