Criteria Number: 6 **Criteria Name:** Governance, Leadership and Management

Sub criteria Number: 6.3 **Sub-criteria Name:** Faculty Empowerment Strategies

6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

6.3.3.1. Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes(MDPs) professional development /administrative training programs during the last five years

Year	2022-23	2021-22	2020-21	2019-20	2018-19
No. of teachers	**79**	**54**	**64**	**65**	**75**

6.3.3.2 Total number of non-teaching staff year wise during the last five years

Year	2022-23	2021-22	2020-21	2019-20	2018-19
No. of non-teaching staff	**4**	**-**	**-**	**-**	**-**

The documentary evidence can be accessed by clicking on the link given.

Document	Academic Year	Link
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	2022-23	Supporting Document
	2020-21	Supporting Document
	2019-20	Supporting Document
	2018-19	Supporting Document

2022-23

Dates (From-to) (DD-MM-YYYY)	Title of the FDP/ Professional Development/ Administrative Training Program	Page No.
2022-23		
From 27-6-2022 to 8-7-2022	STTP on Artificial Intelligence towards Data Science Applications	1
From 8-7-2022 to 13-7-2022	STTP on Reforms and Innovation in Examination System	11
From 12-6-2023 to 17-6-2023	STTP on MLOPS: A Modern Approach to Design, Develop and Operate Machine Learning Models	23
From 26-7-2023 to 1-7-2023	SDP on Industry 4.0: Paradigm Shift in Technology	40

About VCET

Vidyavardhini means a body committed to enhancement of knowledge. Vidyavardhini Society was established as a registered society in 1970 by Late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July 1994. The Institute is affiliated to the University of Mumbai for the four-year degree program leading to the Degree of Bachelor of Engineering. The Institute is accredited by NAAC. Four programs of the Institute were also accredited by NBA for period of three years from 2022 to 2025.

About IT Department

Department of Information Technology was established in the year 1999. The Department has an intake of 60 students. The Department boasts of a qualified, dynamic and technologically sound faculty with a good teaching and industrial experience. The Department consists of 9 well-equipped, state-of-the-art labs with facilities conducive for growth of the students. The sincere efforts by the staff and graduating students each year bring laurels to the Department by their academic and placement records.

Patrons

Chief Patron

- **Shri. Vikas Vartak,** President, Vidyavardhini

Patrons

- **Shri. Arun Vartak ,** Chairman, Vidyavardhini
- **Shri. Shantaram Jadhav,** Vice President, Vidyavardhini
- **Shri. Pandurang Naik,** Vice President, Vidyavardhini
- **Shri. P. D. Kodolikar,** Vice President, Vidyavardhini
- **Shri. Bhausaheb Mohol,** Secretary, Vidyavardhini
- **Shri. Hasmukhbhai Shah,** Treasurer, Vidyavardhini
- **Dr. Harish V. Vankudre,** Principal, VCET

Conveners

- **Dr. Ashish Vanmali**
  Associate Professor and HOD – IT, VCET
- **Prof. Chandan Kolvankar**
  Assistant Professor, Dept. of IT, VCET

Coordinators

- **Prof. Anagha Patil**
  Assistant Professor
  E-mail: anagha.patil@vcet.edu.in
  Mobile: 90040 78402
- **Prof. Bharati Gondhalekar**
  Assistant Professor
  E-mail: bharati.gondhalekar@vcet.edu.in
  Mobile: 94233 65470

Vidyavardhini's College of Engineering & Technology

K.T. Marg, Vasai Road (West), Dist. Palghar – 401202, Maharashtra

Four programs accredited by NBA

ISTE Approved
Two weeks Online STTP on

Artificial Intelligence Towards Data Science Applications

(ISTE/Proceedings/Online STTP-SF-MAH-03/2022-23)

27th June to 8th July 2022

Organized by

Department of Information Technology

Vidyavardhini's College of Engineering & Technology

Visit: https://vcet.edu.in/STTP/
E-mail: sttp.aids@vcet.edu.in

Course Objectives

- To expose participants to cognitive skills of Artificial intelligence.
- To orient participants to Deep learning concepts and its implementation.
- To orient participants to Advanced ML techniques and its implementation.
- To expose participants to real world applications of data science.

