



CENTRAL FACILITY

AICTE

IDEA (Idea Development Evaluation & Application) Lab

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ABOUT US

Under the guidance of AICTE, the Meerut Institute of Engineering and Technology, Meerut has established the IDEA (Idea, Development, Evaluation and Application) Lab to inspire students to apply their knowledge of science, technology, engineering, and mathematics (STEM) fundamentals in practical contexts. This approach aims to facilitate enriched, hands-on learning experiences, fostering learning by doing and promoting product visualization (idea to prototype).

Beyond enhancing technical skills, the IDEA lab plays a pivotal role in nurturing imagination and creativity among students, faculties, and other stakeholders. Additionally, the IDEA lab offers a foundational training ground for essential 21st-century skills such as design thinking, problem-solving, collaboration, communication, and lifelong learning.



“Innovation is implementing new idea that create value”

VISION

- Nurture innovators to ideate in areas of societal importance.
- Design Thinking Process to spur creativity.
- Opportunity for everyone to innovate, ideate & design solutions, irrespective of their age.
- Capacity building of emerging innovators in evolving technologies & designing their innovations from ideation to impactful solutions.
- Partnership with local industries/institutions in problem solving through innovative offerings in terms of products, services & processes & identifying innovation challenges.

MISSION

"At AICTE Idea Lab, our mission is to cultivate a dynamic ecosystem that fosters innovation, creativity, and excellence in the field of education, research, and technology. We are dedicated to nurturing a culture of entrepreneurship, problem-solving, and collaboration among students, faculty, and industry professionals.

OBJECTIVES

01



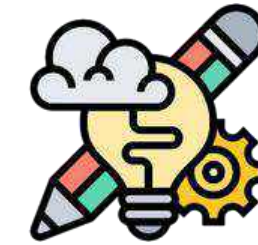
Spread the culture of innovation among students, & other stakeholders.

02



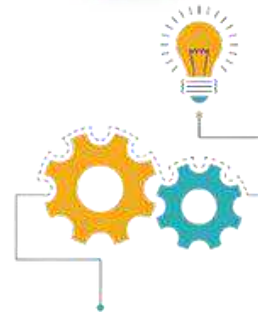
Motivate students to ideate & pursue creativity.

03



Train students to become imaginative, creative & capable of converting their ideas into prototypes.

04



Provide all possible facilities under one roof for the conversion of ideas into reality.

05



Generate a wide range of creative ideas & concepts across various domains & industries.

06



Address real world challenges & problems through innovative solutions & approaches.



FUNDING DETAIL



NAME OF THE FACILITY	AICTE IDEA Lab
LOCATION	ADMIN BLOCK, MIET MEERUT
GRANT/FUNDING	1,34,79,000/-
FUNDING DETAILS	MIET-88,38,000/- AICTE IDEA Lab-46,41,000/-

CHIEF MENTOR'S DESK



We, at AICTE IDEA Lab strongly believe that the holistic development of students is possible by focusing on core areas which are - Concept Based Learning and Comprehensive Industrial Exposure.

We offer 360-degree nurturing for overall grooming and developing global competency. We are committed to excellence through innovations in the teaching and learning process and have been successful in maintaining high academic standards by taking appropriate steps to bridge the gap between industry and academia.

COORDINATOR'S DESK

Welcome to AICTE IDEA Lab at Meerut Institute of Engineering & Technology, Meerut. I am thrilled to extend a warm greeting to you. Our central facility is dedicated to fostering a dynamic learning environment where innovation, research, and practical skills converge to shape the future of students with multi-disciplinary approach. We take pride in our committed faculty who are not only experts in their fields but also passionate mentors, guiding students towards academic excellence and professional success. At AICTE IDEA Lab MIET, Meerut, we emphasize a hands-on approach to learning, integrating cutting-edge technology and industry-relevant projects into our curriculum. Our goal is to equip students with the knowledge and skills needed to tackle real-world challenges.



OUR TEAM



VIKAS GOEL
TECH-GURU



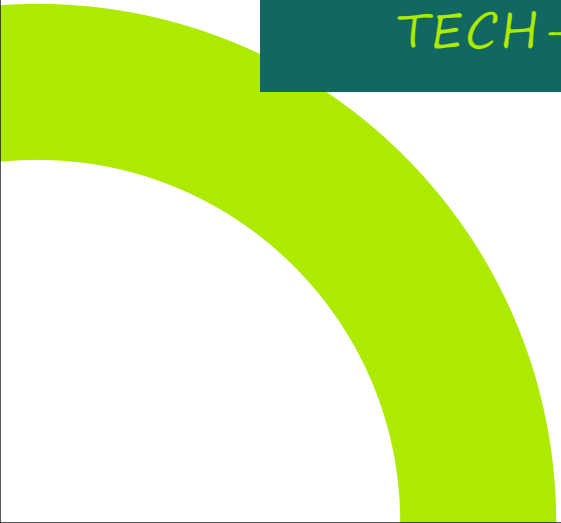
ANIL VERMA
TECH-GURU



SHIVAM
TECH-GURU



SHIREEN
TECH-GURU
NAJEEB



2021



PROPOSAL, GRANT
SANCTION & INAUGURAL
OF AICTE IDEA Lab at
MIET

2022



NEW DESIGN
DEVELOPMENT &
IPR

2023



RIGOUROUS
TRAINING &
SENSITIZATION
PROGRAM

2024



EXTENSION OF
PROJECT & NEW IPR

2025



REVENUE
GENERATION

2026



SELF SUSTAINABLE

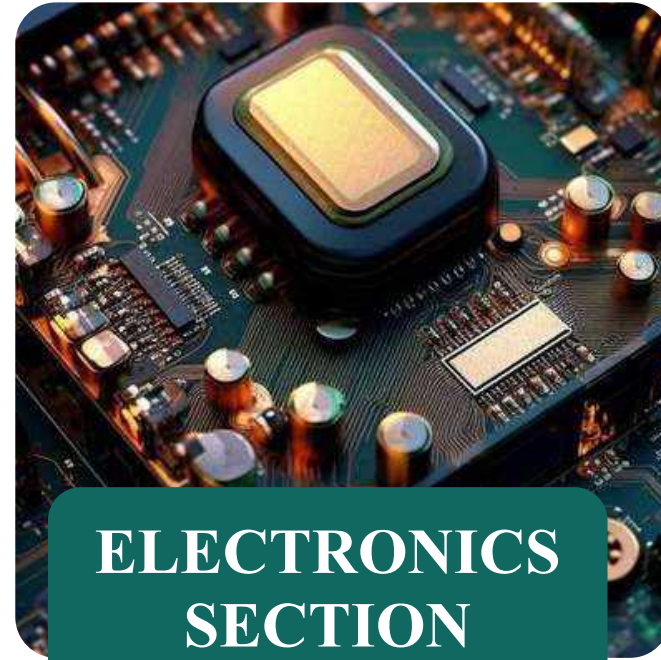
ONGOING IMPLEMENTATION OF ACTIVITIES LIKE FACULTY DEVELOPMENT PROGRAM (FDP), SKILLING DEVELOPMENT PROGRAM (SDP), AWARENESS PROGRAM, IDEATHON, BOOTCAMP, OPEN DAY FOR SCHOOL LEARNERS

OUR FACILITIES



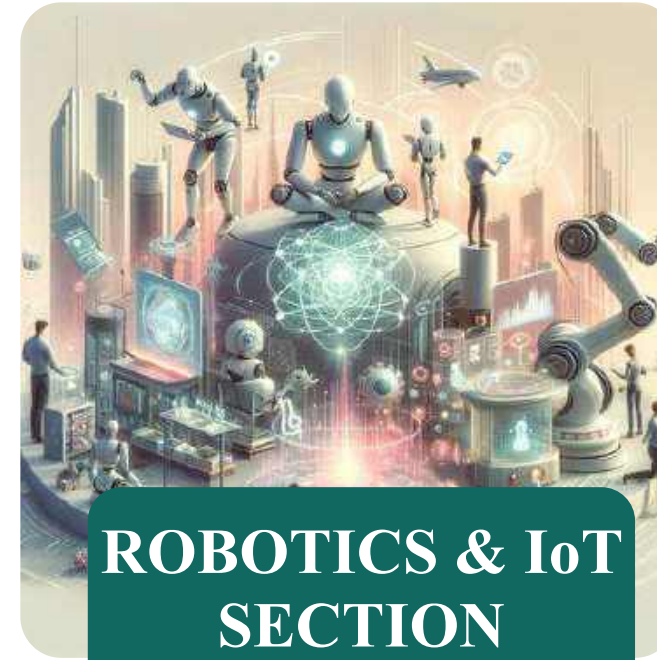
MECHANICAL SECTION

Our Mechanical Section provides access to cutting-edge equipment, laboratories, and workshops, fostering hands-on learning experiences essential for their academic and professional growth.



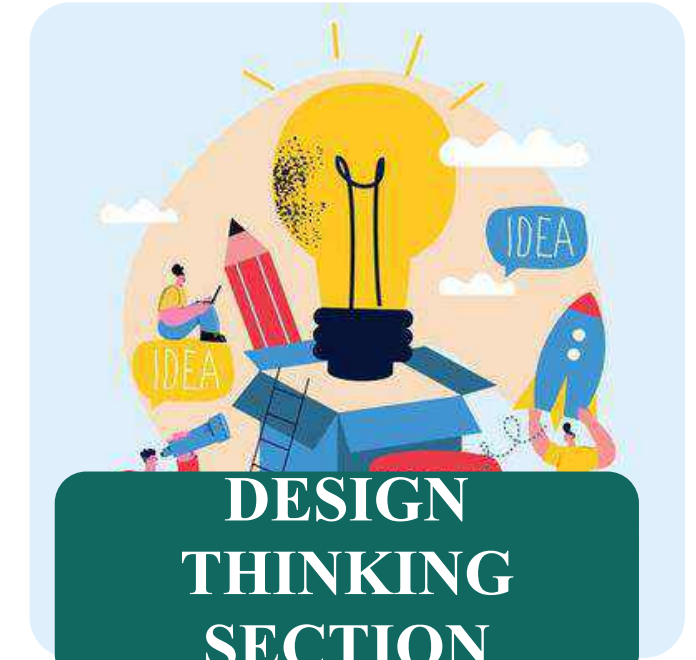
ELECTRONICS SECTION

Our Electronics Section offers students a dynamic learning environment to explore circuits, design projects, and conduct experiments, nurturing innovation and expertise in the field of electronics.



ROBOTICS & IoT SECTION

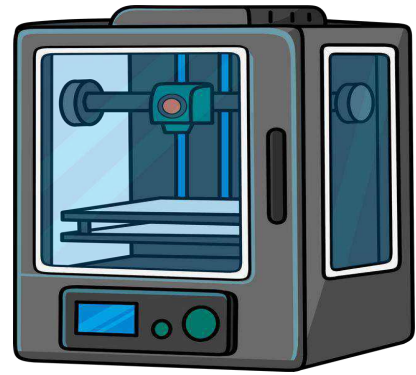
Our Robotics and IoT Section, providing students with equipment, and expert guidance to delve into robotics, automation, and Internet of Things technologies, fostering hands-on experimentation and innovation for tomorrow's interconnected world."



DESIGN THINKING SECTION

Unlock creativity and problem-solving skills in our Design Thinking facility, where students engage in collaborative workshops, brainstorming sessions, and prototyping activities, fostering a culture of innovation and human-centered design to tackle real-world challenges."

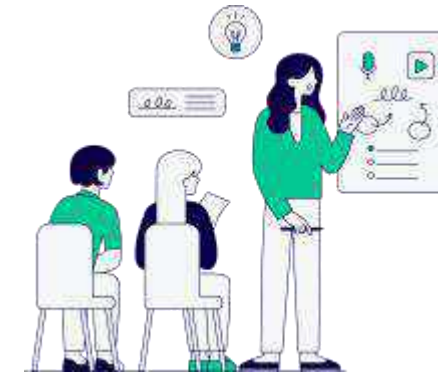
AREAS OF WORK



3D PRINTING



AR/VR



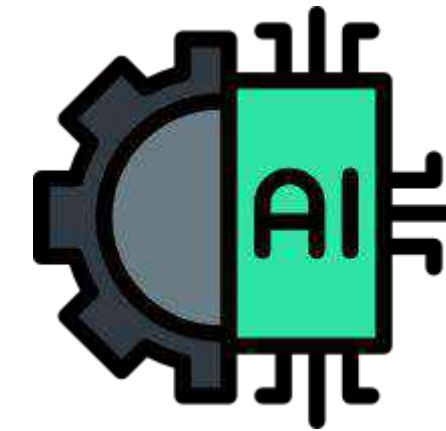
ON/OFF
CAMPUS
TRAINING



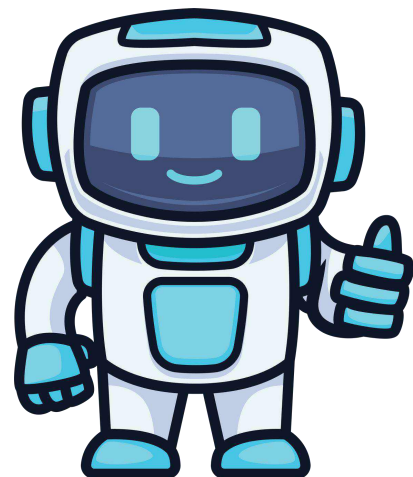
IoT



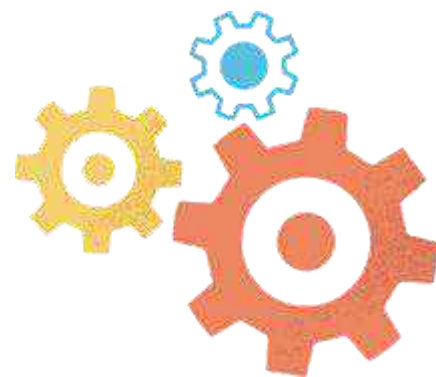
PRODUCT
DESIGNING



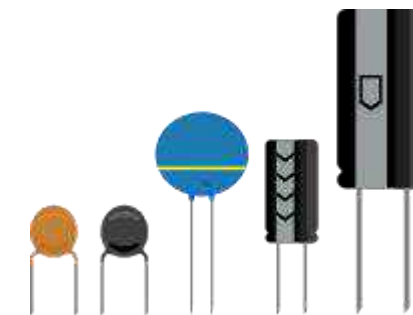
EDGE AI



ROBOTICS



MECHANICAL



ELECTRONICS

MAJOR EQUIPMENTS



Equipment Name	CREALITY K1C 3D PRINTER
Bed size	220*220*220 mm
Machine Weight	12.4kg
Rated Voltages	100-120V /200-240V, 50/60Hz
Rated Power	350W
Supported Filament	PLA/ABS/Carbon/ASA /TPU

MAJOR EQUIPMENTS

Equipment Name	ANET 3D PRINTER
Bed size	220*220*250mm
Machine Weight	12.4kg
Rated Voltages	100-120V /200-240V, 50/60Hz
Rated Power	250W
Supported Filament	PLA



MAJOR EQUIPMENTS



Equipment Name	MAKERBOT 3D PRINTER
Bed size	2.5L X 19.9W X 15.0H cm
Machine Weight	33.6.0 kg [35.3 lbs]
Rated Voltages	100-240 VAC; 0.76-0.43 A; 50/60 Hz; 100W
Rated Power	250W
Supported Filament	PLA/ABS/Carbon

MAJOR EQUIPMENTS

Equipment Name	AWC C02 LASER MACHINE
Bed size	8ft*4ft
Machine Weight	300 kg
Working Voltage	230V/50Hz
Laser Power	100W
Supported Non-Material	MDF/Acrylic/Mirror Sheet



MAJOR EQUIPMENTS

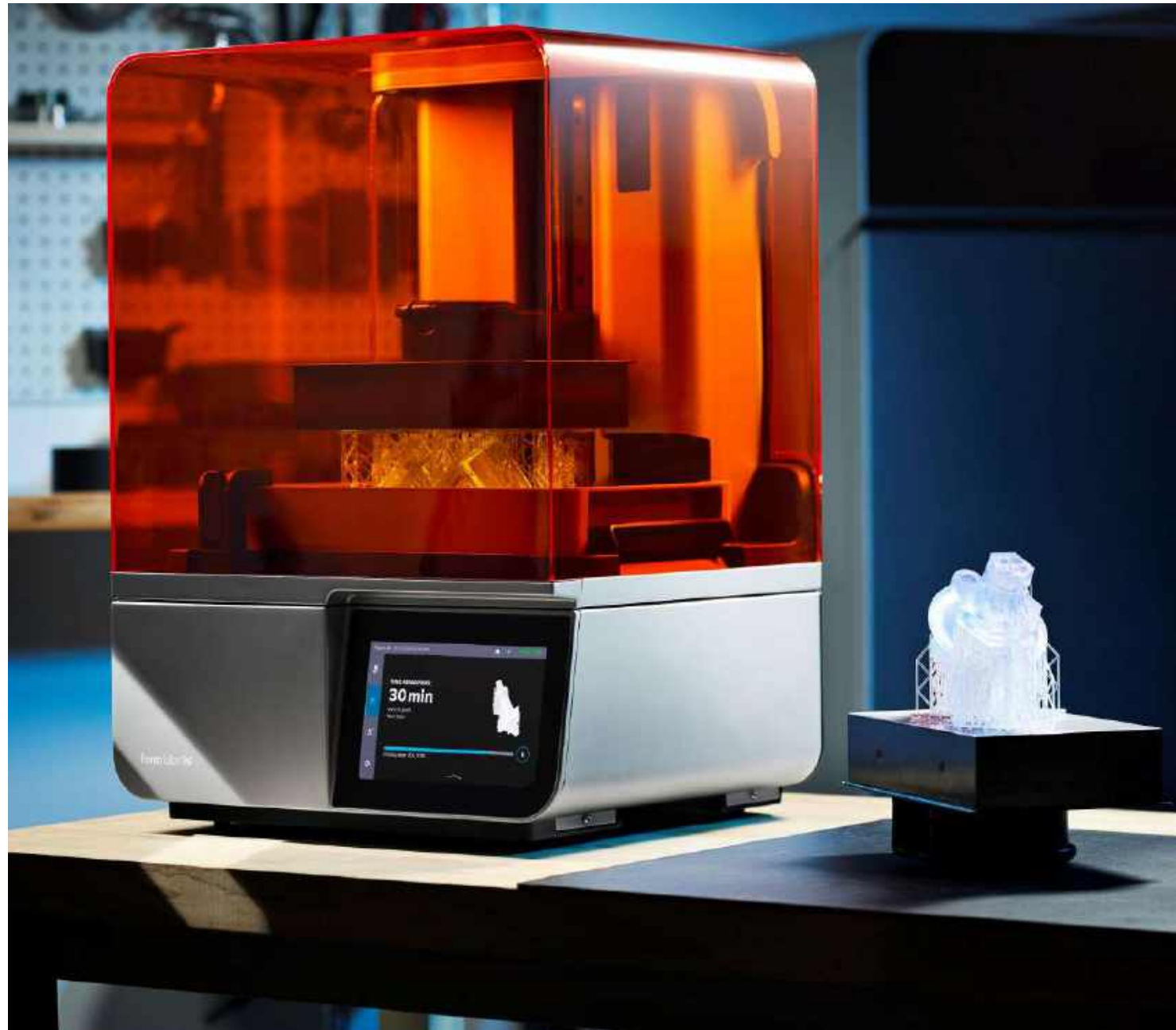


Equipment Name	CNC ROUTER MACHINE
Bed size	600*400 mm
Machine Weight	350 kg
Rated Voltages	220 V
Rated Power	2.2kw
Supported Material	WPC, Aluminium, Mild steel, Copper, Wood

Equipment Name	FIBER LASER MACHINE
Bed size	1300*900 mm
Machine Weight	250 kg
Working Voltage	230V/50Hz
Laser Power	150W
Workable Material	Aluminium, copper, Zinc



MAJOR EQUIPMENTS

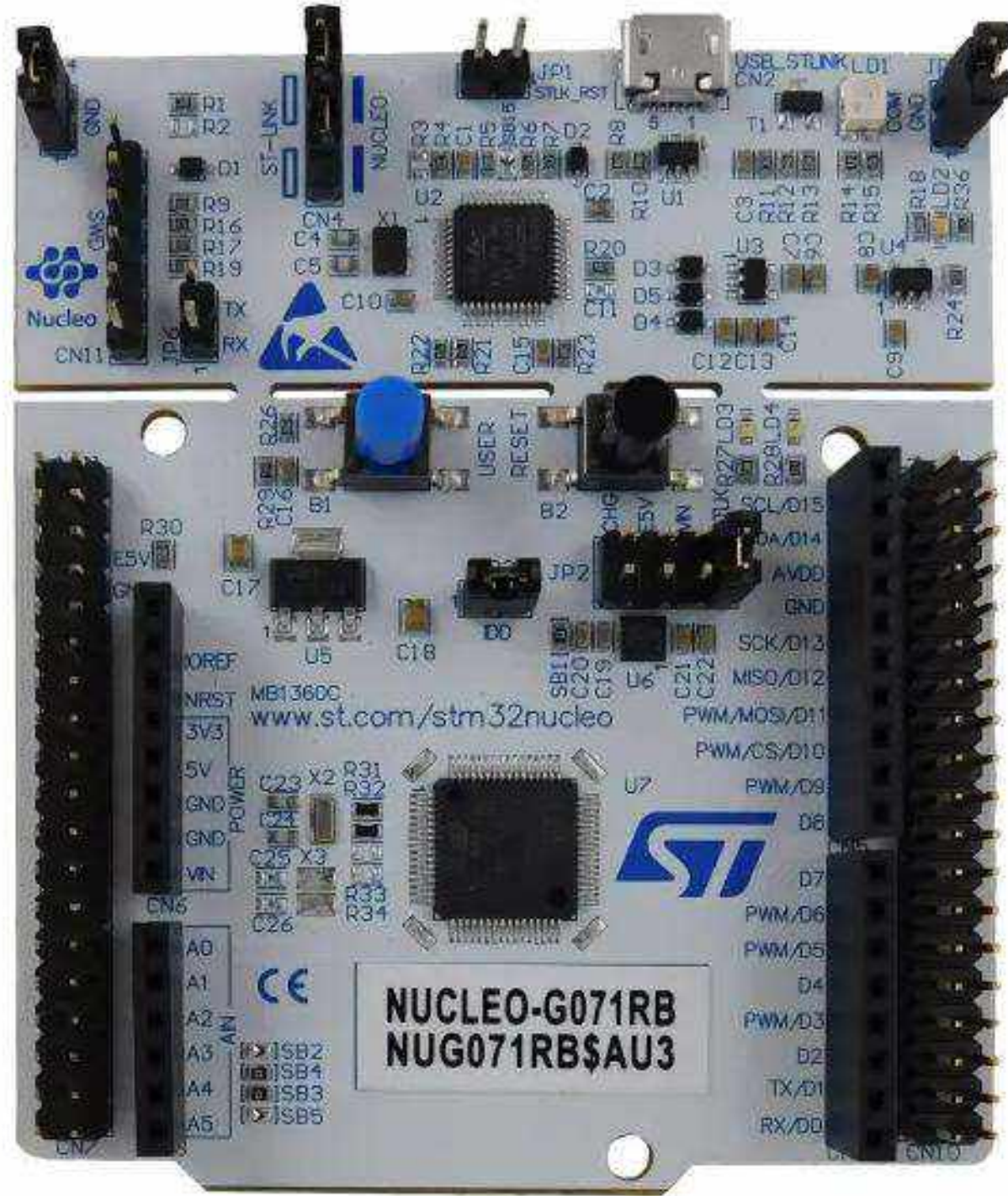


Equipment Name	RESIN PRINTER
Bed size	220*220*220 mm
Machine Weight	18.3 kg
Rated Voltages	220 V
Rated Power	100–240 VAC 2.5 A 50/60 Hz 220 W
Supported Material	Resin

MAJOR EQUIPMENTS

Equipment Name	Meta Quest 3 128GB Console Virtual Reality
Special Feature	3D Spatial Audio
Connectivity Technology	Wi-Fi, HDMI
Included Components	Headband
Compatible Devices	Game Console
Product Dimensions	23D x 13W x 22H Centimeters





NAME	ST MICROELECTRONICS KIT
Item Type:	Development Board
Chip Type:	STM32
Power Supply	ST-LINK USB VBUS or external sources
Debugger	On-board ST-LINK debugger/programmer with USB re-enumeration
Capability	Mass storage, Virtual COM port, and debug port

LIST OF ACTIVITIES

S.NO.	NAME OF ACTIVITY
1	Ideathon
2	Skilling Programme
3	Awareness Programme
4	Open Day For School Students
5	School Teacher Awareness Programme
6	Faculty Development Programme (FDP)
7	National Conference
8	Professional Skilling
9	Pitch Perfect Competition



ACHIEVEMENTS



PATENT

1. Chargeable Smart Safety Device for use in Army Camp

2. Iot Enabled Mask Mouth Identification with Remedial Measures

3. A System for indicating working status of ATM with Nearest ATM Finder & Enhanced Security Features

4. Smart Mask

5. Hands- Free Water Tap Mechanism

6. IoT Enabled Smart Diaper

7. Condition-Based Monitoring and Predictive Maintenance Systems for Rolling Bearings*



PROJECTS SPONSORED



Executed project on Predictive maintenance for bearing systems using NI DAQ card and Matlab for TIH Bombay (2022-23)

Executed project on Neurogenerative Tremomarker using sensors for iHub Roorkee (2022-23)

Ongoing project for Financial Model for Resource Constraint Farming with iHub Roorkee (2022-23)

CST UP Funded Project SUNO: SPEAKER FOR HEARING & SPEECH IMPAIRED (2024-25)



CONSULTANCY



NAME OF FIRMS

1. JILA VIGYAN CLUB
2. PRATHAM EDUCATION FOUNDATION
3. PULSEWAVE INNOVATION PVT. LTD.
4. ASHONI INNOVATION & PRODUCT PVT. LTD.
5. ARUN FILM INDUSTRY
6. JC BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY
7. MAHILA PUNJABI SANGADHAN
8. MATHWORKS
9. ARK INFOSOLUTIONS PVT. LTD.
10. LADY IRWIN COLLEGE, UNIVERSITY OF DELHI
11. MIET PUBLIC SCHOOL
12. MIET
13. IPEC
14. MIT

*Successfully secured consultancy projects valued at Rs. 3 lakhs, facilitating industry-academia partnerships and hands-on problem-solving.



AYODHYA RAM MANDIR
Material:MDF



WALL ART
Material:Acrylic



ORGANISER
Material: MDF



RAMP WALK STAGE
Material: MDF



WALL CLOCK
Material: MDF, WPC, Acrylic



DECORATIVE BUTTERFLY
Material:Acrylic



TEMPLE
Material:WPC, Acrylic, PLA



CEILING LAMP
Material:MDF



MUSHROOM LAMP
Material: PLA



RAM DARBAR
Material:MDF



SHOWPIECE
Material:MDF



SKULL
Material: PLA

GLIMPSE OF PROJECTS @AICTE IDEA Lab, MIET



SPIDER ROBO
Year: 2022



LINE FOLLOWER ROBOT
Year: 2022



FIRE PROTECTION SYSTEM
Year: 2023



DIE ROBOT
Year: 2023



WIND TURBINE
Year: 2024



OBJECT AVOID ROBO CAR
Year: 2024



HOME AUTOMATION
Year: 2022



SANITIZER MACHINE
Year: 2022



SOUND BOOSTER
Year: 2023



MINI GENERATOR
Year: 2023



SMART EXTENSION BOARD
Year: 2024



DISTANCE METER
Year: 2024



GLIMPSE OF ACTIVITIES *@* AICTE IDEA Lab, MIET



IDEATHON @AICTE IDEA Lab, MIET



GPS Map Camera
Meerut, Uttar Pradesh, India
N.H. 58, Delhi-Roorkee Highway, Baghpat Road Bypass Crossing,
Meerut, Uttar Pradesh 250005, India
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CERTIFICATE
OF APPRECIATION
This certificate is presented to

For participating in the IDEATHON 2023 conducted from 20. November,
2023 to 24. November 2023 at AICTE IDEA LAB

DR. BRIJESH SINGH MR. PRASHANT KR. GUPTA
CHIEF MENTOR COORDINATOR
AICTE IDEA LAB AICTE IDEA LAB



GPS Map Camera
Meerut, Uttar Pradesh, India
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GPS Map Camera
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IDEATHON @AICTE IDEA Lab, MIET



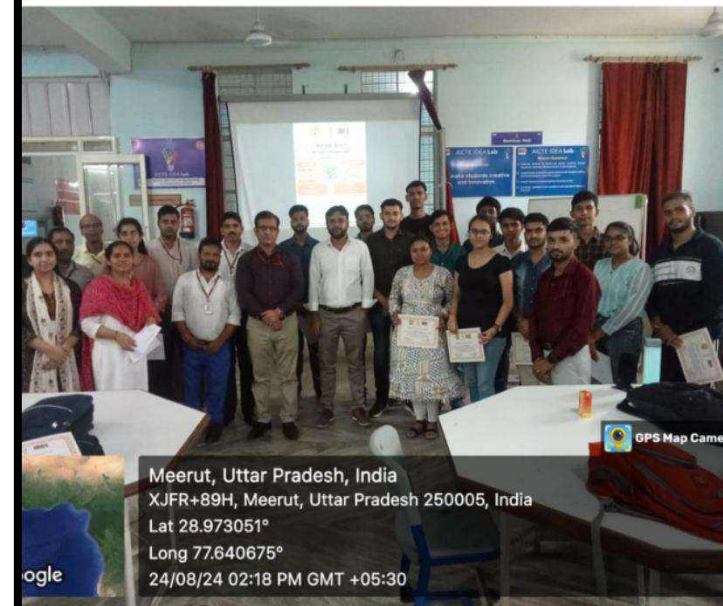
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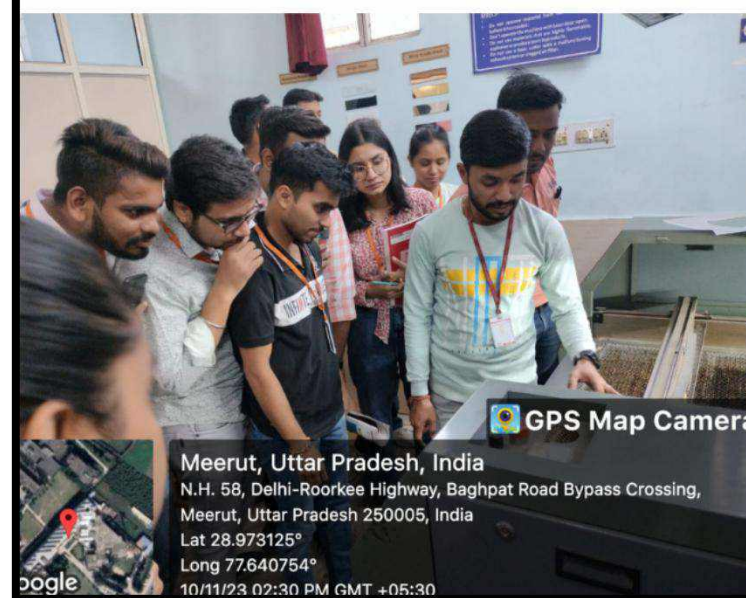


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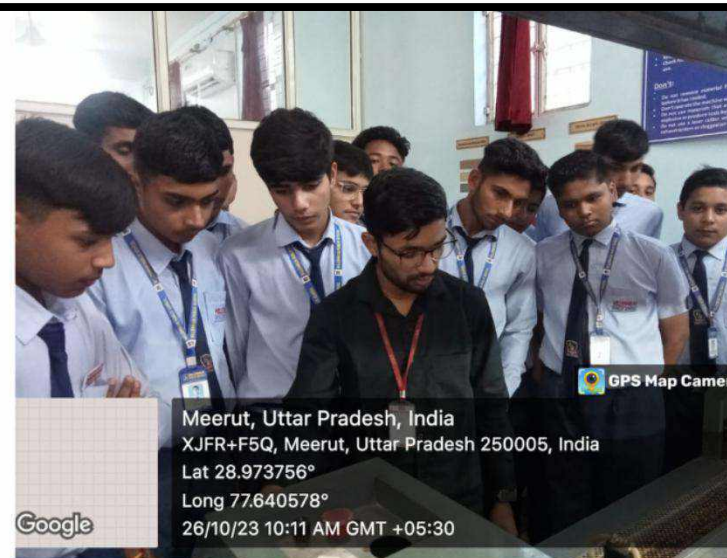
SKILLING PROGRAM @AICTE IDEA Lab, MIET



SKILLING PROGRAM @AICTE IDEA Lab, MIET



OPEN DAY FOR SCHOOL LEARNERS @AICTE IDEA Lab, MIET





OPEN DAY FOR SCHOOL LEARNERS @AICTE IDEA Lab, MIET





FDP @AICTE IDEA Lab, MIET



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Meerut, Uttar Pradesh, India
XJFR+56M, Meerut, Uttar Pradesh 250005, India
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Long 77.640626°
29/09/23 11:20 AM GMT +05:30



SCHOOL TEACHER AWARENESS PROGRAM @AICTE IDEA Lab, MIET



PARTICIPANTS EXPERIENCE

@ AICTE IDEA Lab



‘The working faculties are very cooperative and Idea Lab is having lot of things we can learn . Teachers are helping in nature.’

- ABHISHEK GOEL



‘During Idea Lab Program I appreciate the opportunity to brainstorm & work on projects with diverse group of participants. It was best experience where it provides a creative space for exploring innovative ideas.’

-



‘For participants Idea Lab is a unique & unforgettable experience in which they were happily immersed in scientific co-creation & are often surprised by their own ingenuity & we love it when that happens.’

-SOURAV



‘The faculty members who gave their best. They have inspired us in bringing up ideas & also have given the directions for implementing it. It was a great experience in learning.’

-DIVYANSH



JOIN US...

@ AICTE IDEA Lab



AICTE IDEA Lab & Innovations
WhatsApp group





THANK YOU.....



idealab@miet.ac.in



www.miet.ac.in



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Baghpat Bypass Road Crossing,
Meerut, Uttar Pradesh 25000*