ROADMAP (FESTO LAB)

Plan 2025-26

05 Outcomes and Impact

1. 60-70 Students trained & certified
2. Increased industry exposure & student engagement
3. Plan improvements for next academic cycle (2026-27)

Q4 (Apr-Jun) Competition and Showcase

1. Partner with industry for:
   Guest lectures
   Live projects
   Internships
2. Start automation club or Innovation cell

Q3 (Jan-Mar) Testing, Validation & MOU

1. Funded Project From CSIR
2. MOU Finalization
3. Conduct Industry Oriented Program For Even sem students

Q2 (Oct-Dec)- Fabrication & Advanced Training

1. Hands on Experience on Industrial Projects
2. Assessment & Certification
3. Faculty Development Program

Q1 (Jul-Sep)-Planning & Basic Training

1. Lab Setup & Orientation
2. IOT Enable Lab Setup
3. Conduct Industry Oriented Program For Odd sem students

MEERUT INSTITUTE OF ENGINEERING AND TECHNOLOGY, MEERUT

FESTO LAB (CENTER FACILITY)

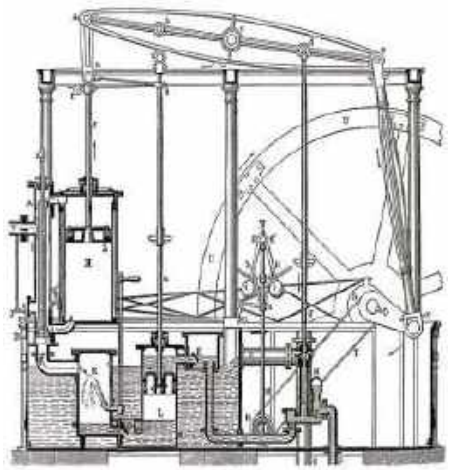
LAB INCHARGE - Mr. Sudhanshu Pandey

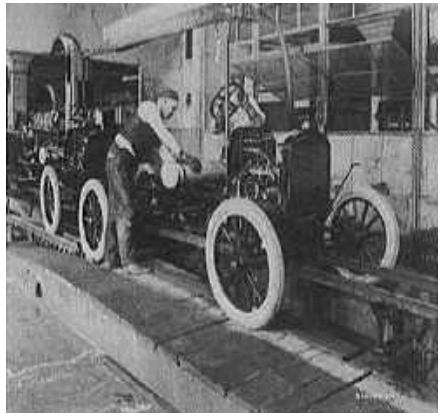
LAB TECHNICIAN - Mr. Ramesh Singh

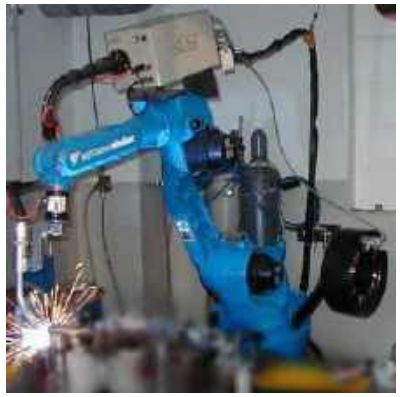
MECHANICAL ENGINEERING DEPARTMENT

1. OBJECTIVES
2. MODULES
3. LIST OF TEAM MEMBERS ALONG WITH DETAILS
4. LIST OF EQUIPMENT
5. ROAD MAP
6. PARTICIPATION RECORDS
7. CREDENTIALS - ACHIEVEMENTS
8. OUTCOME – PAPER / IPR ETC.
9. FUNDED RESEARCH AND CONSULTANCY/AWARDS.
10. MEDIA COVERAGE.

INDUSTRIAL EVOLUTION







1. Industrial revolution
Mechanical powered by water and steam

2. Industrial revolution
Introducing mass production lines powered by electric energy

3. Industrial revolution
Through the use of electronics and IT further progression in autonomous production

4. Industrial revolution
Based on cyber-physical-systems

Level of co

Industry 1.0	Industry 2.0	Industry 3.0	Industry 4.0
End of the 18th century.	Beginning of 20th century	Beginning of 70th Decades	Today

OBJECTIVES

1. THIS PROGRAM AIMS TO PROVIDE STUDENTS WITH A BRIEF IDEA ABOUT NEW AUTOMATION TECHNOLOGIES.
2. IT WILL ACT AS THE BRIDGE TO ADDRESS THE TECHNOLOGICAL GAP AND FOCUS ON NEW INDUSTRIAL TECHNOLOGIES.
3. THIS PROGRAM WILL ENHANCE THE PRACTICAL SKILLS AS WELL AS ANALYTICAL SKILLS OF THE STUDENTS.
4. THIS PROGRAM ENSURES INDUSTRY READINESS OF THE STUDENTS AND ALSO INCREASES REAL-WORLD EXPERIENCE.

MODULES

S.NO	Module
1.	Basic Pneumatic
2.	Advanced Level Pneumatic
3.	Electro Pneumatic
4.	Electro Pneumatic with PLC
5.	Mechatronics MPS System
6.	Industry 4.0

LIST OF TEAM MEMBERS

LAB IN-CHARGE

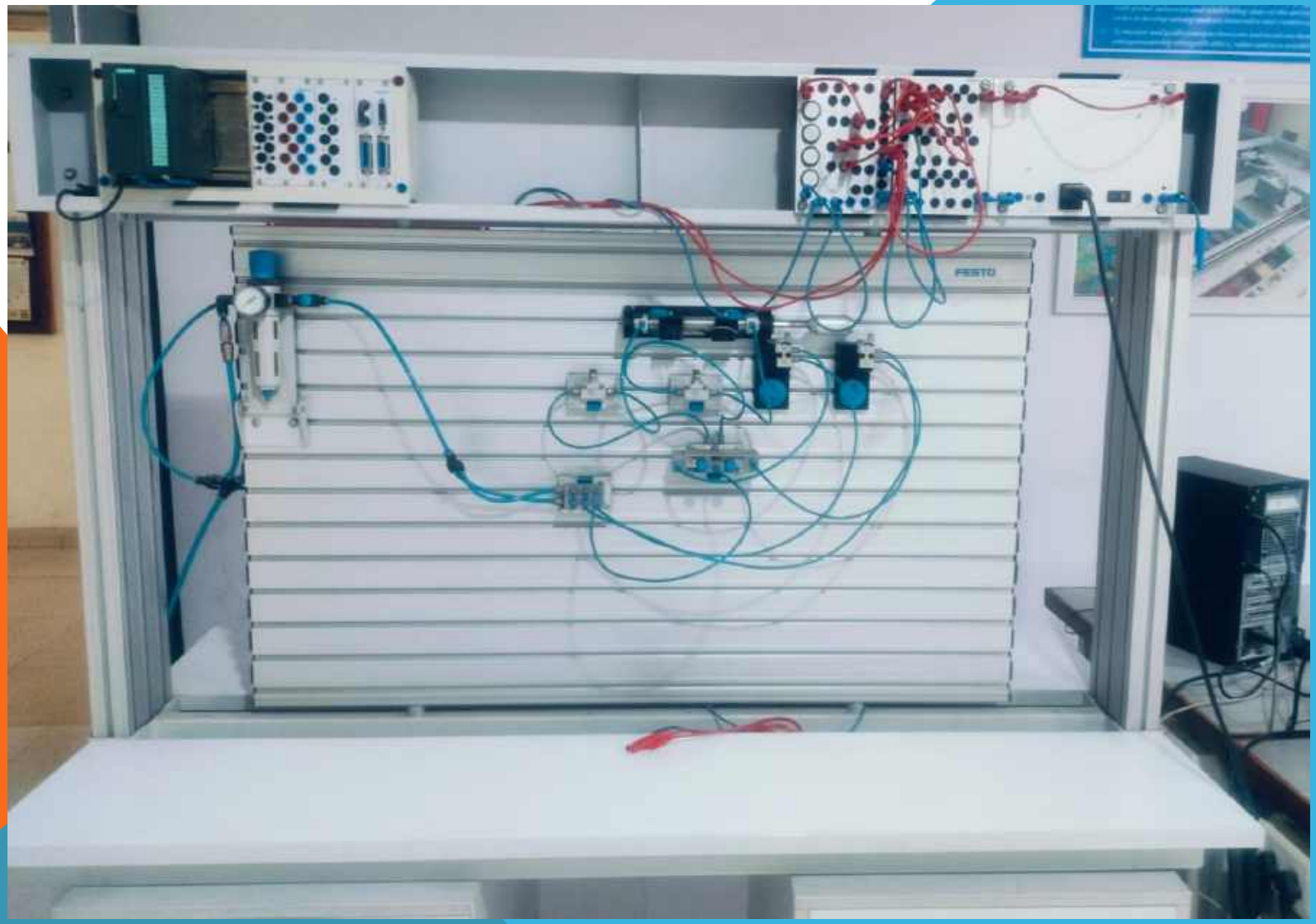
1:-MR. SUDHANSHU PANDEY
(SUDHANSHU.PANDEY@MIET.AC.IN)
ASSISTANT PROFESSOR
MECHANICAL ENGINEERING DEPARTMENT

LAB TECHNICIAN

2:-MR. RAMESH SINGH
(RAMESH.SINGH@MIET.AC.IN)
LAB ASSISTANT
MECHANICAL ENGINEERING DEPARTMENT

LIST OF EQUIPMENT

WORKSTATION WITH PNEUMATICS AND ELECTRO PNEUMATICS



LIST OF EQUIPMENT

INDUSTRY 4.0 WITH THREE STATION

ROAD MAP

Work done in 2017-18	Work done in 2018-19	Work done in 2019-20	Work done in 2020-21	Work done in for 2021-22
➢ Establish lab infrastructure Increased ➢ Integrate FESTO lab activities with existing curriculum.	➢ Train faculty and staff on FESTO equipment and software. ➢ Organize introductory lab sessions and hands-on projects.	➢ Establish partnerships with local industries for internships and collaborative projects. ➢ Offer advanced training programs and certifications for students.	➢ Offer advanced training programs and certifications for students. ➢ Launch outreach programs for local schools to promote STEM education.	➢ Conducted Faculty development program for introducing new technology among faculty members. ➢ Offer advanced training programs and certifications for students.

ROAD MAP

Work done in 2022-23

- Offered advanced training programs and certifications for students.

Work done in 2023-24

- Conducted Faculty development program for introducing new technology among faculty members.
- Offer advanced training programs and certifications for students.

Future Plan for 2024-25

- Upgrade existing equipment to the latest technology standards.
- Provide mentorship and resources for entrepreneurial ventures

Future Plan for 2025-26

- Alumni Network and Collaboration.
- Develop flagship projects showcasing the lab's capabilities and innovations.

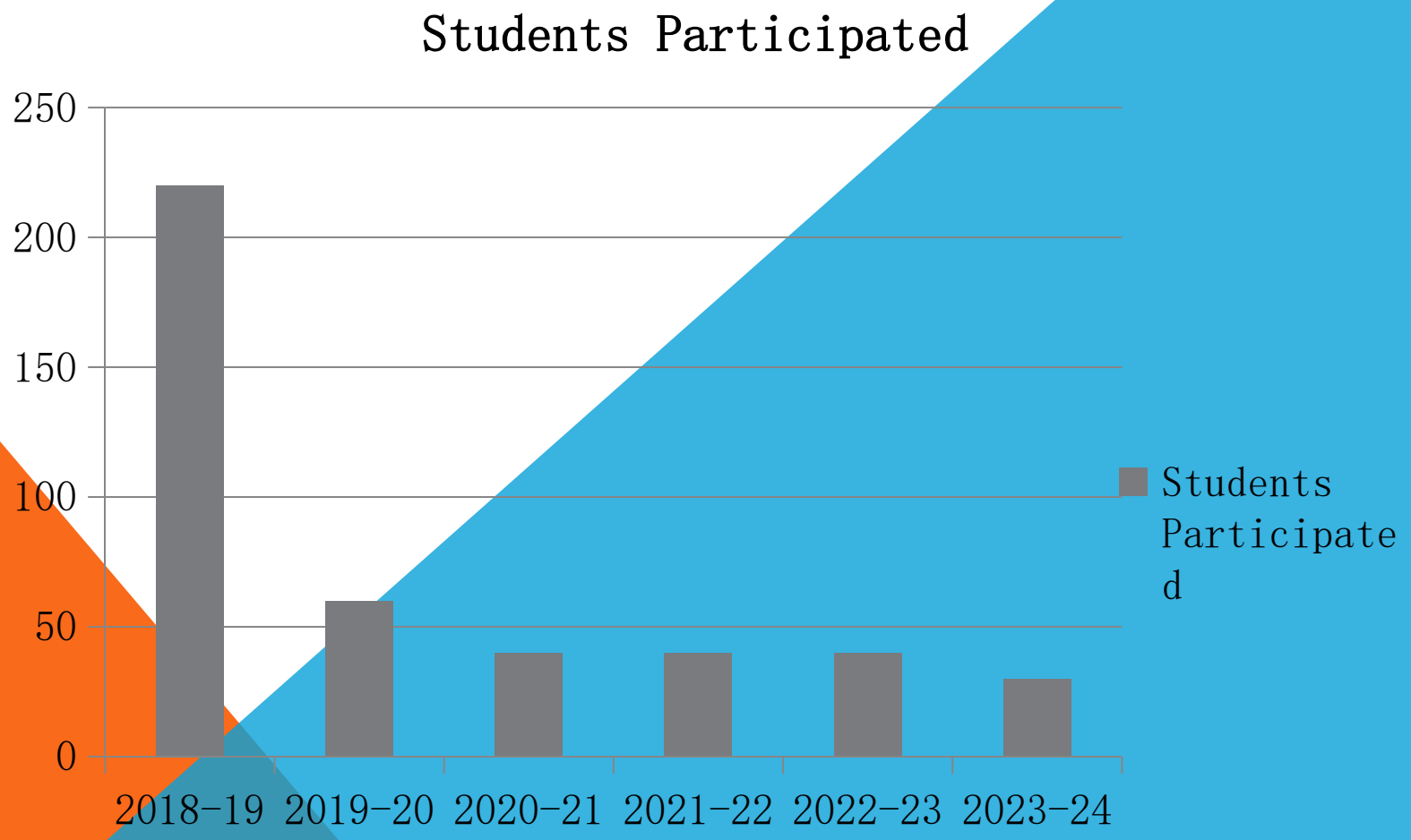
Future Plan for 2026-27

- Ensure the long-term financial and operational sustainability of the lab.
- Continuously assess and adapt the roadmap to align with evolving technologies and industry needs

PARTICIPATION RECORDS

Year	No of students Participated in training program
2018-19	220
2019-20	60
2020-21	40
2021-22	40
2022-23	40
2023-24	30

PARTICIPATION RECORDS



CREDENTIALS – ACHIEVEMENTS

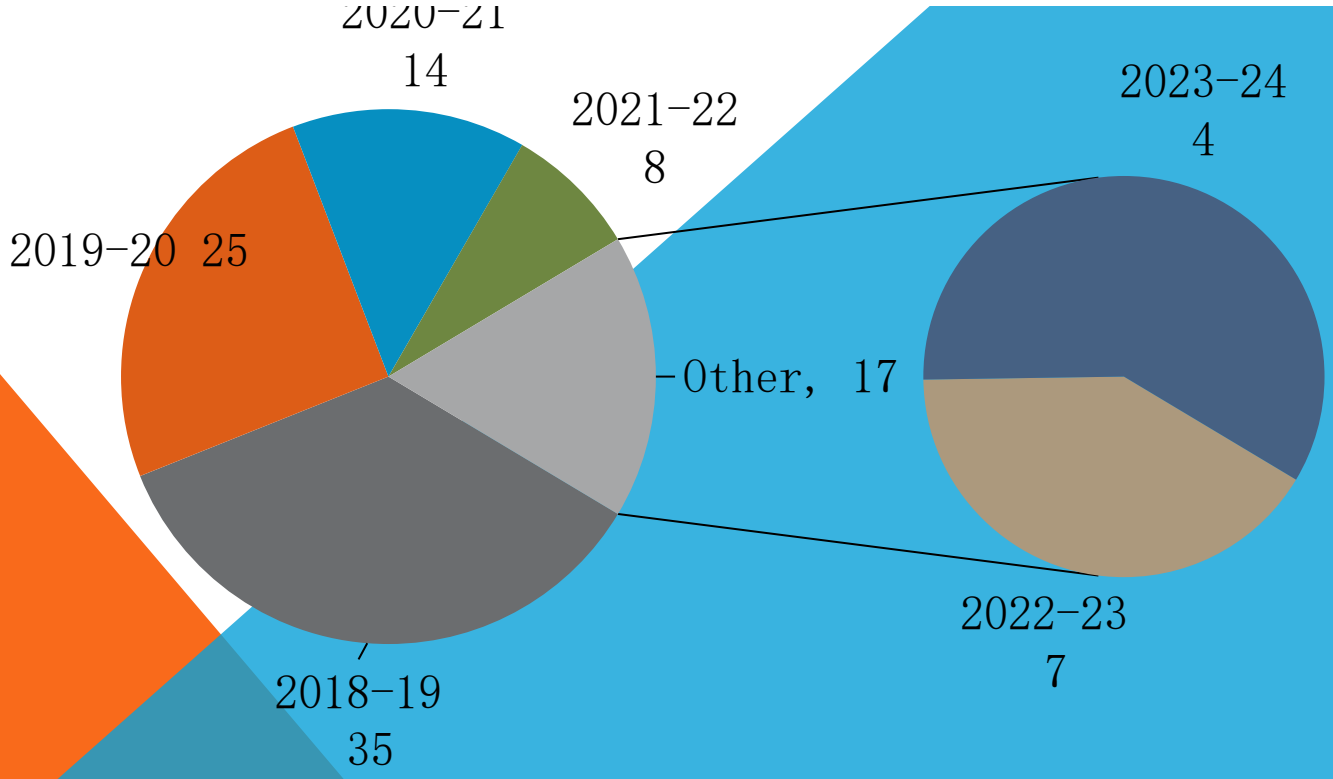
- AUTOMATIC BLADDER MACHINE IS MANUFACTURED FOR MITTAL RUBBER FACTORY PVT. LTD.
- IN 2019-20 MAHINDRA MANUFACTURING LTD. PERFORMED A PLACEMENT DRIVE WITH THE HELP OF INDUSTRY 4.0
- IN 2020-21 MARUTI TRAINED HIS WORKERS ON CURRENT TECHNOLOGY WITH THE HELP OF FESTO EQUIPMENT.

CREDENTIALS – ACHIEVEMENTS

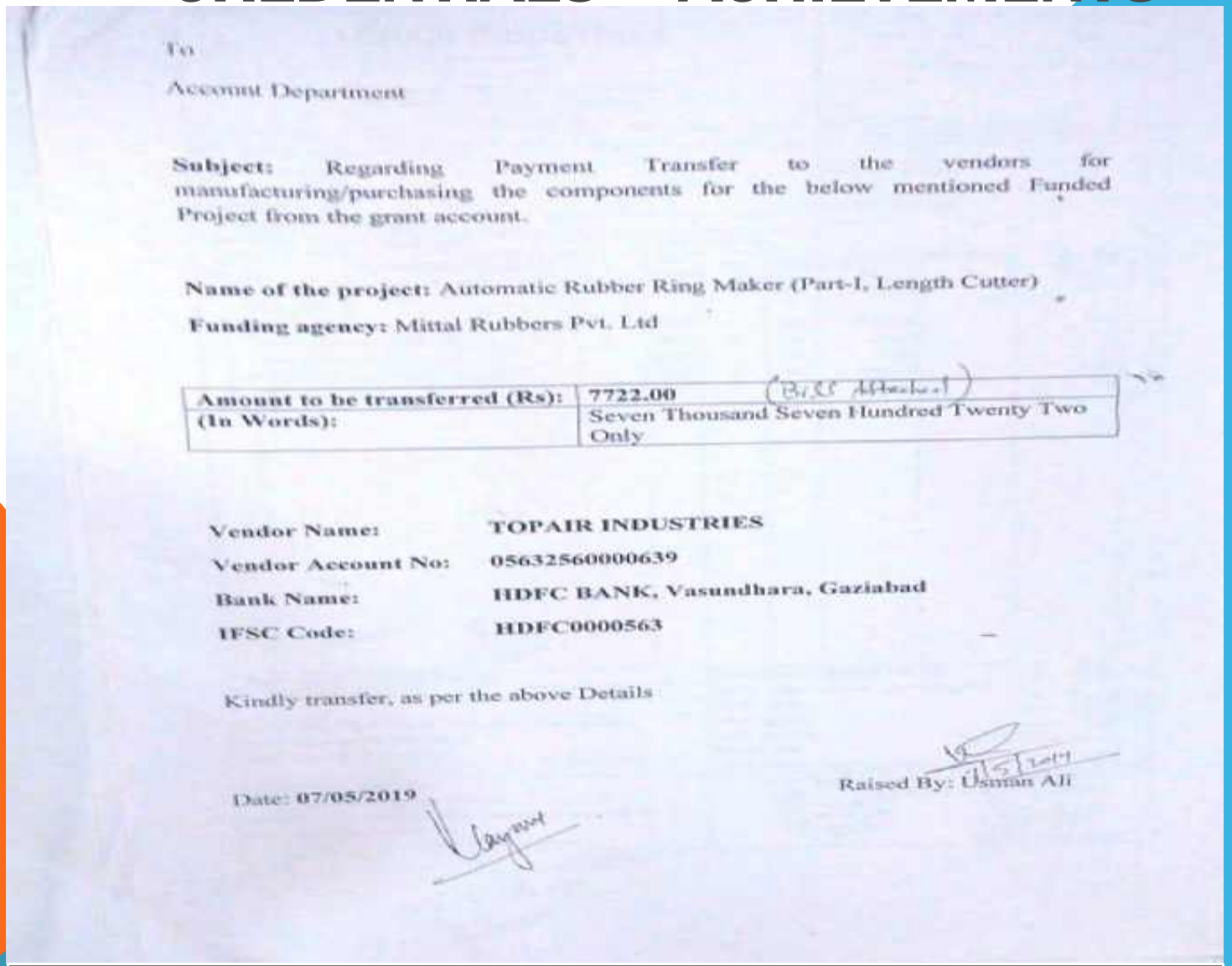
Year	No. of Students Placed in Automation Company
2018-19	35
2019-20	25
2020-21	14
2021-22	8
2022-23	7
2023-24	4

CREDENTIALS – ACHIEVEMENTS

No. of Students Placed in Automation Company in last 6 Years



CREDENTIALS – ACHIEVEMENTS



To

Account Department

Subject: Regarding Payment Transfer to the vendors for manufacturing/purchasing the components for the below mentioned Funded Project from the grant account.

Name of the project: Automatic Rubber Ring Maker (Part-I, Length Cutter)

Funding agency: Mittal Rubbers Pvt. Ltd

Amount to be transferred (Rs):	**7722.00** (Bill Attached)
(In Words):	Seven Thousand Seven Hundred Twenty Two Only

Vendor Name: TOPAIR INDUSTRIES

Vendor Account No: 05632560000639

Bank Name: HDFC BANK, Vasundhara, Gaziabad

IFSC Code: HDFC0000563

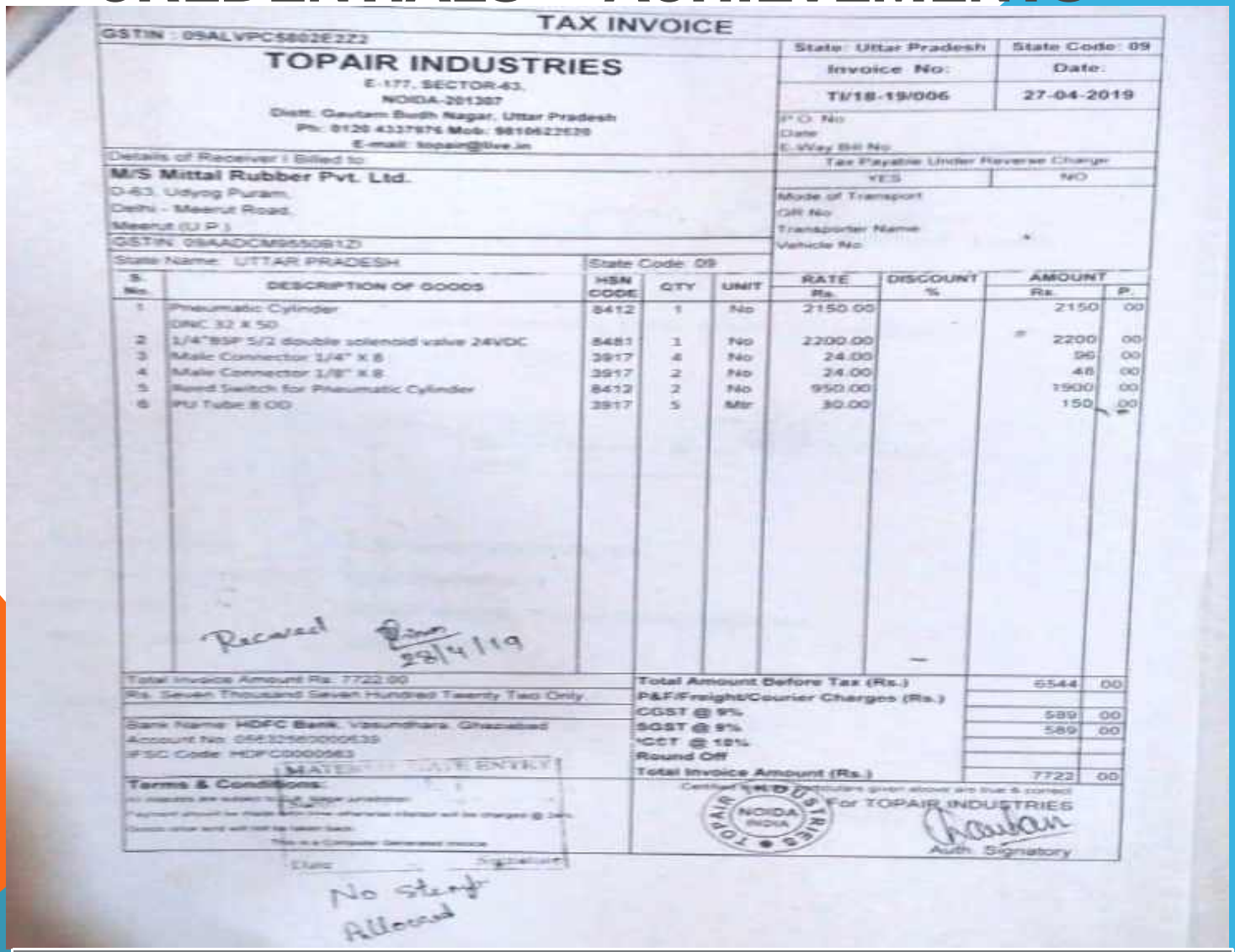
Kindly transfer, as per the above Details

Raised By: Usman Ali

Date: 07/05/2019

Purchased Bill of Mittal Rubber Factory

CREDENTIALS – ACHIEVEMENTS



TAX INVOICE

GSTIN : 09ALVPC5802E2Z1

TOPAIR INDUSTRIES
E-177, SECTOR-63,
NOIDA-201307
Distt. Gautam Budh Nagar, Uttar Pradesh
Ph: 0120 4337976 Mob: 9810622620
E-mail: topair@live.in

State: Uttar Pradesh | State Code: 09

Invoice No:	Date:
TI/18-19/006	27-04-2019

P.O. No:
Date:
E-Way Bill No:

Tax Payable Under Reverse Charge: YES / NO

Mode of Transport:
GR No:
Transporter Name:
Vehicle No:

Details of Receiver / Billed to:
M/S Mittal Rubber Pvt. Ltd.
D-63, Udyog Puram,
Delhi - Meerut Road,
Meerut (U.P.)
GSTIN: 09AADCM9550B1ZD
State Name: UTTAR PRADESH | State Code: 09

S. No.	DESCRIPTION OF GOODS	HSN CODE	QTY	UNIT	RATE Rs.	DISCOUNT %	AMOUNT Rs.	P.
1	Pneumatic Cylinder DNC 32 X 50	8412	1	No	2150.00		2150	00
2	1/4"BSP 5/2 double solenoid valve 24VDC	8481	1	No	2200.00		2200	00
3	Male Connector 1/4" X 8	3917	4	No	24.00		96	00
4	Male Connector 1/8" X 8	3917	2	No	24.00		48	00
5	Reed Switch for Pneumatic Cylinder	8412	2	No	950.00		1900	00
6	PU Tube 8 OD	3917	5	Mtr	30.00		150	00

Received 28/4/19

Total Invoice Amount Rs. 7722.00
Rs. Seven Thousand Seven Hundred Twenty Two Only

Total Amount Before Tax (Rs.)	6544	00
P&F/Freight/Courier Charges (Rs.)		
CGST @ 9%	589	00
SGST @ 9%	589	00
UGST @ 18%		
Round Off		
Total Invoice Amount (Rs.)	7722	00

Bank Name: HDFC Bank, Vasundhara, Ghaziabad
Account No: 04632560000539
IFSC Code: HDFC0000563

Terms & Conditions:

Certified that the particulars given above are true & correct
For TOPAIR INDUSTRIES
Auth. Signatory

No Stamp Allowed

Purchased Bill of Mittal Rubber Factory

MEDIA COVERAGE

इंडस्ट्री 4.0 पर चार दिवसीय प्रशिक्षण कार्यक्रम

ग्रीन इंडिया

मेरठ। एमआईईटी के मैकेनिकल इंजीनियरिंग विभाग में स्मार्ट मैन्युफैक्चरिंग और इंडस्ट्री 4.0 पर चार दिवसीय प्रशिक्षण कार्यक्रम शुरू किया गया। प्रशिक्षण कार्यक्रम का आयोजन आईआईटी दिल्ली द्वारा एआईए फाउंडेशन फॉर स्मार्ट मैन्युफैक्चरिंग के सहयोग से किया गया।

विभागाध्यक्ष डॉ. शैलेन्द्र त्यागी ने बताया कि प्रशिक्षण कार्यक्रम भारत सरकार के भारी उद्योग मंत्रालय की पहल समर्थ उद्योग भारत 4.0 के तहत आयोजित किया गया है। प्रशिक्षण कार्यक्रम में कंप्यूटर साइंस, इलेक्ट्रॉनिक कम्युनिकेशन इंजीनियरिंग, इलेक्ट्रिकल इंजीनियरिंग, एमसीए और मैकेनिकल इंजीनियरिंग विभागों के 31 छात्रों ने भाग लिया। आईआईटी दिल्ली एआईए फाउंडेशन फॉर स्मार्ट मैन्युफैक्चरिंग से प्रोग्राम लीड आकाश दुबे, ट्रेनर पुलक रिजवानी और संजीव कुमार ने छात्रों को स्मार्ट मैन्युफैक्चरिंग, इंडस्ट्री 4.0, रोबोटिक मैन्युफैक्चरिंग, साइबर फिजिकल सिस्टम, इंडस्ट्रियल आईओटी, ऑगमेंटेड पर प्रशिक्षण दिया। वास्तविकता, आभासी वास्तविकता। रीयल-टाइम डैशबोर्ड, मशीन लर्निंग आदि तकनीकों के बारे में विस्तार से बताया गया।

वाइस चेयरमैन पुनीत अग्रवाल ने कहा कि एमआईईटी ने एक दशक पहले नई तकनीक अपनाई थी। हमारे छात्र उद्योग 4.0 के साथ-साथ नवीनतम तकनीकों को सीखने और अपनाने में हमेशा आगे रहे हैं, जिसके परिणामस्वरूप साल दर साल उत्कृष्ट कॉलेज प्लेसमेंट हुए हैं। निदेशक डॉ बृजेश सिंह ने कहा की प्रत्येक वर्ष 1 से 1.5 करोड लोग रोजगार वर्ग में आ रहे हैं।

Media Coverage (31/12/2023)

Thank You