Topics Covered

- **Mathematical Concepts:** Gradient descent, Cost function, Differentiation
- **Data Engineering:** Handling massive datasets
- **Uncertainty:** Inference, Bayesian networks, Decision theory
- **Cognitive computing:** Design principles, Knowledge representation
- **Fuzzy logic:** Properties and operations, Fuzzy controllers
- **Deep Learning:** ANN, CNN, RNN, LSTM, Autoencoder
- **Advanced ML:** Ensemble classifiers, Evaluation metrics
- **Implementation:** Sklearn, Tensorflow
- **Applications:** Applications of text/image/ video processing, Telecommunication

Key Resource Persons

- **Mr. Ninad Mohite**, Research Scientist/ Advisor, AiBorne Tech.
- **Mr. Nimit Kothari**, Sr. Machine Learning Engineer, Fractal Analytics
- **Mr. Rohan Shringarpure**, AGM, Vodafone-Idea, India
- **Mr. Arun Gupta**, Technical Architect, EnKash
- **Dr. Nilesh Patil**, Associate Professor, D.J. Sanghvi COE
- **Dr. Ashish Vanmali**, Associate Professor and HOD – IT, VCET
- **Prof. Chandan Kolvankar**, Assistant Professor, VCET
- **Dr. Madhavi Waghmare**, Assistant Professor, VCET
- **Prof. Anagha Patil**, Assistant Professor, VCET

Organizing Committee

Core Team

- Dr. Thaksen Parvat
- Dr. Archana Ekbote
- Dr. Madhavi Waghmare
- Prof. Vaishali Shirsath
- Prof. Sainath Patil
- Prof. Yogesh Pingle
- Prof. Swati Varma

Supporting Team

- Mr. Nitin Shingane
- Mrs. Harita Raut
- Mrs. Komal Shringarpure

Mode of Conduction

The course will be conducted in **ONLINE** mode using **Google Meet/Zoom** platform.

Registration Fees

For Teaching Faculty : **Rs. 750/-**

For Industry Person : **Rs. 1500/-**

Note: ISTE membership is mandatory for registration of the course. If a person does not have ISTE membership, he/she should apply for the same and submit the scanned copy of the application form and DD submitted while registration.

How to Apply

Registration fees can be paid through online bank transfer or GPay.

Details for online transfer:

Beneficiary Name: Anagha Patil
A/C No.: 320602010051980
Bank : Union Bank of India
Branch: Vidyavardhini College Road
IFSC Code: UBIN0562556

Details for GPay:

Beneficiary Name: Anagha Patil
Mobile No.: 90040 78402

After paying registration fees, complete the registration form available on the course webpage https://vcet.edu.in/STTP/ on or before 15th June 2022.

Vidyavardhini's College of Engineering & Technology
Department of Information Technology

Report of Two weeks ISTE approved Online STTP on "Artificial Intelligence towards Data Science Applications"

Title	**Artificial Intelligence Towards Data Science Applications**
Working date	27th June 2022 – 08th July 2022
Duration	11 days
Timings	Session 1 : 9.30 am to 11.15 am Session 2 : 11.30 am to 1.00 pm Session 3 : 2.00 pm to 4.00 pm
Mode of Conduction	Online through Zoom
Description	This course was designed to learn Artificial Intelligence towards Data Science Applications". This course focused on various topics like: • **Mathematical Concepts:** Gradient descent, Cost function, Differentiation • **Data Engineering:** Handling massive datasets • **Uncertainty:** Inference, Bayesian networks, Decision theory • **Cognitive computing:** Design principles, Knowledge representation • **Fuzzy logic:** Properties and operations, Fuzzy controllers • **Deep Learning:** ANN, CNN, RNN, LSTM, Autoencoder • **Advanced ML:** Ensemble classifiers, Evaluation metrics • **Implementation:** Sklearn, Tensorflow • **Applications:** Applications of text/image/ video processing, Telecommunication
Objectives	• To expose participants to cognitive skills of Artificial intelligence. • To orient participants to Deep learning concepts and its implementation. • To orient participants to Advanced ML techniques and its implementation. • To expose participants to real world applications of data science.
Learning outcomes	Learner will be able to • Design models for reasoning with uncertainty as well as the use of unreliable information. • Analyze the process of building a Cognitive application.

	• Design fuzzy controller system. • Analyze current trends in Data Science.
Participants	Faculties from various Engineering institutes.
No. of Participants	92
Registration Fees	Rs. 750 (for Teaching faculty) Rs. 1500 (for Industry person)
Speakers	• Dr. Ashish Tendulkar, Google • Ms. Uttara Athawale, faculty, GNIMS • Mr. Sandip Nagale • Dr. NIlesh Patil, Associate Prof., D. J. Sanghavi • Dr. Ujwala Bharambe, A. P., TSEC • Dr. Surya Durbha, IIT Bombay • Mr. Arun Gupta, Sr. Software Engineer, Encash • Mr. Ninad Mohite, CTO and Founder, AiBorneTech • Mr. Ravi Singh, AI Lead, AiBorne Tech • Mr. Milind Chavan, TCS • Mr. Rohan Shringarpure, Vodafone • Mr. Prasad Nikam, NVidia • Mr. Chandan Kolvankar, AP, VCET • Mr. Sainath Patil, AP, VCET • Mrs. Anagha J. Patil, AP, VCET • Ms. Swati Varma, AP, VCET
Convenors	• Dr. Ashish Vanmali, Associate Professor, VCET • Mr. Chandan Kolvankar, Assistant Professor, VCET
Coordinator	• Mrs. Anagha Patil, Assistant Professor, VCET • Mrs. Bharati Gondhalekar, Assistant Professor, VCET
Link to course material	https://drive.google.com/drive/folders/1ieR-aWkjqsnKz3lgiTV4LBbsDTBw3Ijy?usp=sharing

Mrs. Anagha Patil,
Assistant Professor, VCET

Mrs. Bharati Gondhalekar,
Assistant Professor, VCET

Snapshots of the event:


Remove Pin
Recording...
Vidyavardhini's College of Engineering & Technology
Department of Information Technology
ISTE STTP on
Artificial
Intelligence
Towards
Data Science
Applications
Mrs. Anagha Patil
Start Video
Security
Participants
61
Chat
Share Screen
Reactions
Apps
Whiteboards
More
End


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Data Science
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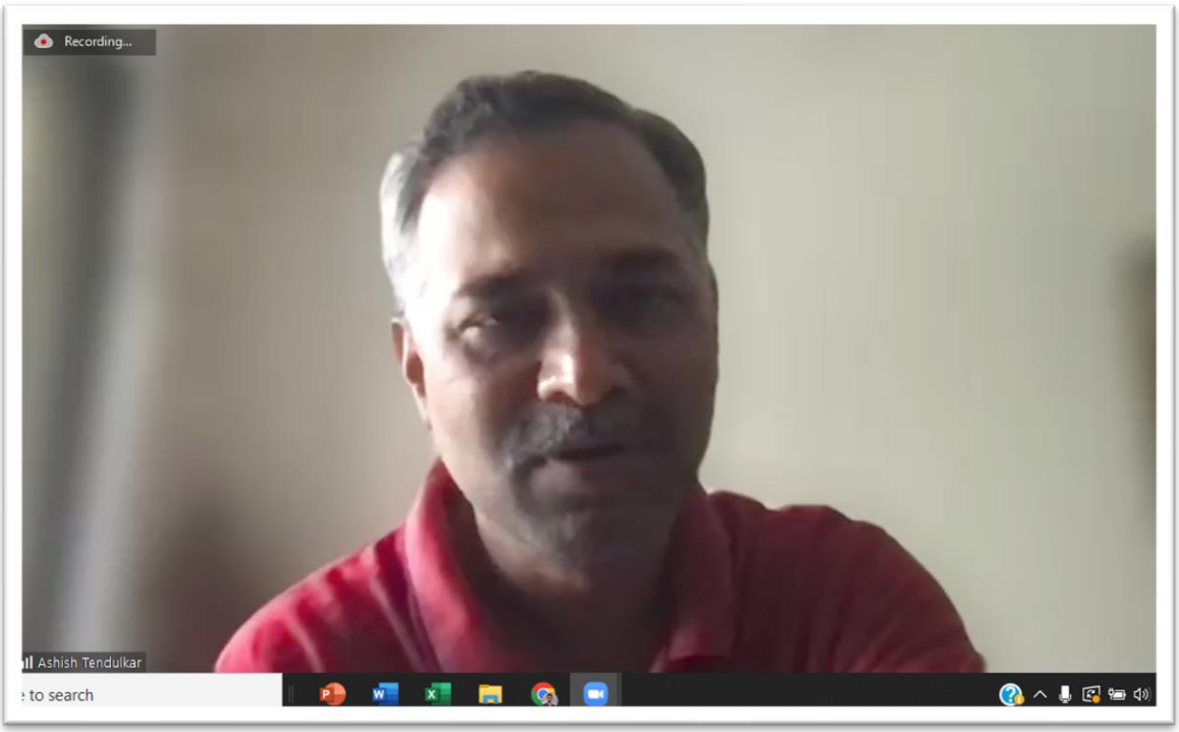

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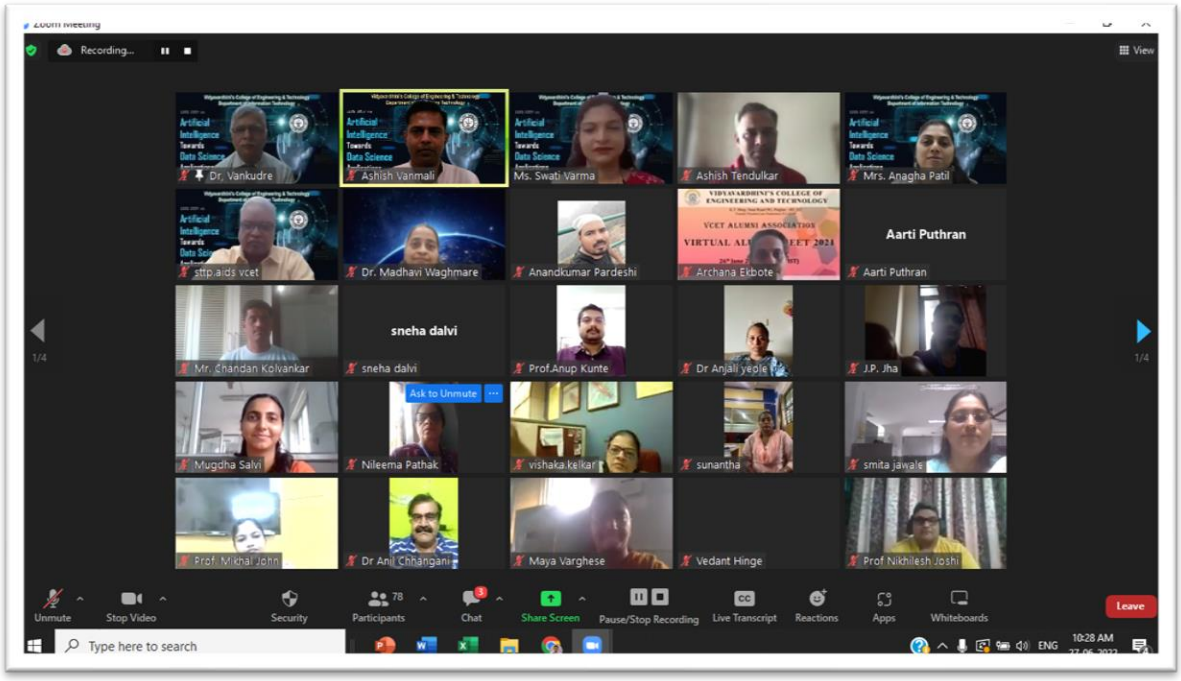
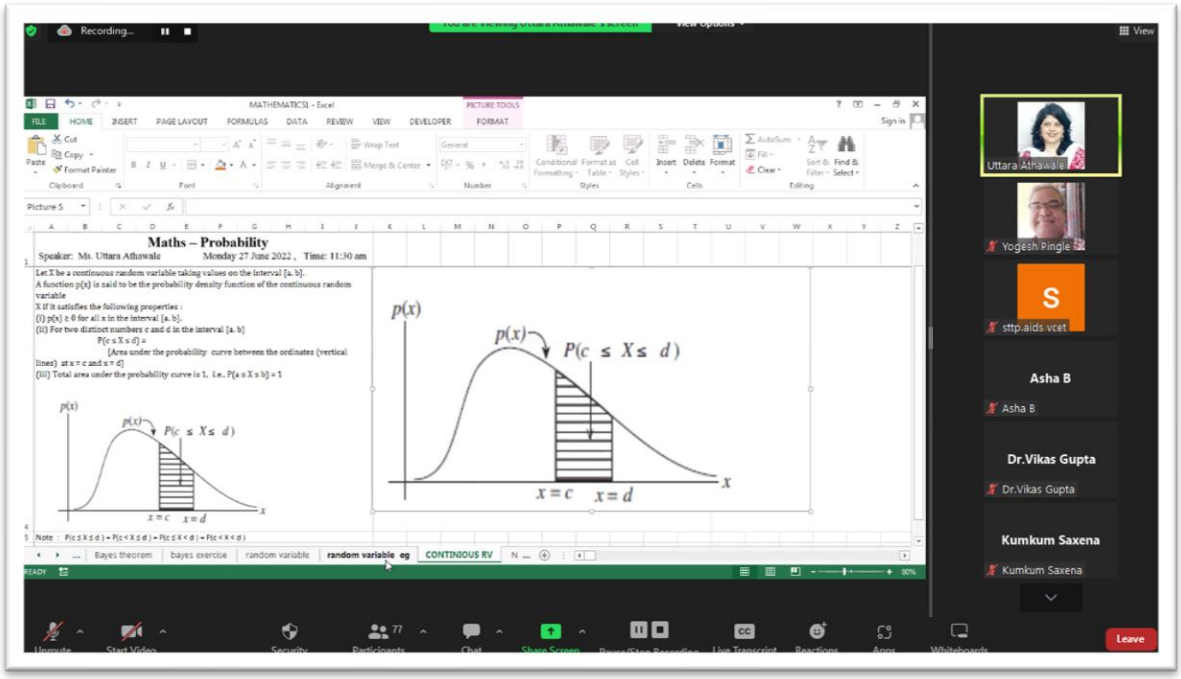
Department of Information Technology





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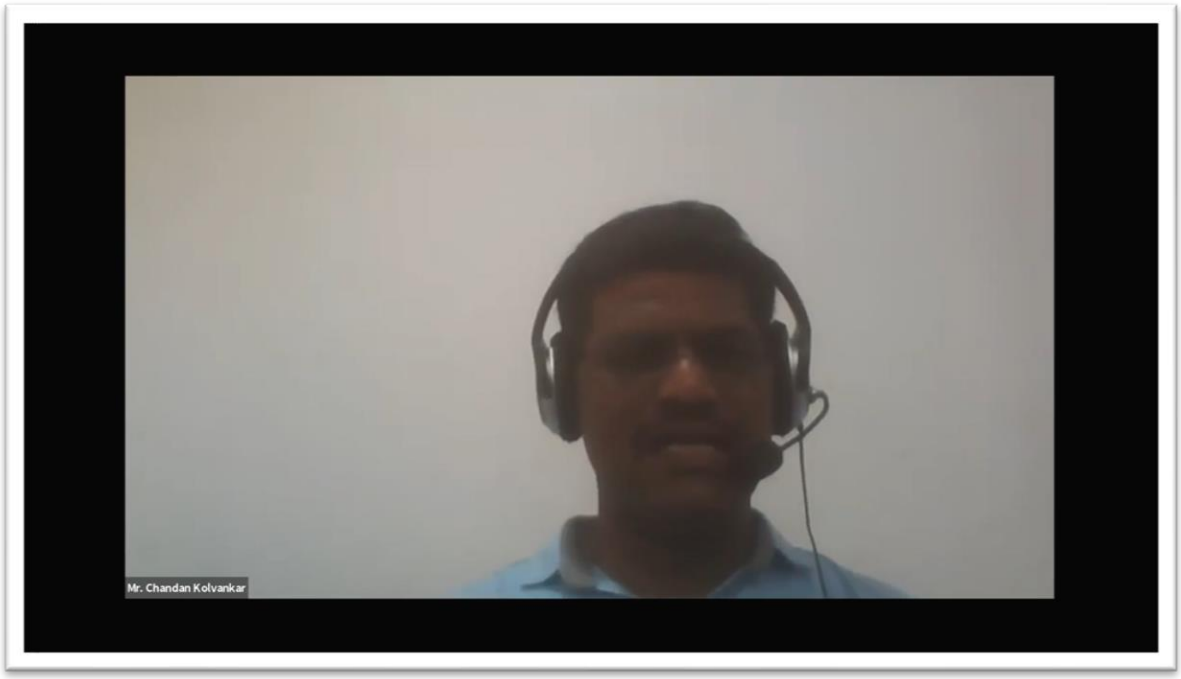
Department of Information Technology



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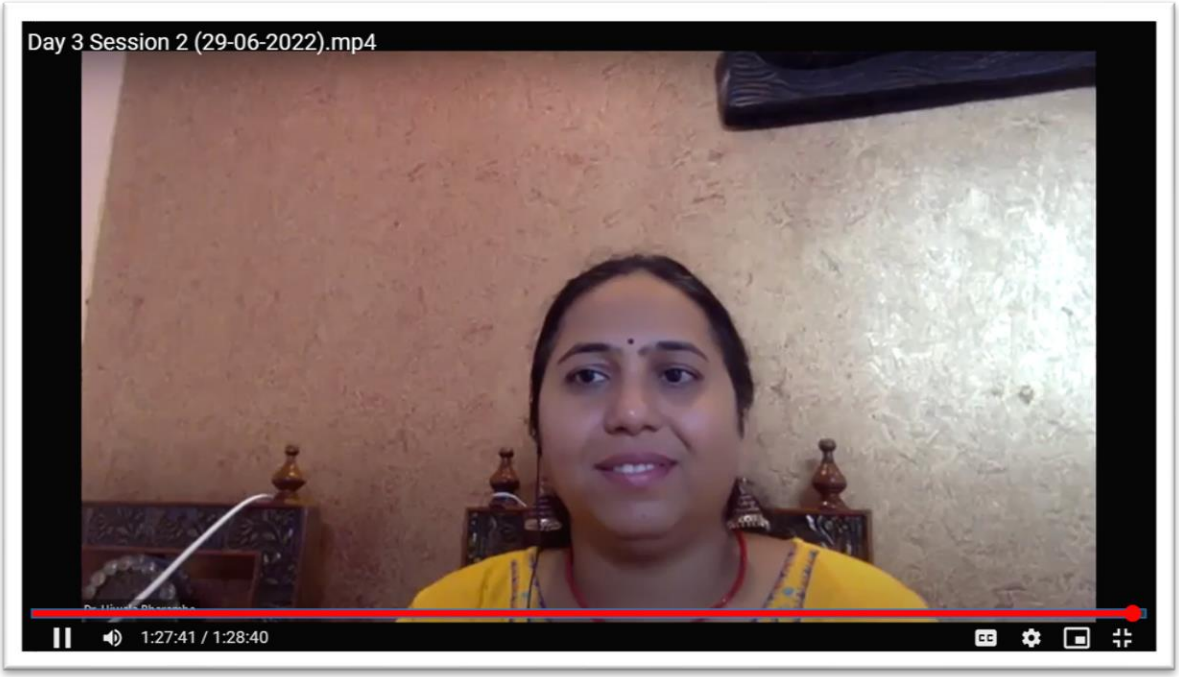

ABOUT VCET

Vidyavardhini means a body which is committed to enhancement of knowledge. Vidyavardhini was established as a registered society in the year 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai.

VCET is approved by AICTE and affiliated to the University of Mumbai for the Bachelor's Degree in Eight Programs, Mechanical, Electronics and Telecommunication, Instrumentation, Computer Engineering, Information Technology, Civil Engineering, Computer Science & Engineering (Data Science) and Artificial Intelligence & Data Science Engineering.

DEPARTMENT OF COMPUTER ENGINEERING

Department of Computer Engineering was established in the year 1999 with the objective of imparting the knowledge and developing practical skills in various areas of computer engineering. The Department has been Re-accredited by NBA (AY: 2022 to 2025) and has an intake of 60 students.

DEPARTMENT OF MECHANICAL ENGINEERING

Department of Mechanical Engineering was established in the year 1994 with the objective of imparting the knowledge and developing practical skills in various areas of mechanical engineering. The Department has been Re-accredited by NBA (AY: 2022 to 2025) and has an intake of 90 students.

PATRONS

Chief Patron

Shri. Vikas Vartak, President, Vidyavardhini

Patron

Shri. Arun Vartak, Chairman, Vidyavardhini

Shri. Shantaram Jadhav, Vice President, Vidyavardhini

Shri. Pandurang Naik, Vice President, Vidyavardhini

Shri. P. D. Kodolikar, Vice President, Vidyavardhini

Shri. Bhausaheb Mohol, Secretary, Vidyavardhini

Shri. Hasmukhbhai Shah, Treasurer, Vidyavardhini

Dr. Harish Vankudre, Principal, VCET

CONVENERS

Dr. Uday Aswalekar

Professor & HOD, Mechanical Engineering

Dr. Megha Trivedi

Associate Professor & HOD, Computer Engineering

IQAC Coordinator

COORDINATORS

Dr. Tatwadarshi P. Nagarhalli

Associate Professor, Computer Engineering

Email: tatwadarshi.nagarhalli@vcet.edu.in

Mob. No.: 9975556767

Mr. Vishwas Palve

Assistant Professor, Mechanical Engineering

Email: vishwas.palve@vcet.edu.in

Mob. No.: 9870300102

Vidyavardhini's College of Engineering & Technology

Approved by AICTE and affiliated to the University of Mumbai

Accredited by NAAC

In association with

KLE Technological University

ISTE approved One week Short Term Training Programme

on

Reforms and Innovations in Examination System

08th - 13th July 2022

Organized by

Department of Computer Engineering,
(NBA Accredited)

Department of Mechanical Engineering
(NBA Accredited)

And

Internal Quality Assurance Cell

K.T. Marg, Vartak College Campus, Vasai Road (W), Dist. Palghar, Maharashtra 401202

Contact No.: 0250-233 9486

Website: https://vcet.edu.in/

ABOUT THE COURSE

Globalization of the world economy and higher education are driving profound changes in the Engineering education system. Worldwide adaptation of Outcome-Based Education framework and enhanced focus on higher-order learning and professional skills necessitates paradigm shift in traditional practices of curriculum design, education delivery and assessment. In recent years, worldwide sweeping reforms are being undertaken to bring about essential changes in engineering education in terms of what to teach and how to teach and how to assess. Examinations/student assessments play a very important role in deciding the quality of education.

The contents of this STTP are completely derived from the recommendations made in the AICTE Exam Reforms November 2018. This STTP attempts to bring out recommendations for reforms in the examination system to meet challenges of the emerging engineering education landscape. The STTP will also shed light on the implementation of National Education Policy 2020 in the Higher Education (Engineering) sphere.

COURSE OBJECTIVES

- To prepare faculty for paradigm shift in traditional practices of curriculum design, education delivery and assessment to adapt outcome-based education.
- To get acclimatized with the examination reforms and prepare faculty designing question papers to test higher order, abilities and skills of the engineering students.

TOPICS TO BE COVERED

- Importance of Examination Reforms
- Need for outcome based education (OBE)
- Elements of outcome based education (OBE)
- Understanding Graduate Attributes, Competencies and Performance Indicators
- Writing course outcomes (CO) using Bloom's Taxonomy, preparation of course articulation matrix
- Use of Bloom's Taxonomy for design of question papers
- Use of Rubrics
- Case studies: Course project and laboratory experience
- Understanding SEE model question paper with CO, BL and PI
- Rubrics and Assessment
- The National Education Policy

EMINENT SPEAKERS

Prof. (Dr.) Prakash Tewari
Dean Academics,
KLE Technological University, Hubballi, Karnataka

Prof. (Dr.) B.B. Kottürshettar
Dean Planning and Development,
KLE Technological University, Hubballi, Karnataka

Prof. (Dr.) Surendra S. Rathod
Dean Academics,
Sardar Patel Institute of Technology, Mumbai

Prof. (Dr.) Rakesh Himte
Dean IQAC
Rungta College of Engineering & Technology, Bhilai Raipur, Chhattisgarh

PROGRAMME COMMITTEE

Mrs. Smita Jawale, *Assistant Professor, Computer Engg*

Mrs. Swati Varma, *Assistant Professor, Computer Engg*

Mr. Kamlesh Bachkar, *Assistant Professor, Mechanical Engg*

Mrs. Sneha Mhatre, *Assistant Professor, Computer Engg*

Mr. Rishabh Melwanki, *Assistant Professor, Mechanical Engg*

EVENT DETAILS

Date: **08th - 13th July, 2022**

Time: **9 am to 5 pm**

Mode of Conduction: **Online**

REGISTRATION

Registration Fees: ₹ 2000/-

Fee Payment:

Registration fees can be paid through Gpay or any third party UPI applications to

Beneficiary Name: Tatwadarshi P. N.

Mobile No.: 9975556767

UPI ID: tatwadarshipn@okicici

Registration Form:

After paying the registration fees kindly complete the registration by filling the following form

https://forms.gle/arSpG6G8pvs8kKxd7

Vidyavardhini's College of Engineering & Technology

Department of Computer Engineering

Academic Year : 2022-23

ISTE Approved One Week Online Short Term Training Program (STTP)

On

"Reforms and Innovations in Examination System"

Duration: 8th to 13th July 2022

Participants: Faculty from Colleges of Engineering

Course Objectives:

1. To prepare faculty for paradigm shift in traditional practices of curriculum design, education delivery and assessment to adapt outcome-based education.
2. To get acclimatized with the examination reforms and prepare faculty designing question papers to test higher order, abilities and skills of the engineering students.

Faculty Involved:

1. Convener

- Dr. Uday Aswalekar
  Professor & HOD, Mechanical Engineering

- Dr. Megha Trivedi
  Associate Professor & HOD, Computer Engineering
  IQAC Coordinator

2. Coordinator
- Dr. Tatwadarshi Nagarhalli, Associate Professor, Computer Engineering
- Mr. Vishwas Palve, Assistant Professor, Mechanical Engg

3. Organizing Committee
- Mrs. Smita Jawale, