6.3.3 Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year 2024-25

Pages 01 to 50 are endorsed by Principal

INDEX

6.3.3 Number of professional development /administrative training programs organized by the institution for teaching staff during year 2024-25

Dates (from-to) (DD-MM-YYYY)	Title of the professional development program organised for teaching staff	No. of participants
04/11/2024 to 11/11/2024	"Power Load Forecasting Using Machine Learning"	16
25/11/2024 to 30/11/2024	Fundamentals of welding : Mastering the basics	14
09/12/2024 to 14/12/2024	Microsoft Azure AI Engineer Associate	19
23/06/2025 to 30/06/2025	NEP 2020: Dimensions of Autonomy	56

6.3.3 Number of professional development /administrative training programs organized by the institution for non-teaching staff during year 2024-25

Dates (from-to) (DD-MM-YYYY)	Title of the administrative training program organised for non-teaching staff	No. of participants
23/06/2025 to 27/06/2025	"EMPOWERING ADMINISTRATIVE EXCELLENCE THROUGH ERP & LIFE SKILLS"	17

Vishnu Waman Thakur Charitable Trust's

VIVA Institute of Technology

Shirgaon, Veer Sawarkar Road, Virar (East), Palghar District – 401305

Accredited by NAAC with Grade "B++"

Department of Electrical Engineering

Date: 23/09/2024

To,
The Principal,
VIVA Institute of Technology,
Shirgaon, Virar (E.).

Subject: Budget for STTP

Dear Sir,

The Electrical Engineering and EXTC department of VIVA Institute of Technology is organising ISTE Approved one Week STTP on **"Power Load Forecasting Using Machine Learning"** from 4th November to 11th November 2024.

The detailed expenditure is as follows:

1	Proposed Date	4th to 11th November 2024
2	Number of days	6 Days
3	Proposed honorarium to the guest per Session	2000
4	Total honorarium	6*2000 = 12000
5	ISTE Permission fees	1,180/-
6	Course Fee (118 x 17)	2006/-
	Total Expenditure	15,186/-

Kindly permit us to conduct this STTP.

Thanking you,

Yours Truly,

Prof. Bhushan Save

H.O.D.

(Electrical Engineering)

Vishnu Waman Thakur Charitable Trust's
VIVA INSTITUTE OF TECHNOLOGY
APPROVED BY AICTE, NEW DELHI, DTE, GOVT. OF MAHARASHTRA AND AFFILIATED TO THE UNIVERSITY OF MUMBAI
[illegible]
NAAC ACREDITATE WITH GRADE B—

Organized by: Department of Mechanical Engineering

STTP Details

Academic Year 2024-25

<table>
<tr><th>Sr. No.</th><th>Name of the Resource Person</th><th>STTP Topic</th><th>Date</th></tr>
<tr><td rowspan="4">1.</td><td>Dr. Vishvesh Badheka
Professor,
Pandit Dindayal Petrolium University</td><td rowspan="4">Fundamentals of Welding: Mastering the Basics</td><td rowspan="4">Date: 25th to 30th November, 2024</td></tr>
<tr><td>Dr. Amit Kumar Singh
Post-Doctoral Research Associate,
University of North Texas, USA</td></tr>
<tr><td>Mr. Vinay Chansikar
CEO
Preciworld Mechanical</td></tr>
<tr><td>Mr. Shashikant Gupta
Proprietor,
Radhika Enterprises</td></tr>
</table>

Vishnu Waman Thakur Charitable Trust's
VIVA INSTITUTE OF TECHNOLOGY
APPROVED BY AICTE, NEW DELHI, DTE., GOVT. OF MAHARASHTRA AND AFFILIATED TO THE UNIVERSITY OF MUMBAI
At Shirgaon, Post Virar, Tal. Vasai, Dist. Palghar - 401303. Tel. 7720002544. Website: www.viva-technology.org
NAAC ACREDITATE WITH GRADE B++

Ref: VIVA/VIT/ MECH/STAFF/ /2024-25 **Date:** 21/11/2024

CIRCULAR

All the faculty members are hereby informed that the ISTE approved One week STTP is arranged on the topic **"Fundamentals of Welding: Mastering the Basics"** from 25-11-2024 to 30-06-2024. All the faculty members are requested to attend the same.

Detailed schedule:

Date	Course Details	Timings
25-11-2024	Inauguration Function	9.00 am-9.30 am
	Fundaments of the Joining Processes	9.30 am-12.30 pm
	Fundamentals of Welding Processes and their Applications in the Industry	1.00 pm-4.00 pm
26-11-2024 (Online)	Advanced Welding Processes in Additive Manufacturing	9.30 am-12.30 pm
27-11-2024 (Online)	Physical Processes in TIG Welding	9.30 am-12.30 pm
28-11-2024	Hands On Training on WARP IN TIG 4001 Machine (GTAW)	9.30 am-12.30 pm
	Hands On Training on WARP WS 200 Machine (GMAW)	1.00 pm-4.00 pm
29-11-2024	Hands On Training on Sigma Weld 170 TIG Machine	9.30 am-12.30 pm
	Hands On Training on Sigma Weld SW 400 mm Machine	1.00 pm-4.00 pm
30-11-2024	Industrial Visit	9.30 am-12.30 pm
	Industrial Visit	1.00 pm-4.00 pm
	Valedictory function and Vote of Thanks	4.00 pm-4.30 pm

Dr. Chinmay Pingulkar
STTP Coordinator

Dr. Niyati Raut
STTP Coordinator

भारतीय तकनीकी शिक्षा संस्था
INDIAN SOCIETY FOR TECHNICAL EDUCATION

(Under the Societies' Registration Act XXI of 1860)

Dr. S.M. Ali
Executive Secretary

ISTE/Proceedings/STTP/FDP-SF-MAH-133/2024-25 November 18,2024

Proceedings of Executive Secretary, ISTE

Sub. : Sanction to conduct full time Faculty Development Programme on Self-financing basis for the financial year 2024-2025.

Sanction is hereby accorded to the following institution for the conduct of the Online/SF-STTP/FDP programme indicated below:

Name of Institution	:	Viva Institute of Technology Vasai, Dist. Palghar - 401305
Topic	:	**Fundamentals of Welding : Mastering The Basics**
Name & Address of Coordinators	:	Dr. Niyati Raut, Assoc. Professor Dr. Chinmay Pingulkar, Assoc. Professor
Duration	:	One Week
Proposed dates	:	**25.11.2024 to 30-11-2024**

Terms and Conditions

The institution offering the Programmes should be approved by AICTE and must be Institutional Member of ISTE. Institutions having ISTE Faculty Chapter and Students Chapter shall be preferred. There will be no financial commitment on the part of ISTE on account of this programme. The fee of one **proposal is Rs. 1180/- (Incl. 18% GST)** paid by NEFT/RTGS along with proposal in the following ISTE Account **(Name of Account: ISTE Membership Fee, Account No: 6707247614 Bank: Indian Bank IFSC Code: IDIB000M089 Branch: Mehrauli Road New Delhi).**

1 This will be a Self Financing program of the duration of 1 week/2 weeks/4 weeks.

2 The registration fee of the participants may be fixed by the host institution.

3 ISTE Life membership is necessary for participants to attend SF programmes. Minimum 25 Participants are must for conducting the FDP/STTP. However, If any participant is not having life membership he/she may take the membership of ISTE before the commencement of the programme via web portal **https://membership.isteonline.in**

4 The final report as mentioned in these guidelines is to be submitted to ISTE within 15 days after completion of the Programme.

5 The institute should ensure that the Resource Persons should be well known personalities having thorough knowledge and he/she should be from an Institute or Industry.

-2/-

6 **e-Certificate to ISTE Life Members will be issued by ISTE from this office. Operational and processing fee of Rs. 100 +18% GST (Total Rs. 118/-) will be charged per participant. Institute conducting the program will collect the fee from participants and will send it to ISTE by NEFT/RTGS with list of participants with their ISTE Life Membership Number. Institute conducting program will not issue Certificates with ISTE logo to Participants. Course coordinator is requested to ensure the same and attach payment proof or UTR number.**

7 **At least one test at the end is to be conducted to judge the performance of participants. Institute can conduct more test, if they desire. Attendance and successful completion of Test conducted is mandatory to receive certification by ISTE. Co Ordinator should ensure this while submitting list of participants to ISTE.**

8 **The Digital e-certificates to eligible participants will be sent by ISTE Delhi through organizing Institute.** The certificate contains the ISTE logo at the top. The digitally signed e-certificates will bear the Signatures of Executive Secretary, ISTE.

9 Covid Guidelines issued from time to time are to be followed strictly as notified by the Govt. during the Programme.

Executive Secretary

To,

The Principal
Viva Institute of Technology
At Shirgoan, Post. Virar (East)
Tal. Vashi, Dist. Palghar - 401305
Maharashtra

Copy to:

Dr. Niyati Raout
Assoc. Professor, Dept. of Mechanical Engg.
Viva Institute of Technology
At Shirgoan, Post. Virar (East)
Tal. Vashi, Dist. Palghar - 401305
Maharashtra

ISTE APPROVED

ONE WEEK ONLINE SHORT TERM TRAINNING PROGRAM

ON

FUNDAMENTALS OF WELDING: MASTERING THE BASICS

25 TH – 30 TH NOVEMBER, 2024

Registration No:

Name: _____

Designation: _____

Qualification: _____

Organization: _____

Address: _____

_____

Mobile No.:_____

Email :_____

ISTE Membership No:_____

Demand Draft No.: _____

Dated: _____

Bank & Branch : _____

Amount in Rs. _____

Demand Draft should be drawn in favor of **"VIVA institute of Technology"** payable at **Mumbai.**

Signature of the Applicant Institute Seal

Scanned copy of Registration form and DD to be sent at sttp.mech@viva-technology.org

The DD and the registration form should reach on or before 20 November, 2024.

PARTONS

Hon. Shri. Hitendra Vishnu Thakur
President, VIVA Trust
Hon. Ms. Aparna Thakur
Secretary, Managing Committee, VIVA Trust
Hon. Shri. Mukund Raghunath Padhye
Member, VIVA Trust
Hon. Shri. Sanjeev Patil
Member, VIVA Trust

ADVISOR

Dr. Arun Kumar
Principal, VIVA Institute of Technology

CONVENER

Dr. Niyati Raut, HOD, Mechanical Engg. Dept.

CO-ORDINATORS

Dr. Chinmay Pingulkar, Mechanical Engg. Dept.

ORGANIZING COMMITTEE

Prof. Omkar Joshi
Prof. Pratik Raut
Prof. Tejas Chaudhari
Prof. Priyank Vartak
Prof. Swapnil Raut
Prof. Suneet Mehta

CONTACT PERSON

Dr. Chinmay Pingulkar - (+918087777588)
Contact No. 0250-6990999 (Ext-135/136)
Email: sttp.mech@viva-technology.org

Vishnu Waman Thakur Charitable Trust's

VIVA INSTITUTE OF TECHNOLOGY

Shirgaon, Virar (E)
Approved by AICTE, New Delhi, DTE, Government of Maharashtra.
Affiliated to University of Mumbai

Announces

ISTE APPROVED

ONE WEEK SHORT TERM TRAINNING PROGRAM

ON

FUNDAMENTALS OF WELDING: MASTERING THE BASICS

25 TH – 30 TH NOVEMBER, 2024

ORGANIZED BY

DEPARTMENT OF MECHANICAL ENGINEERING

About the Institution

VIVA institute of technology was established in the year 2009 with a definite mission to develop the standard of the institute above benchmark level, latest technology in the chosen discipline by tapping their hidden and obvious potential, molding them into good and responsible citizens by playing a meaningful role in industry and society. The institute is approved by AICTE, New Delhi and DTE, Maharashtra State and affiliated to Mumbai University. The main objective of the institute has always been promoting education at all levels. The institute offers the following courses/programs: Mechanical Engineering, Civil Engineering, Electronics & Telecommunication Engineering and Electrical Engineering, Computer Engineering, Computer Science Engineering (AI & ML) & Department of MCA.

VIVA institute is well equipped with workshop, laboratories, computer center with latest machineries, tools, instruments etc.

About the Program:

The "Fundamentals of Welding: Mastering the Basics" program is designed to provide Participants with a comprehensive understanding of the essential principles, techniques, and safety measures associated with welding. This program integrates theoretical learning with extensive practical sessions, allowing students to develop the skills needed to perform various types of welding with precision and safety. Throughout the course, Participants students will engage in hands-on exercises using industry-standard equipment, while also learning about welding techniques, metallurgy, and welding safety.

In addition to classroom and lab-based learning, the program includes industrial visits, where Participants will have the opportunity to observe welding practices in real-world manufacturing and construction settings. These visits provide valuable insights into how welding is applied in the industry, the challenges faced by professionals, and the importance of quality control in the welding process.

Course objective:

- ✓ Understand the principles and concepts of welding processes.
- ✓ Develop hands-on skills in welding techniques, safety procedures, and equipment operation.
- ✓ Learn to identify and correct common welding defects and errors.
- ✓ Understand welding safety protocols and personal protective equipment (PPE) usage.

Course Contents:

- ✓ **Day 1:**
  Fundaments of the Joining Processes, Fundamentals of Welding Processes and their Applications in the Industry.
- ✓ **Day 2:**
  Advanced Welding Processes in Additive Manufacturing
- ✓ **Day 3:**
  Physical Processes in TIG Welding
- ✓ **Day 4:**
  Hands on Training on WARP IN TIG 4001 Machine (GTAW) & WARP WS 200 Machine (GMAW)
- ✓ **Day 5:**
  Hands on Training on Sigma Weld 170 TIG Machine & Sigma Weld SW 400 mm Machine
- ✓ **Day 6:**
  Industrial Visits

Resource Persons:

- ✓ **Dr. Vishvesh Badheka,**
  Professor, Pandit Dindayal Petroleum University
- ✓ **Dr. Amit Kumar Singh,**
  Post-Doctoral Research Associate, University of North Texas, USA
- ✓ **Mr. Vinay Chansikar,**
  CEO, Preciworld Mechanical
- ✓ **Mr. Shashikant Gupta,**
  Proprietor, Radhika Enterprises

Venue:

VIVA Institute of Technology
Shirgaon, Virar (E). Dist-Palghar
Pin – 401305
Contact No. 0250-6990999 (Ext-135/138)
Website: www.viva-technology.org

Important Dates

Last date of registration: 20 November, 2024
25 TH – 30 TH November, 2024

Eligibility

PG students, Faculty from engineering, Management and delegates from industry can attend the program.

Course Fee

- **Research Scholars or P.G students: Rs. 500/-**
- **Faculty (ISTE Member): Rs. 500/-**
- **Faculty (Non-ISTE Member): Rs. 1000/-**
- **Delegates from the industry: Rs. 1000/-**

ISTE Approved One week STTP On

"Fundamentals of Welding: Mastering the Basics"

Date: 25th to 30th November, 2024

Organized by: Department of Mechanical Engineering

VIVA Institute of Technology, Virar (E)

List of Participants

Sr. No.	Name of the Participant	ISTE Membership Number
1	Dr. Niyati Raut	LM76844
2	Vinit Deepak Raut	LM76841
3	Dr. Chinmay Pingulkar	LM111387
4	Pratiksha Sankhe	LM124605
5	Mehta Suneet J.	LM111396
6	Henisha A. Raut	LM124606
7	Priyank Madhukar Vartak	LM111391
8	Swapnil Prakash Raut	LM111401
9	Dr. Kiran K. Jadhao	LM43384
10	Ms. Chhaya Shamrao Patil	LM124607
11	Tejas Hareshwar Chaudhari	LM111397
12	Pratik Prakash Raut	LM111402
13	Omkar Kanchankumar Joshi	LM91558
14	Sushil S Mishra	LM94969

Dr. Chinmay Pingulkar
STTP Coordinator

Dr. Niyati Raut
STTP Coordinator

VIVA INSTITUTE OF TECHNOLOGY

ISTE Approved One week STTP On

"Fundamentals of Welding: Mastering the Basics"

Date: 25th to 30th November, 2024

Organized by: Department of Mechanical Engineering

VIVA Institute of Technology, Virar (E)

Detailed Schedule

Date	Course Details	Timings
25-11-2024	Inauguration Function	9.00 am-9.30 am
	Fundaments of the Joining Processes	9.30 am-12.30 pm
	Fundamentals of Welding Processes and their Applications in the Industry	1.00 pm-4.00 pm
26-11-2024 (Online)	Advanced Welding Processes in Additive Manufacturing	9.30 am-12.30 pm
27-11-2024 (Online)	Physical Processes in TIG Welding	9.30 am-12.30 pm
28-11-2024	Hands On Training on WARP IN TIG 4001 Machine (GTAW)	9.30 am-12.30 pm
	Hands On Training on WARP WS 200 Machine (GMAW)	1.00 pm-4.00 pm
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	Hands On Training on Sigma Weld SW 400 mm Machine	1.00 pm-4.00 pm
30-11-2024	Industrial Visit	9.30 am-12.30 pm
	Industrial Visit	1.00 pm-4.00 pm
	Valedictory function and Vote of Thanks	4.00 pm-4.30 pm

Dr. Chinmay Pingulkar
STTP Coordinator

Dr. Niyati Raut
STTP Coordinator

ISTE Approved One week STTP On

" Fundamentals of Welding: Mastering the Basics"

Date: 24th to 30th June, 2024

Organized by: Department of Mechanical Engineering,

VIVA Institute of Technology, Virar (E)

List of the Resource Person

Sr. No.	Name of the Resource Person	Designation And Organization
1.	Dr. Vishvesh Badheka	Professor, Pandit Dindayal Petrolium University
2.	Dr. Amit Kumar Singh	Post-Doctoral Research Associate. University of North Texas. USA
3.	Mr. Vinay Chansikar	CEO Preciworld Mechanical
4.	Mr. Shashikant Gupta	Proprietor. Radhika Enterprises

Dr. Chinmay Pingulkar
STTP Coordinator

Dr. Niyati Raut
STTP Coordinator

Department of Mechanical Engineering, VIVA Institute of Technology, Virar (E)

Topic Name:	ISTE Approved One week STTP On "Fundamentals of Welding: Mastering the Basics"
Name of the Guest Speakers:	Mr. Vinay Chansikar, Dr. Vishvesh Badheka, Dr. Amit Kumar Singh, Mr. Shashikant Gupta
Date:	25th to 30th November, 2024
Time:	09.30 am to 4.00 pm

Programme Summary/Details:

A comprehensive, week-long Short Term Training Program (STTP) titled "Fundamentals of Welding: Mastering the Basics" was conducted from November 25th to 30th, 2024. Organized by the Department of Mechanical Engineering at VIVA Institute of Technology, Virar, and approved by the Indian Society for Technical Education (ISTE), the program offered a blend of theoretical knowledge and practical training.

The STTP commenced with a foundational session on joining and welding processes led by Mr. Vinay Chansikar, CEO of Preciworld Mechanicals. He introduced fundamental concepts of welding, brazing, and soldering, and detailed various techniques including Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), Gas Metal Arc Welding (GMAW), and resistance welding. The session also highlighted the extensive applications of welding in industries such as automotive, aerospace, and construction.

The second day featured an online lecture by Dr. Vishvesh Badheka on "Advanced Welding Processes in Additive Manufacturing". Dr. Badheka discussed the integration of 3D printing with welding, focusing on hybrid techniques like laser and metal deposition welding. He emphasized their use in producing lightweight, high-strength components for the aerospace and automotive sectors and touched upon the future of welding in the context of Industry 4.0.

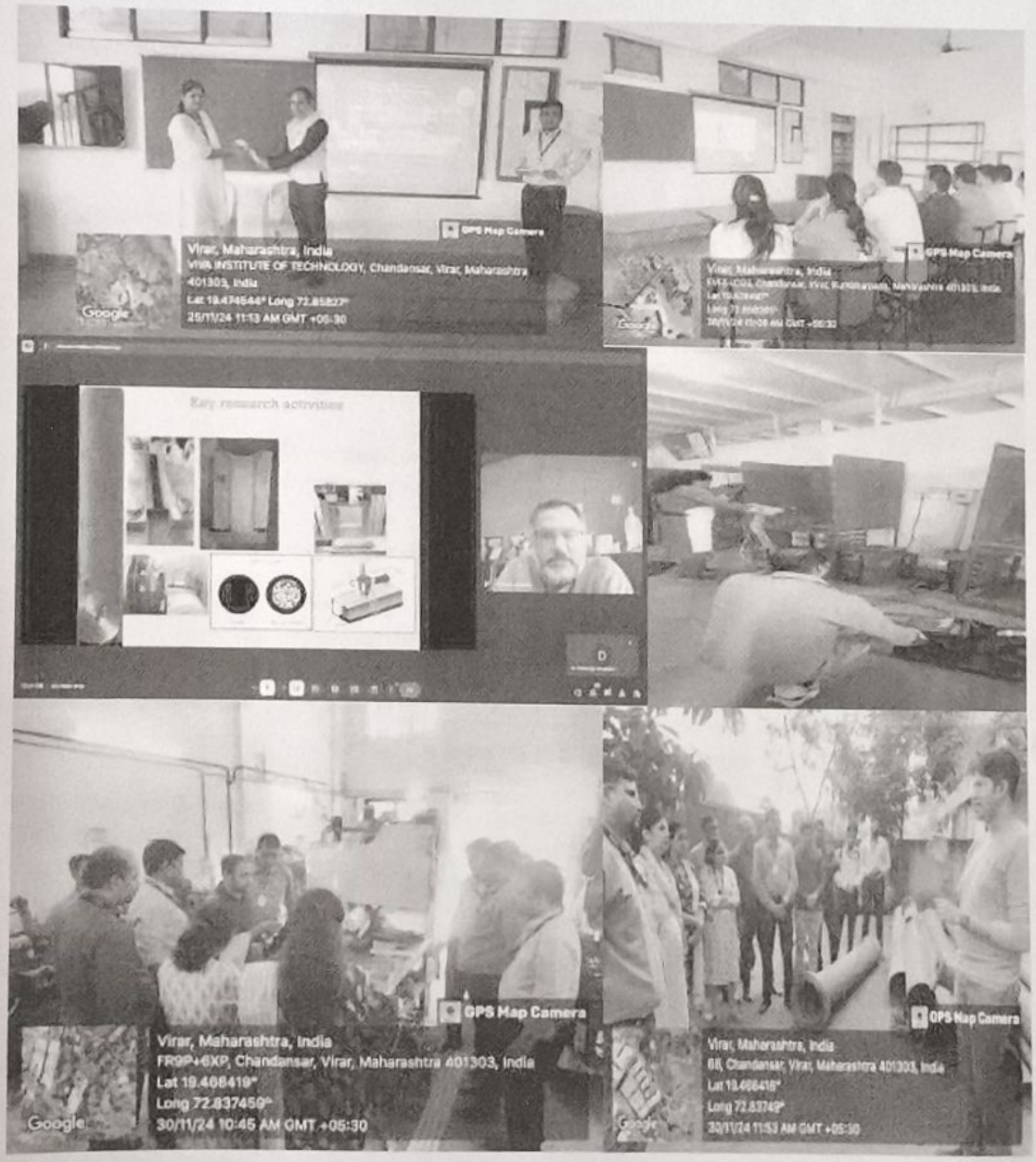
On day three, Dr. Amit Kumar Singh delivered an online session on the "Physical Processes in TIG Welding". He explained the principles of TIG welding, arc physics, and heat distribution, along with material-specific considerations for welding metals like aluminum, stainless steel, and titanium.

The fourth and fifth days were dedicated to hands-on training under the guidance of Mr. Shashikant Gupta, a professional in welding equipment operation. Participants gained practical experience with various machines, including the WARP IN TIG 4001 (GTAW) and WARP WS 200 (GMAW). They further honed their skills on the Sigma Weld 170 TIG machine for precision work and the more powerful Sigma Weld SW 400 mm machine for thicker materials, practicing on both thin sheets and industrial-grade metals.

The program concluded on the sixth day with an industrial visit to provide real-world context. Participants visited Preciworld Mechanicals, where they observed precision manufacturing and the use of TIG and MIG welding in creating complex assemblies. A subsequent visit to Paresh Engineering Industries, led by Mr. Parag Nerurkar, offered insights into welding practices in the piping industry, showcasing the unique

techniques and challenges involved in large-scale pipeline welding. These visits provided invaluable exposure to industry-standard practices, effectively supplementing the technical training received during the week.

Photos:



ISTE Approved One week STTP On

"Fundamentals of Welding: Mastering the Basics"

Date: 25th to 30th November, 2024

Organized by: Department of Mechanical Engineering, VIVA Institute of Technology, Virar (E)

Report

Introduction

ISTE approved a one-week Short Term Training Program (STTP) titled "Fundamentals of Welding: Mastering the Basics". The program took place from 25th to 30th November, 2024, and aimed to equip participants with foundational skills in welding while exploring advanced. The program combined both theoretical sessions and hands-on training to provide a holistic learning experience. The STTP included expert lectures, online sessions, practical demonstrations, and an industrial visit to witness real-world welding applications.

Day 1: (25-11-2024): Fundaments of the Joining Processes, Fundamentals of Welding Processes and their Applications in the Industry

Speakers' Name: Mr. Vinay Chansikar

Session Overview

The first day of the STTP laid the foundation for understanding welding and joining processes. Mr. Vinay Chansikar, an expert in welding technologies and the CEO of Preciworld Mechanicals, led the session, which focused on the following areas:

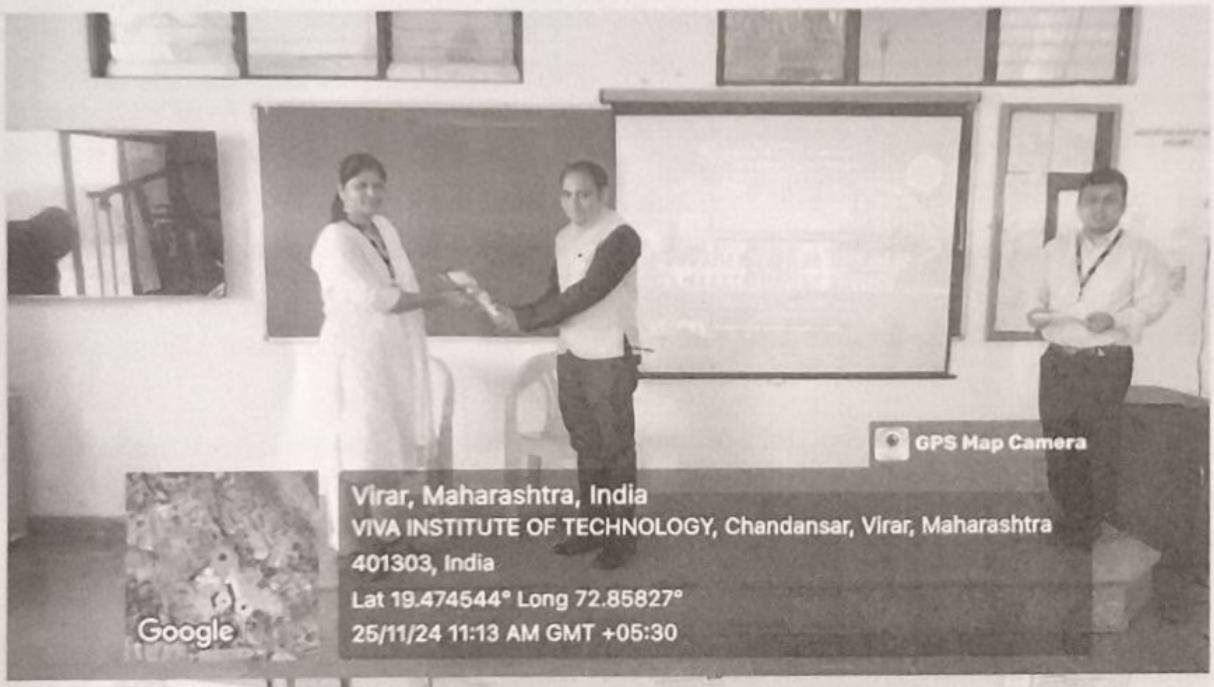
Introduction to Joining Processes: Mr. Chansikar introduced the fundamental concepts of joining processes, including welding, brazing, and soldering. The differences and applications of each were discussed, with an emphasis on welding as a dominant technique in industrial applications.

Fundamentals of Welding Processes: The various welding processes were examined in detail, including:

Arc Welding: Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW).

Resistance Welding: Spot and seam welding.

Applications of Welding in Industry: The lecture explored how welding is used across diverse industries such as automotive, aerospace, construction, and heavy machinery. Practical examples from the speaker's own experience in manufacturing and fabrication were shared to help participants understand real-world welding challenges.



Day 2: (26-11-2024): Advanced Welding Processes in Additive Manufacturing (Online)

Speaker's Name: Dr. Vishvesh Badheka

Session Overview

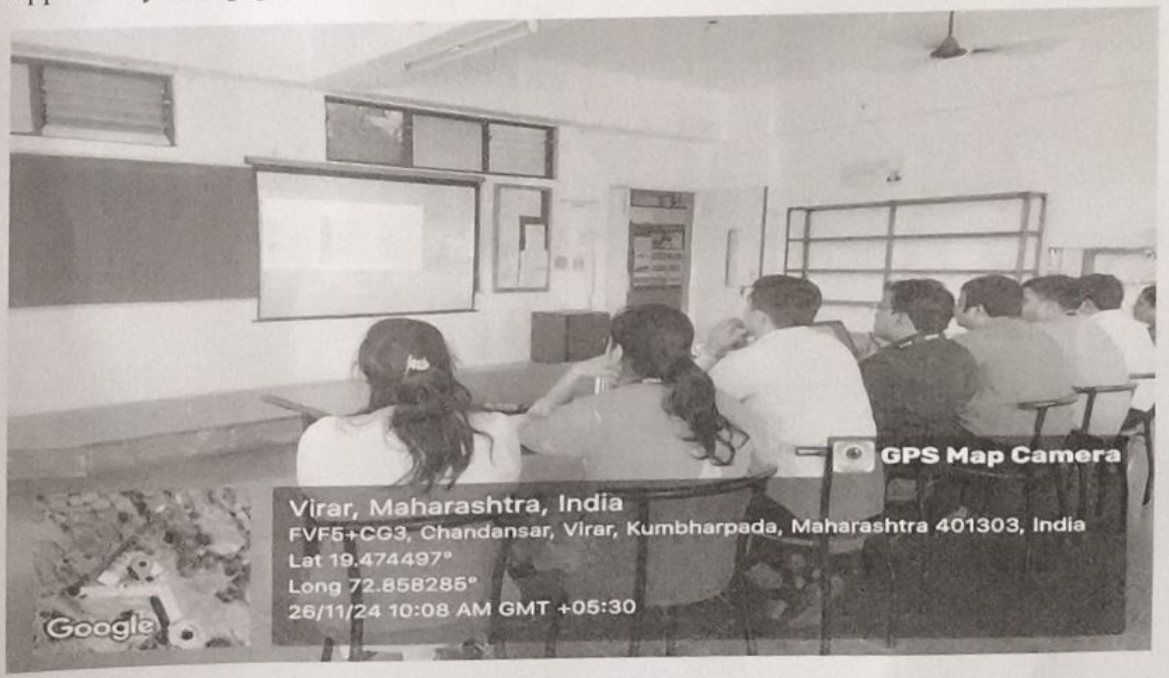
Day 2 featured an online session on Advanced Welding Processes in Additive Manufacturing, delivered by Dr. Vishvesh Badheka, an expert in welding and materials science. Dr. Badheka focused on:

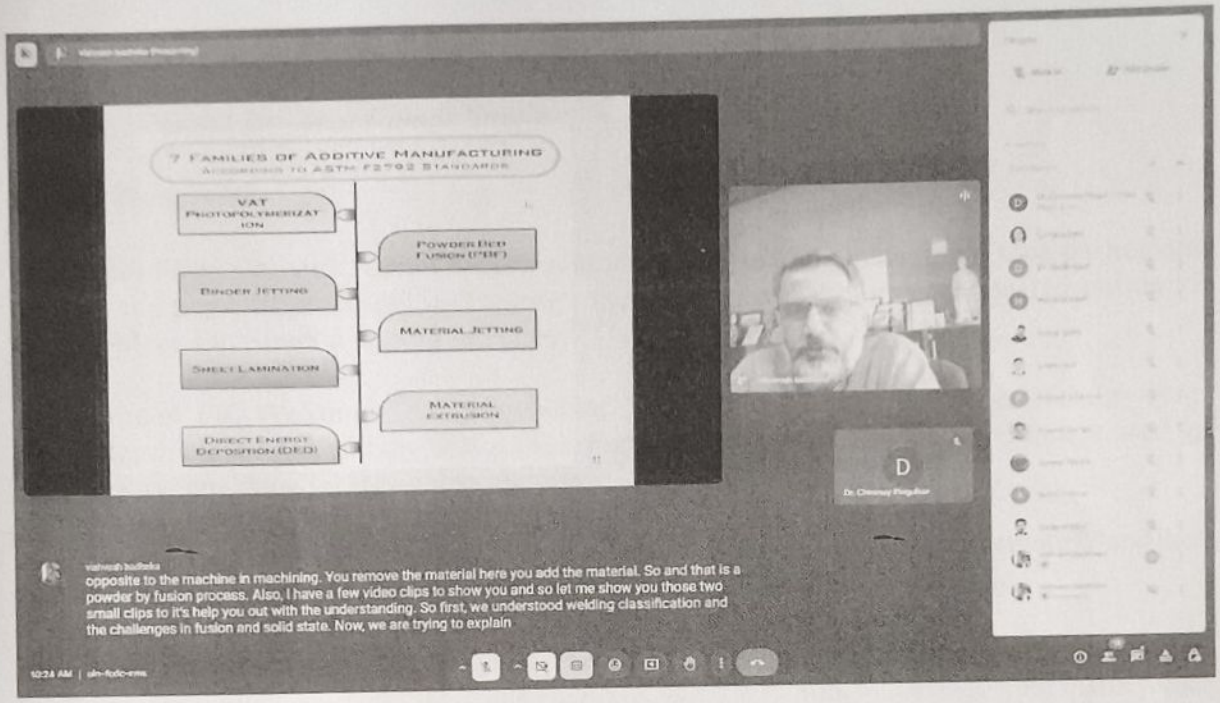
Introduction to Additive Manufacturing: The concept of 3D printing and its integration with welding techniques, particularly in industries that require precision parts.

Advanced Welding Technologies: The role of welding processes in additive manufacturing, with a particular focus on hybrid welding techniques such as laser welding and metal deposition welding.

Applications in Aerospace and Automotive Sectors: How advanced welding techniques contribute to the production of lightweight, high-strength components for industries like aerospace and automotive.

Dr. Badheka also discussed the future of welding in the context of Industry 4.0, where automation, robotics, and digital technologies are transforming the traditional welding processes. The online format allowed for a global perspective, and participants had the opportunity to engage with the speaker through an interactive Q&A.




7 FAMILIES OF ADDITIVE MANUFACTURING
VAT PHOTOPOLYMERIZATION
BINDER JETTING
SHEET LAMINATION
DIRECT ENERGY DEPOSITION (DED)
POWDER BED FUSION (PBF)
MATERIAL JETTING
MATERIAL EXTRUSION
opposite to the machine in machining. You remove the material here you add the material. So and that is a powder by fusion process. Also, I have a few video clips to show you and so let me show you those two small clips to it's help you out with the understanding. So first, we understood welding classification and the challenges in fusion and solid state. Now, we are trying to explain


Key research activities

Day 3: (27-11-2024): Physical Processes in TIG Welding (Online)

Speaker's Name: Dr. Amit Kumar Singh

Session Overview

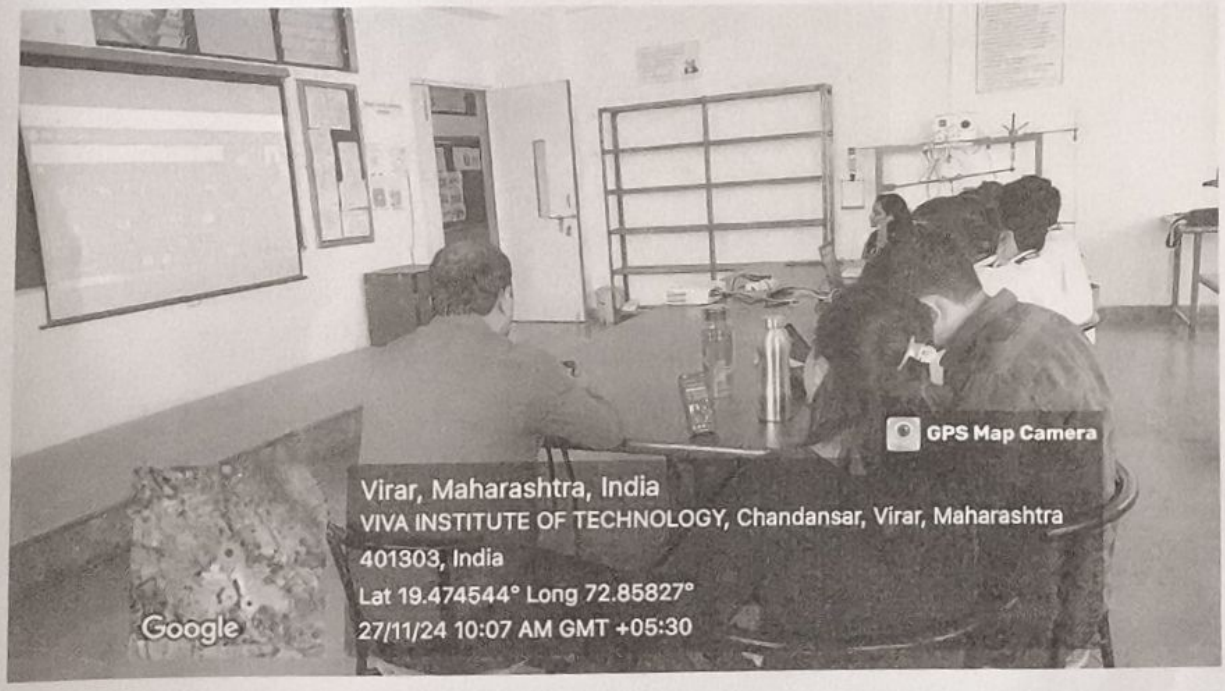
On the third day, Dr. Amit Kumar Singh, an authority on welding metallurgy, took participants through the physical processes in Tungsten Inert Gas (TIG) Welding, conducted online via Google Meet. Dr. Singh's session included:

Principles of TIG Welding: The theory behind TIG welding, including the role of the tungsten electrode, shielding gas, and the heat source. Participants learned how TIG welding is used for high quality, precision welds on thin materials.

Arc Physics and Heat Distribution: An in-depth discussion on how arc formation and heat transfer occur in TIG welding, influencing the quality and strength of the weld.

Material Considerations: Dr. Singh explained how different metals react to TIG welding, including aluminium, stainless steel, and titanium, and the factors that affect weld quality such as heat input and electrode positioning.

The session also touched upon the importance of post-weld cleaning, especially when working with reactive metals like aluminium.



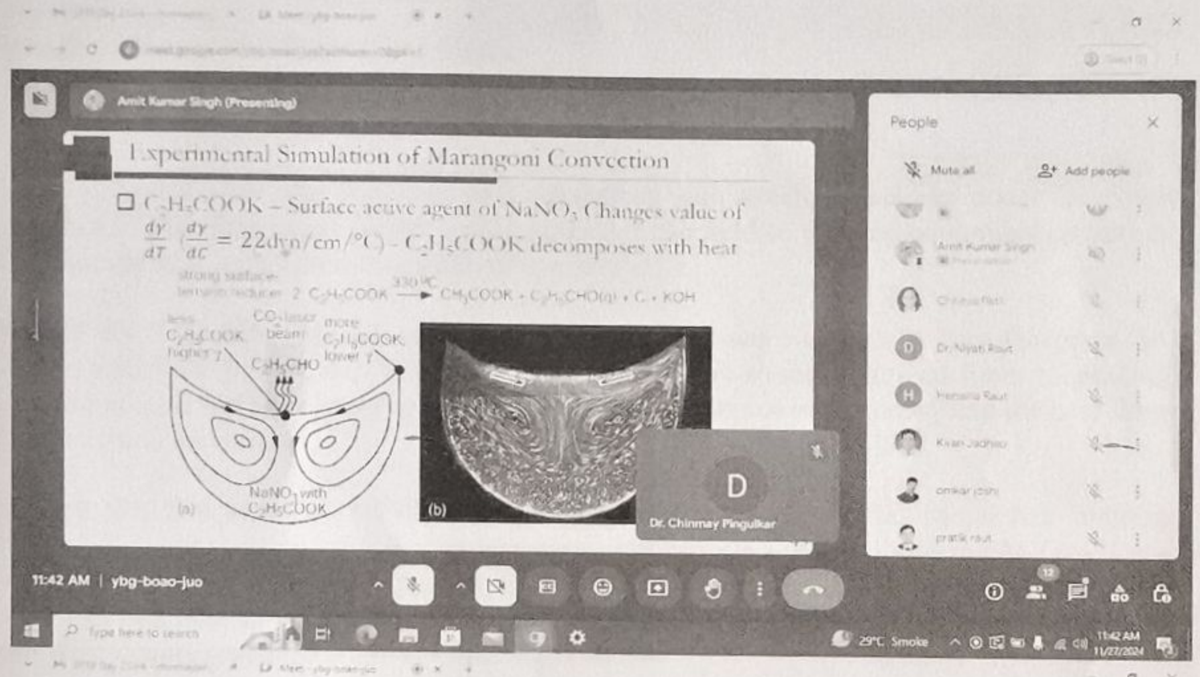
Vishnu Waman Thakur Charitable Trust's

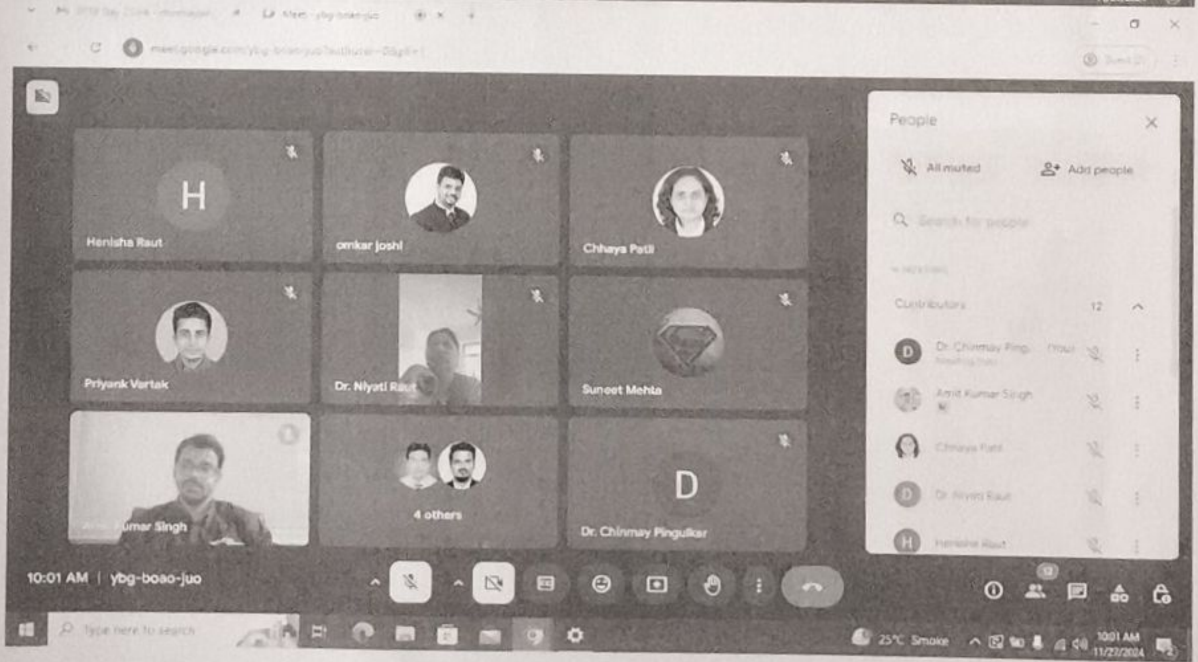
VIVA INSTITUTE OF TECHNOLOGY

APPROVED BY AICTE, NEW DELHI, DTE - GOVT. OF MAHARASHTRA AND AFFILIATED TO THE UNIVERSITY OF MUMBAI

At. Shirgaon, Post Virar, Tal. Vasai, Dist. Palghar - 401 305 Tel. 7770002542 Website: www.viva-technology.org

NAAC ACREDITATE WITH GRADE B++





Day 4: (28-11-2024): Hands on Training on WARP IN TIG 4001 Machine (GTAW), WARP WS 200 Machine (GMAW)

Speakers' Name: Mr. Shashikant Gupta

Session Overview

Day 4 provided a valuable hands-on training session with welding machines under the expert guidance of Mr. Shashikant Gupta, a professional in the field of welding equipment operation. The training was focused on two welding machines:

WARP IN TIG 4001 Machine (GTAW): Participants were trained in Gas Tungsten Arc Welding (GTAW) using the WARP IN TIG 4001. This session allowed them to practice creating precise welds on stainless steel sheets, with an emphasis on controlling the heat input and electrode handling.

WARP WS 200 Machine (GMAW): The session then moved to Gas Metal Arc Welding (GMAW) using the WARP WS 200 Machine. Participants learned about the MIG welding process, including wire feed control, arc length, and metal deposition rates. Mr. Gupta demonstrated how to adjust settings on both machines to achieve optimal weld bead quality and participants practiced welding under supervision.



Day 5: (29-11-2024): Hands on Training on Sigma Weld 170 TIG Machine, Training on Sigma Weld SW 400 mm Machine

Speakers' Name: Mr. Shashikant Gupta

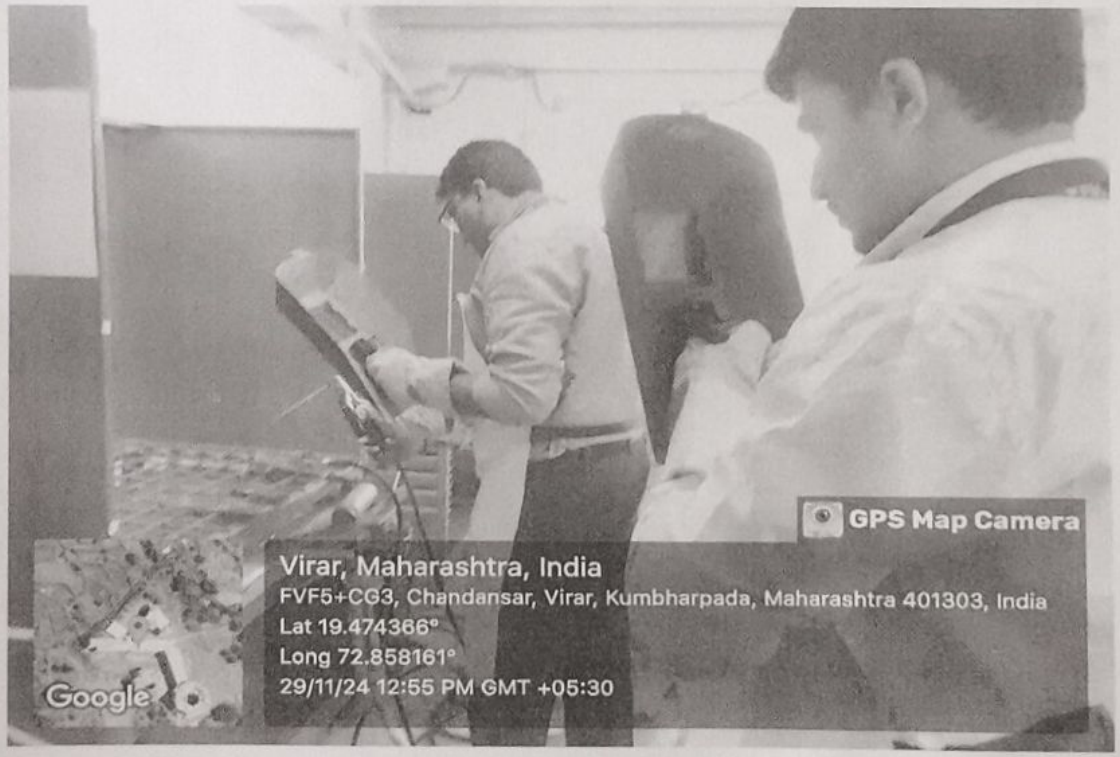
Session Overview

Building on the previous day's training, Day 5 provided further hands-on experience with advanced welding equipment:

Sigma Weld 170 TIG Machine: The focus was on refining the techniques learned on the TIG machine, using the Sigma Weld 170 to create precise welds on thin metal sheets. Participants practiced controlling the arc and improving their technique for aesthetic and strong welds.

Sigma Weld SW 400 mm Machine (GMAW): In addition to TIG welding, participants were introduced to a more powerful MIG welding machine, the Sigma Weld SW 400 mm. The focus was on thicker metal welding, such as in industrial pipe and structural welds.

This hands-on session was critical in providing participants with practical welding experience, allowing them to apply the concepts they had learned over the past few days.



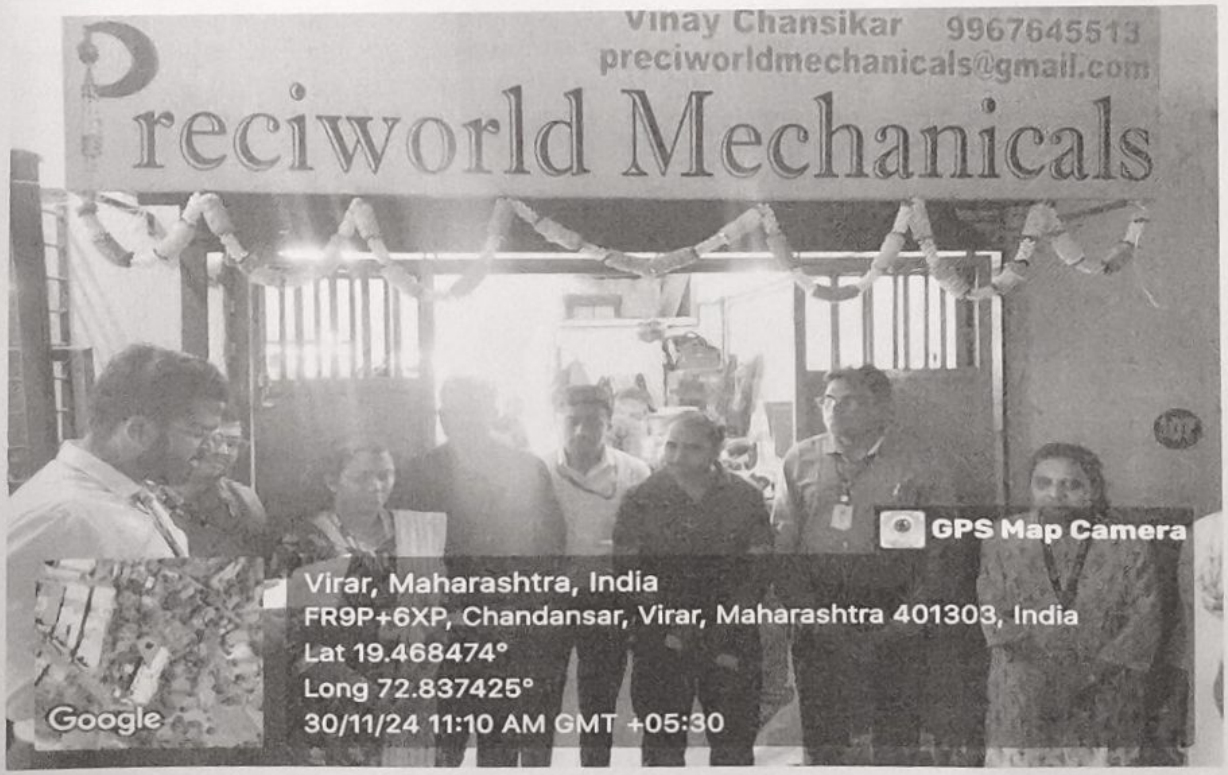
Day 6: (30-11-2024): Industrial Visit at Preciworld Mechanicals and Paresh Engineering Industries.

Overview

The final day of the program offered participants an excellent opportunity to witness welding processes in real-world industrial settings. Two industrial visits were arranged:

Preciworld Mechanicals: Mr. Vinay Chansikar, the CEO of Preciworld Mechanicals, guided participants through a tour of the company's facilities. Participants observed various welding processes employed in precision manufacturing, including TIG and MIG welding techniques used for creating complex assemblies.


GPS Map Camera
Virar, Maharashtra, India
11, East, Virar, Maharashtra 401303, India
Lat 19.469144°
Long 72.835621°
30/11/24 11:22 AM GMT +05:30
Google


Vinay Chansikar 9967645513
preciworldmechanicals@gmail.com
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GPS Map Camera
Virar, Maharashtra, India
FR9P+6XP, Chandansar, Virar, Maharashtra 401303, India
Lat 19.468474°
Long 72.837425°
30/11/24 11:10 AM GMT +05:30
Google

Paresh Engineering Industries: The visit to Paresh Engineering Industries, led by Mr. Parag Nerurkar, offered insights into welding practices used in the piping industry. Participants observed the welding of large-scale pipelines, understanding how pipe welding differs from sheet metal welding in terms of equipment, techniques, and challenges.

Both visits offered hands-on exposure to industry-standard practices, providing valuable context for the techniques learned during the training program.

Departmental Activity for Faculties

Academic Year 2024-25

Index

भारतीय तकनीकी शिक्षा संस्था
INDIAN SOCIETY FOR TECHNICAL EDUCATION

(Under the Societies' Registration Act XXI of 1860)

Dr. S.M. Ali
Executive Secretary

ISTE/Proceedings/STTP/FDP-SF-MAH-142/2024-25 December 02, 2024

Proceedings of Executive Secretary, ISTE

Sub. : Sanction to conduct full time Faculty Development Programme on Self-financing basis for the financial year 2024-2025.

Sanction is hereby accorded to the following institution for the conduct of the SF-STTP/FDP programme indicated below:

Name of Institution	:	Viva Institute of Technology Virar (E), Dist. Palghar - 401305	
Topic	:	**Microsoft Azure AI Engineer Associate**	
Name & Address of Coordinators	:	Mrs. Karishma Raout HOD	Mrs. Chandani Patel HOD
Duration	:	One Week	
Proposed dates	:	**09.12.2024 to 14 -12-2024**	

Terms and Conditions

The institution offering the Programmes should be approved by AICTE and must be Institutional Member of ISTE. Institutions having ISTE Faculty Chapter and Students Chapter shall be preferred. There will be no financial commitment on the part of ISTE on account of this programme. The fee of one **proposal is Rs. 1180/- (Incl. 18% GST)** paid by NEFT/RTGS along with proposal in the following ISTE Account **(Name of Account: ISTE Membership Fee, Account No: 6707247614 Bank: Indian Bank IFSC Code: IDIB000M089 Branch: Mehrauli Road New Delhi).**

1 This will be a Self Financing program of the duration of 1 week/2 weeks/4 weeks.

2 The registration fee of the participants may be fixed by the host institution.

3 ISTE Life membership is necessary for participants to attend SF programmes. Minimum 25 Participants are must for conducting the FDP/STTP. However, If any participant is not having life membership he/she may take the membership of ISTE before the commencement of the programme via web portal https://membership.isteonline.in

4 The final report as mentioned in these guidelines is to be submitted to ISTE within 15 days after completion of the Programme.

5 The institute should ensure that the Resource Persons should be well known personalities having thorough knowledge and he/she should be from an Institute or Industry.

-2/-

Vishnu Waman Thakur Charitable Trust's
VIVA Institute of Technology
Shirgaon, Virar (East), Dist: Palghar-401305, Maharashtra
Website: www.viva-technology.org

ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Date: 9th Dec to 14th Dec 2024

Organised by: Department of Master of Computer Applications, Department of Computer Engineering, Department of Computer Science and Engineering (AI & ML)

List of Participants

Sr. No.	Name of the Participant	ISTE Membership number
1	Karishma Raut	LM76834
2	Minakshi Gaonkar	LM138801
3	Vrunal Gharat	LM141462
4	Nivedha Raut	LM141433
5	Dr. Ashwini Save	LM76828
6	Sunita Naik	LM76825
7	Reshma Chaudhari	LM91569
8	Saniket Kudoo	LM107081
9	Bhavika Thakur	LM123741
10	Kirtida Naik	LM135215
11	Chandani Patel	LM107082
12	Pradnya Mhatre	LM107084
13	Nitesh Kumar	LM107086
14	Sonia Dubey	LM107088
15	Brijesh Joshi	LM140243
16	Kshiteeja Churi	LM141519
17	Poonam Jadhav	LM141526
18	Akshata Suraj Raut	LM138802
19	Prof. Krutika Vartak	LM107090

Sign of STTP Co-ordinators:

Prof. Karishma Raut

Dr. Ashwini Save

Prof. Chandani Patel

Vishnu Waman Thakur Charitable Trust's
VIVA Institute of Technology
Approved by AICTE, New Delhi, DTE, Government of Maharashtra
and Affiliated to University of Mumbai

Shri. Hitendra V. Thakur
President

Ms. Aparna P. Thakur
Secretary

Dr. Arun Kumar
Principal

Ref. No. : VIVA / VIT / 1421A / 2024-25

Date : 02.12.2024

CIRCULAR

All the faculty members are hereby informed that the ISTE approved one week STTP is organized by Department of Master of Computer Applications, Department of Computer Engineering, Department of Computer Science and Engineering (AI & ML) on the topic **"Microsoft Azure AI Engineer Associate"** from 9th Dec to 14th Dec 2024. All the faculties are requested to attend the same.

Detailed Schedule:

Date	Topic	Timing
9/12/2024	Get Started with Azure AI Services	9am to 11am
	Analyze Images with Azure AI Vision	11:15 am to 1pm
	Read Text in Images	1:30pm to 4pm
10/12/2024	Classify images with a Azure AI Vision custom model	9am to 11am
	Analyze Text	11:15 am to 1pm
	Create a Question Answering Solution	1:30pm to 4pm
11/12/2024	Create a language understanding model with the Language service	9am to 11am
	Recognize and synthesize speech	11:15 am to 1pm
	Integrate Azure OpenAI into your app	1:30pm to 4pm
12/12/2024	Utilize prompt engineering in your app	9am to 1pm
	Use your own data with Azure OpenAI	1:30pm to 4pm
13/12/2024	Create a Custom Skill for Azure AI Search	9am to 1pm
	Extract Data from Forms	1:30pm to 3:30pm
	Feedback 1	3:30pm to 4pm
14/12/2024	Real Time Applications of AI services	9am to 2:30pm
	Feedback 2 and Quiz	2:30pm to 4pm

Prof. Karishma Raut
HOD of CSE(AI&ML)

Dr. Ashwini Save
HOD of Computer Engg.

Prof. Chandani Patel
HOD of MCA

Principal

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ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Date: 9th Dec to 14th Dec 2024

Organized by: Department of Master of Computer Applications, Department of Computer Engineering, Department of Computer Science and Engineering (AI & ML)

List of Participants

Sr. No.	Name of the Participant	ISTE Membership number	Quiz Score Out of (10)
1	Karishma Raut	LM76834	09
2	Minakshi Gaonkar	LM138801	09
3	Vrunal Gharat	LM141462	08
4	Nivedha Raut	LM141433	10
5	Dr. Ashwini Save	LM76828	07
6	Sunita Naik	LM76825	10
7	Reshma Chaudhari	LM91569	08
8	Saniket Kudoo	LM107081	08
9	Bhavika Thakur	LM123741	10
10	Kirtida Naik	LM135215	08
11	Chandani Patel	LM107082	09
12	Pradnya Mhatre	LM107084	09
13	Nitesh Kumar	LM107086	10
14	Sonia Dubey	LM107088	10
15	Brijesh Joshi	LM140243	09
16	Kshiteeja Churi	LM141519	08
17	Poonam Jadhav	LM141526	08
18	Akshata Suraj Raut	LM138802	08
19	Prof. Krutika Vartak	LM107090	07

Sign of STTP Co-ordinators:

KRaut

Prof. Karishma Raut

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Website: www.viva-technology.org

ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Attendance Record

DAY 1: 9th Dec 2024

Topic: Azure AI services

Sr. No.	Name of the Participant	Morning Session	Afternoon Session
1	Karishma Raut		
2	Minakshi Gaonkar		
3	Vrunal Gharat		
4	Nivedha Raut		
5	Dr. Ashwini Save		
6	Sunita Naik		
7	Reshma Chaudhari		
8	Saniket Kudoo		
9	Bhavika Thakur		
10	Kirtida Naik		
11	Chandani Patel		
12	Pradnya Mhatre		
13	Nitesh Kumar		
14	Sonia Dubey		
15	Brijesh Joshi		
16	Kshiteeja Churi		
17	Poonam Jadhav		
18	Akshata Suraj Raut		
19	Shaad Ajij Shaikh		
20	Kranti Narayan Gule		
21	Prof. Krutika Vartak		
22	Chinmay Patre		

Name & Sign of Guest: Mr. Abhay Shashikant Dhanmehar

Sign of STTP Co-ordinators:

Prof. Karishma Raut | Dr. Ashwini Save | Prof. Chandani Patel

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ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Attendance Record

DAY 2: 10th Dec 2024

Topic: Azure AI Vision

Sr. No.	Name of the Participant	Morning Session	Afternoon Session
1	Karishma Raut		
2	Minakshi Gaonkar		
3	Vrunal Gharat		
4	Nivedha Raut		
5	Dr. Ashwini Save		
6	Sunita Naik		
7	Reshma Chaudhari		
8	Saniket Kudoo		
9	Bhavika Thakur		
10	Kirtida Naik		
11	Chandani Patel		
12	Pradnya Mhatre		
13	Nitesh Kumar		
14	Sonia Dubey		
15	Brijesh Joshi		
16	Kshiteeja Churi		
17	Poonam Jadhav		
18	Akshata Suraj Raut		
19	Shaad Ajij Shaikh		
20	Kranti Narayan Gule		
21	Prof. Krutika Vartak		
22	Chinmay Patre		

Name & Sign of Guest: Mr. Abhay Shashikant Dharmeher

Sign of STTP Co-ordinators:

Prof. Karishma Raut | Dr. Ashwini Save | Prof. Chandani Patel

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ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Attendance Record

DAY 3: 11th Dec 2024

Topic: Azure AI - Language service

Sr. No.	Name of the Participant	Morning Session	Afternoon Session
1	Karishma Raut		
2	Minakshi Gaonkar		
3	Vrunal Gharat		
4	Nivedha Raut		
5	Dr. Ashwini Save		
6	Sunita Naik		
7	Reshma Chaudhari		
8	Saniket Kudoo		
9	Bhavika Thakur		
10	Kirtida Naik		
11	Chandani Patel		
12	Pradnya Mhatre		
13	Nitesh Kumar		
14	Sonia Dubey		
15	Brijesh Joshi		
16	Kshiteeja Churi		
17	Poonam Jadhav		
18	Akshata Suraj Raut		
19	Shaad Ajij Shaikh		
20	Kranti Narayan Gule		
21	Prof. Krutika Vartak		
22	Chinmay Patre		

Name & Sign of Guest: Mr. Abhay Shashikant Dhanmehar

Sign of STTP Co-ordinators:

Prof. Karishma Raut | Dr. Ashwini Save | Prof. Chandani Patel

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ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Attendance Record

DAY 4: 12th Dec 2024

Topic: Prompt Engineering

Sr. No.	Name of the Participant	Morning Session	Afternoon Session
1	Karishma Raut		
2	Minakshi Gaonkar		
3	Vrunal Gharat		
4	Nivedha Raut		
5	Dr. Ashwini Save		
6	Sunita Naik		
7	Reshma Chaudhari		
8	Saniket Kudoo		
9	Bhavika Thakur		
10	Kirtida Naik		
11	Chandani Patel		
12	Pradnya Mhatre		
13	Nitesh Kumar		
14	Sonia Dubey		
15	Brijesh Joshi		
16	Kshiteeja Churi		
17	Poonam Jadhav		
18	Akshata Suraj Raut		
19	Shaad Ajij Shaikh		
20	Kranti Narayan Gule		
21	Prof. Krutika Vartak		
22	Chinmay Patre		

Name & Sign of Guest: Mr. Abhay Shashikant Dharmeher

Sign of STTP Co-ordinators:

Prof. Karishma Raut | Dr. Ashwini Save | Prof. Chandani Patel

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Website: www.viva-technology.org

ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Attendance Record

DAY 5: 13th Dec 2024

Topic: Azure AI Search

Sr. No.	Name of the Participant	Morning Session	Afternoon Session
1	Karishma Raut		
2	Minakshi Gaonkar		
3	Vrunal Gharat		
4	Nivedha Raut		
5	Dr. Ashwini Save		
6	Sunita Naik		
7	Reshma Chaudhari		
8	Saniket Kudoo		
9	Bhavika Thakur		
10	Kirtida Naik		
11	Chandani Patel		
12	Pradnya Mhatre		
13	Nitesh Kumar		
14	Sonia Dubey		
15	Brijesh Joshi		
16	Kshiteeja Churi		
17	Poonam Jadhav		
18	Akshata Suraj Raut		
19	Shaad Ajij Shaikh		
20	Kranti Narayan Gule		
21	Prof. Krutika Vartak		
22	Chinmay Patre		

Name & Sign of Guest: Mr. Abhay Shashikant Dhanmeher

Sign of STTP Co-ordinators:

Prof. Karishma Raut | Dr. Ashwini Save | Prof. Chandani Patel

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ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Attendance Record

DAY 6: 14th Dec 2024

Topic: Real time Applications of AI services

Sr. No.	Name of the Participant	Morning Session	Afternoon Session
1	Karishma Raut		
2	Minakshi Gaonkar		
3	Vrunal Gharat		
4	Nivedha Raut		
5	Dr. Ashwini Save		
6	Sunita Naik		
7	Reshma Chaudhari		
8	Saniket Kudoo		
9	Bhavika Thakur		
10	Kirtida Naik		
11	Chandani Patel		
12	Pradnya Mhatre		
13	Nitesh Kumar		
14	Sonia Dubey		
15	Brijesh Joshi		
16	Kshiteeja Churi		
17	Poonam Jadhav		
18	Akshata Suraj Raut		
19	Shaad Ajij Shaikh		
20	Kranti Narayan Gule		
21	Prof. Krutika Vartak		
22	Chinmay Patre		

Name & Sign of Guest: Navneet C. Maurya

Sign of STTP Co-ordinators:

Prof. Karishma Raut | Dr. Ashwini Save | Prof. Chandani Patel

Quiz on ISTE Approved One week STTP on "Microsoft Azur AI Engineer Associate"

Organized by: Department of Master of Computer Applications, Department of Computer Engineering, Department of Computer Science and Engineering (AI & ML)
Scheduled on: 9th Dec to 14th Dec 2024

* Indicates required question

1. Email *

_____

2. Name of the Faculty

_____

3. Name of the Department *

_____

Answer the Questions given below:

4. **1) Which of the cognitive Service API would help in:** * 1 point
- Scanning text to identify personal data
- Using a Custom list in-line with content policies to block or allow content.

Mark only one oval.

- ◯ Computer Vision
- ◯ Text Analytics
- ◯ Text Protector
- ◯ Content Moderator

5. **2) In order to configure a bot to connect to a specific channel, you execute the following steps in Azure:** * 1 point

Step 1: Log in to Azure Portal.
Step 2: Choose the bot for configuration.
Step 3: In Bot Management, select Channels.
Step 4: Select the required channel to integrate Bot into Mobile or Web Application.

Which channel would you use to meet the requirements as given in Step 4 above? [choose one option]

Mark only one oval.

- ◯ Slack
- ◯ Microsoft Teams
- ◯ Direct Line
- ◯ Office 365 email

6. **3) A company using traditional online analytical systems is performing analytics to identify fraudulent mobile calls. However, the traditional analytical system is taking long hours to perform the data transformation and data analysis. Eventually, the identification of fraud calls is cost-inefficient and is taking much more time.** * 1 point

Which of the below 2 fully managed Azure services can help the company reduce the cost for data ingestion and eventually perform real-time analytics?

Check all that apply.

- ☐ Event Hub
- ☐ Azure Machine Learning
- ☐ Azure Functions
- ☐ Stream Analytics

7. **4) In Azure cognitive search, an indexer for text content simplifies the complex process of loading an index by providing a mechanism for connecting to and reading text from fields in a data source. It serializes that content as JSON documents and hands-off those documents to the search engine for indexing.** * 1 point

To create an indexer for text content, what are the required properties that you need? (select any 2 answer choices)

Check all that apply.

- [ ] dataSourceName
- [ ] searchIndexerClient
- [ ] name
- [ ] fieldMappings

8. **5) Which of the below cognitive service is NOT a Language Cognitive Service offering from Azure?** * 1 point

Mark only one oval.

- ◯ Language Understanding
- ◯ Text Analytics
- ◯ Speech Service
- ◯ Translator

9. **6) A retail pharmacy giant operating for the last 80 years and having 2000+ retail stores plans to modernize its business to Lower TCO by moving its on-premises data warehouse for inventory management to the cloud.Ensure that analytics are generated efficiently and decision-making is improved.The solution can scale on-demand.** * 1 point

Which Azure offering can help you in setting up a private connection from on-prem to Azure?

Mark only one oval.

- ◯ Azure Databricks
- ◯ Azure Express route
- ◯ Azure ConnectDirect
- ◯ Container Instances

10. **7) You have a requirement to identify and block Video Content that is found to have adult content. You use Video Indexer or Video analyzer for Media in Azure for this purpose. Which element would you choose to get the required insights in the video and time ranges that show the appearance of these insights?** * 1 point

Mark only one oval.

- ◯ sentiments
- ◯ visualContentModeration
- ◯ emotions
- ◯ shots

11. **8) Which of the below cognitive service is NOT a Language Cognitive Service offering from Azure?** * 1 point

Mark only one oval.

- ◯ Language Understanding
- ◯ Text Analytics
- ◯ Speech Service
- ◯ Translator

12. **9) You have a requirement to identify and block Video Content that is found to have adult content. You use Video Indexer or Video analyzer for Media in Azure for this purpose. Which element would you choose to get the required insights in the video and time ranges that show the appearance of these insights?** * 1 point

Mark only one oval.

- ◯ sentiments
- ◯ visualContentModeration
- ◯ emotions
- ◯ shots

13. **10) A developer is working on building a "Deep Search AI solution" for a video library company. The solution requires insights extraction from video to improve the user video searching experience. The solution also requires enabling users to "create content for social media" based on the insights from their videos.** * 1 point

Which Azure cognitive service should the developer use?

Mark only one oval.

- ◯ Face API
- ◯ Computer vision
- ◯ Video Indexer
- ◯ Bing Video Search

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Feedback Form for ISTE Approved One Week STTP on " **Microsoft Azure AI Engineer Associate** " on 13-12-2024

Name of the Participant (As required on certificate)	Name of College/Institute/ Organization	How would you rate the sessions?	How relevant and helpful the sessions were?	Have these sessions fulfilled your expectations?	How likely are you to apply the skills/knowledge gained in your teaching?	How effective were the lab facilities/ ICT tools in enhancing your learning experience?	Any Queries or Suggestions?
Reshma Ravindra Chaudhari	VIVA institute of technology	5	5	5	5	5	NULL
Karishma Sachin Raut	VIVA Institute of Technology	5	5	4	5	5	-
Shaad Ajij Shaikh	Viva Institute of Technology	5	5	5	5	5	-
Bhavika P. Thakur	VIVA Institute of Technology	4	5	4	5	5	-
Dr. Ashwini Save	VIVA Institute of Technology	5	5	5	5	5	No
Prof. Pradnya A. Mhatre	VIVA Institute of Technology	5	5	5	5	5	-
Sonia Dubey	VIVA institute of technology	4	4	4	4	4	NA
SANIKET M KUDOO	Viva Institute of technology	5	5	4	5	5	-
Nivedha Kailas Raut	VIVA Institute of Technology	5	5	5	5	5	None
Vrunal Sandesh Gharat	Viva institute of technology	5	5	5	5	5	-
AKSHATA SURAJ RAUT	Viva Institute of Technology	4	5	5	5	5	NA
Nitesh Kumar	VIVA Institute of Technology	5	5	5	5	5	NA
Poonam Swapnil Jadhav	Viva institute of technology	4	4	4	4	5	Good session
Minakshi Vikas Gaonkar	VIVA Institute of Technology	4	4	4	4	4	NA
Chandani Patel	VIVA INSTITUTE OF TECHNOLOGY	4	5	4	5	5	-
Dr Brijesh Yatindra Joshi	VIVA Institute of Technology	5	5	5	5	5	Arrange such sessions on regular basis
Sunita Vinay Naik	VIVA INSTITUTE OF TECHNOLOGY	5	5	5	5	5	Well organised
Minakshi Vikas Gaonkar	VIVA Institute of Technology	4	4	4	4	4	NA

BRaut

Feedback Form for ISTE Approved One Week STTP on " Microsoft Azure AI Engineer Associate " on 14/12/2024

Name of the Participant (As required on certificate)	Name of College/Institute/ Organization	How would you rate the sessions?	How relevant and helpful the sessions were?	Have these sessions fulfilled your expectations?	How likely are you to apply the skills/knowledge gained in your teaching?	How effective were the lab facilities/ ICT tools in enhancing your learning experience?	Any Queries or Suggestions?
Reshma Ravindra Chaudhari	VIVA institute of technology	5	5	5	5	5	NA
Karishma Sachin Raut	VIVA Institute of Technology	5	5	5	5	5	None
Shaad Ajij Shaikh	Viva Institute of Technology	5	5	5	5	5	NA
Bhavika P. Thakur	VIVA Institute of Technology	5	5	5	5	4	knowledgeable
Dr. Ashwini Save	VIVA Institute of Technology	5	5	5	5	5	No
Prof. Pradnya A. Mhatre	VIVA Institute of Technology	5	5	5	5	5	Informative
Sonia Dubey	VIVA institute of technology	4	4	4	4	4	NA
SANIKET M KUDOO	Viva Institute of technology	5	5	5	5	5	No
Nivedha Kailas Raut	VIVA Institute of Technology	5	5	5	5	5	None
Vrunal Sandesh Gharat	Viva institute of technology	5	5	5	5	5	-
AKSHATA SURAJ RAUT	Viva Institute of Technology	5	5	5	5	4	NA
Nitesh Kumar	VIVA Institute of Technology	5	5	5	5	5	NA
Poonam Swapnil Jadhav	Viva institute of technology	4	4	5	4	4	Good session
Minakshi Vikas Gaonkar	VIVA Institute of Technology	4	4	4	4	4	NA
Chandani Patel	VIVA INSTITUTE OF TECHNOLOGY	5	5	5	5	4	Arrange such sessions on regular basis
Dr Brijesh Yatindra Joshi	VIVA Institute of Technology	5	5	5	5	5	Need more such sessions
Sunita Vinay Naik	VIVA INSTITUTE OF TECHNOLOGY	5	5	5	5	5	informative
Minakshi Vikas Gaonkar	VIVA Institute of Technology	4	4	4	4	4	Nice information

Vishnu Waman Thakur Charitable Trust's
VIVA Institute of Technology
Shirgaon, Virar (East), Dist: Palghar-401305, Maharashtra
Website: www.viva-technology.org

Report on STTP

Topic Name:	Mumbai University & ISTE approved one week STTP on **"Microsoft Azur AI Engineer Associate"**
Organizing Departments:	Department of Master of Computer Applications(MCA), Department of Computer Engineering, Department of Computer Science and Engineering (AI & ML)
Name of the Guest Speaker:	Mr. Abhay Dhanmeher (Trainer in ICT Academy) Mr. Navneet Maurya (Senior developer at Parle Agro)
Date:	9th Dec to 14th Dec 2024
Time:	9am to 4pm
No. of Participants:	21

Program Summary/Details:

The Mumbai university and ISTE-approved offline One Week Short Term Training Program (STTP) on "Microsoft Azur AI Engineer Associate," organized by Department of Master of Computer Applications(MCA), Department of Computer Engineering, Department of Computer Science and Engineering (AI & ML) of VIVA Institute of Technology, Virar (W) in association with ICT academy.

This program is designed to empower educators with the skills to design, develop, and deploy AI solutions using Microsoft Azure. Participants will gain hands-on experience with Azure AI services, including natural language processing, computer vision, and responsible AI principles, enabling them to prepare students for industry-ready AI certifications. The program emphasizes practical knowledge and application, ensuring faculty members can integrate Azure-based AI solutions into their teaching methodologies effectively.

Day 1: 9th Dec 2024

The first day of the training program commenced with an **Introduction to AI on Azure**, where participants were introduced to the capabilities and services offered by Microsoft Azure in the realm of Artificial Intelligence. The session covered key concepts and foundational knowledge, setting the stage for deeper exploration into AI technologies.

The second part of the day focused on **Analyzing Images with Azure AI Vision**. Participants were shown how to use Azure's Computer Vision API to analyze and extract meaningful information from images. This included recognizing objects, categorizing images, and understanding scene context, which are fundamental skills for working with visual data in AI applications.

The final topic of the day, **Reading Text in Images**, explored Azure's Optical Character Recognition (OCR) capabilities. This feature allows AI to detect and extract printed or handwritten text from images, which is especially useful in scenarios like document processing, signage interpretation, and digitizing physical data.

The overall goal of the session was to familiarize participants with practical applications of AI and machine learning tools on the Azure platform, especially in the domain of computer vision and image analysis, preparing them for more advanced topics and hands-on labs in the coming days.

Day 2: 10th Dec 2024

The second day of the training program began with a session on **Classifying Images with an Azure AI Vision Custom Model**. In this segment, participants learned how to create custom image classification models using Azure's Custom Vision service. The session covered the steps of training a model to classify images into specific categories based on user-defined tags. Participants gained hands-on experience in building, training, and evaluating these models, enabling them to customize AI solutions for specific image-related tasks.

Next, the focus shifted to **Analyzing Text**. In this section, participants explored Azure's Text Analytics service, learning how to extract valuable insights from textual data. They were introduced to key features such as sentiment analysis, key phrase extraction, entity recognition, and language detection. This part of the training emphasized how to leverage AI to process and analyze large volumes of text, making it easier to derive actionable insights for various applications like customer feedback analysis, content categorization, and more.

The final topic of the day was **Creating a Question Answering Solution**. In this session, participants learned how to build an intelligent question-answering system using Azure's Cognitive Services. They were shown how to use pre-built models to create solutions that can understand natural language questions and provide relevant answers from a knowledge base, documents, or web content. The session covered how to integrate this AI capability into chatbots, helpdesks, and other interactive systems to improve user experiences and streamline information retrieval.

By the end of the day, participants had a deeper understanding of Azure's AI capabilities in image classification, text analysis, and intelligent question answering, as well as practical experience in applying these tools to real-world scenarios.

Day 3: 11th Dec 2024

The third day of the training program began with a session on **Creating a Language Understanding Model with the Language Service**. In this segment, participants were introduced to Azure's **Language Understanding (LUIS)** service. They learned how to build and train custom language understanding models to interpret and process natural language inputs. The focus was on defining intents, entities, and utterances to create intelligent applications that can understand and respond to user queries in a more human-like manner. This session provided a hands-on experience in building language models that can be integrated into various apps, such as chatbots and virtual assistants.

Next, the training shifted to **Recognizing and Synthesizing Speech**. Participants explored Azure's **Speech Service**, which includes capabilities for speech-to-text (recognizing spoken words) and text-to-speech (synthesizing spoken output from text). The session covered key use cases, such as converting spoken language into written text for transcription, enabling voice commands for applications, and generating natural-sounding speech from written content. Participants also had the opportunity to experiment with customizing speech models to recognize specific accents, languages, and voices, as well as adding features like real-time speech translation.

The final topic of the day was **Integrating Azure OpenAI into Your App**. Here, participants learned how to integrate advanced AI models from **Azure OpenAI** into their applications. The session focused on using models like GPT for natural language processing tasks such as text generation, conversation, summarization, and sentiment analysis. Participants were shown how to set up and interact with the OpenAI API, enabling them to add cutting-edge AI capabilities to their own projects. Real-world use cases included building intelligent chatbots, content generation tools, and applications for customer support or data analysis.

By the end of the day, participants had gained valuable hands-on experience with Azure's language and speech services, as well as practical knowledge on how to integrate Azure OpenAI's powerful capabilities into their apps to create intelligent, conversational user experiences.

Day 4: 12th Dec 2024

The fourth day of the training program began with a session on **Utilizing Prompt Engineering in Your App**. In this segment, participants learned about the concept of **prompt engineering**, which is the art and science of crafting effective prompts to get the desired responses from AI models, particularly those from **Azure OpenAI**. The focus was on designing prompts that can help guide the AI to provide accurate, contextually relevant, and useful outputs. Participants explored how to fine-tune their prompts for various tasks, such as question-answering, content generation, summarization, and more. They also experimented with using different prompt structures and techniques to improve the AI's performance in specific scenarios, learning how small adjustments in wording can lead to significantly better results.

Following that, the training covered **Using Your Own Data with Azure OpenAI**. This session emphasized how to leverage custom datasets to enhance the capabilities of the **Azure OpenAI models**. Participants learned how to fine-tune pre-trained models with their own data, allowing them to tailor the AI to their specific use cases and business requirements. The session covered best practices for data preparation, training, and integration, enabling participants to create more personalized and relevant AI-powered applications. They were shown how to upload and manage data in the Azure environment, and how to use that data to further improve model accuracy and performance for tasks like classification, generation, and summarization.

By the end of the day, participants had a solid understanding of how to work with **Azure OpenAI's advanced features**. They gained the skills to effectively craft prompts for their applications, as well as how to integrate their own data to fine-tune the models and make them more customized to their specific needs. This hands-on experience set them up for building more intelligent, data-driven applications in the real world.

Day 5: 13th Dec 2024

The fifth day of the training program commenced with a session on **Creating a Custom Skill for Azure AI Search**. In this segment, participants learned how to extend the capabilities of **Azure Cognitive Search** by developing and integrating custom skills. Azure AI Search allows users to enrich their search experiences with AI-powered content understanding, and custom skills let them tailor the search process to specific business needs. Participants were introduced to the concept of AI enrichment pipelines, where they could create custom processing steps to extract valuable information from unstructured data, such as documents or images. They gained hands-on experience in building and integrating these custom skills to enhance search relevance, improve result ranking, and automate complex data extraction workflows.

The next topic of the day was **Extracting Data from Forms** using Azure's **Form Recognizer** service. This session focused on how to automate data extraction from structured and semi-structured forms, such as invoices, receipts, surveys, and contracts. Participants learned how to use the pre-built models in **Form Recognizer** to quickly extract key fields like dates, amounts, and names from documents. They also explored how to train custom models to handle more specialized or complex form layouts. The session covered the process of scanning, analyzing, and structuring the data to be used for further processing, reducing the manual effort of data entry and improving efficiency in document-based workflows.

By the end of the day, participants had practical experience in **creating custom skills** for AI-powered search applications and **extracting structured data** from various types of forms. These skills are crucial for automating document management tasks, improving search functionalities, and integrating AI-

driven insights into business workflows. Participants were now equipped with the knowledge to build advanced search solutions and automate document processing in their own applications.

Day 6: 14th Dec 2024

The sixth day of the training program commenced with a session on **Real-Time Applications of AI Services**. This session aimed to demonstrate how the various AI services covered in the previous days could be applied to real-world scenarios, emphasizing their practical utility and impact across industries.

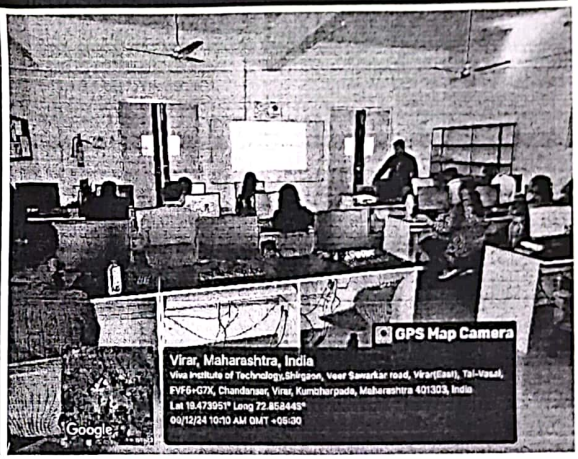
Throughout the day, participants engaged in hands-on labs where they got to implement real-time AI models and integrate them into applications. They experimented with using Azure's AI tools to build a simple real-time video analysis app, integrate speech-to-text for live transcription, and implement a personalized recommendation engine for e-commerce scenarios.

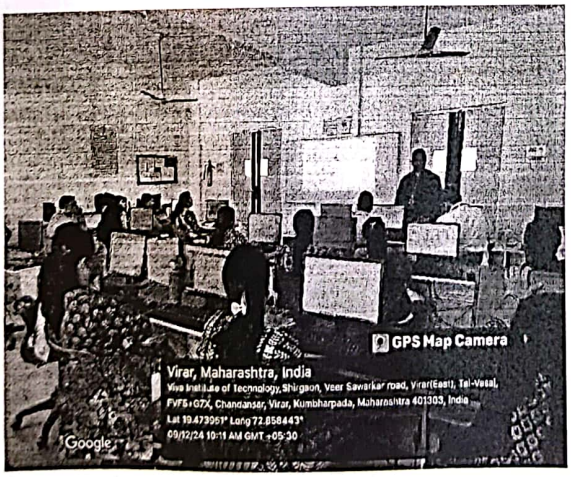
By the end of the day, participants had a deeper understanding of how to leverage **Azure AI services** to create dynamic, real-time applications that can respond to user input, process data in real time, and provide instant, actionable insights across various business domains.

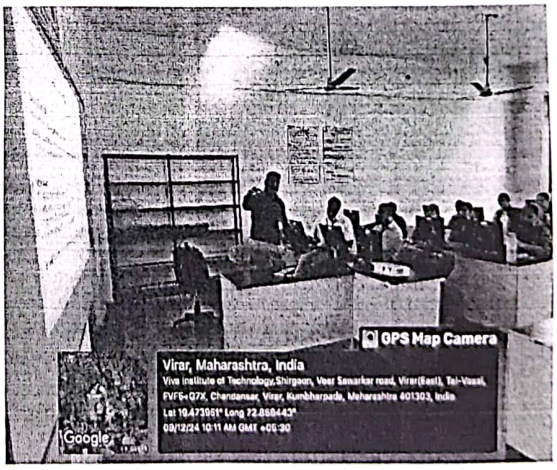
In conclusion, The **Short-Term Training Program (STTP)** on **Microsoft Azure AI Engineer Associate** has been a comprehensive, hands-on journey into the world of Artificial Intelligence, focusing on the practical applications and tools available on the **Azure platform**. Over the course of the training, participants gained in-depth knowledge and experience in various AI-related technologies, which are becoming increasingly vital in modern business and technological landscapes. The program also highlighted the growing importance of cloud-based AI platforms like **Azure**, enabling businesses to scale and adapt to the rapidly changing technological landscape. Whether it's **improving customer experiences**, **automating workflows**, or **enhancing decision-making processes**, the ability to effectively integrate AI into applications has become a valuable skill in today's digital economy.

We encourage all participants to continue building on the foundation laid during this program and explore further opportunities for learning and growth in the field of AI:

Photos:







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PATRONS

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Prof. Minakshi Gaonkar Prof. Reshma Chaudhari
Prof. Nitesh Kumar

REGISTRATION

- ISTE Members: No registration fee. However, online registration is mandatory.
- Non-ISTE Members: 300/- per participant
- Last date of online registration: 4th December 2024

REGISTRATION LINK

Click here:
https://tinyurl.com/ISTE-ICT-FDP-2024-25

COURSE DESCRIPTION

This program is designed to empower educators with the skills to design, develop, and deploy AI solutions using Microsoft Azure. Participants will gain hands-on experience with Azure AI services, including natural language processing, computer vision, and responsible AI principles, enabling them to prepare students for industry-ready AI certifications. The program emphasizes practical knowledge and application, ensuring faculty members can integrate Azure-based AI solutions into their teaching methodologies effectively.

OBJECTIVE

1. Understand the fundamentals of Azure AI services and their application in building intelligent solutions.
2. Develop and manage AI solutions using computer vision, natural language processing, and knowledge mining.
3. Learn to implement responsible AI principles for ethical and compliant AI development.
4. Gain expertise in using Azure tools and services to create scalable, secure, and efficient AI applications.
5. Equip educators with the knowledge to guide students toward achieving the Microsoft Certified: Azure AI Engineer Associate certification.

RESOURCE PERSON

- MR. ABHAY DHANMEHER,
  (TRAINER, ICT ACADEMY)
- MR. NAVNEET MAURYA,
  (SR. SOFTWARE DEVELOPER, PARLE AGRO)

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ACCREDITED by NAAC with "B++" Grade

UNIVERSITY OF MUMBAI & ISTE APPROVED ONE WEEK SHORT TERM TRAINING PROGRAM ON

Microsoft Azure AI Engineer Associate

9TH TO 14TH DECEMBER 2024

ICTACADEMY

ORGANIZED BY

Department of Master of Computer Applications
Department of Computer Engineering
Department of CSE (AI & ML)

VIVA INSTITUTE OF TECHNOLOGY

ABOUT THE INSTITUTE

VIVA INSTITUTE OF TECHNOLOGY is approved by AICTE, New Delhi, and DTE, Maharashtra State, and is affiliated with the University of Mumbai. The Institute is awarded a 'B++' grade by the National Assessment and Accreditation Council (NAAC). The institute nurtures a unique education system for creating dynamic leaders for the corporate sector, entrepreneurs, academicians, researchers, and professionals who contribute to the development of society and the nation. This institute believes in empowering young students through a rigorous curriculum, student participation in R & D, a mentor system, value-added programs, and a solid industrial interface.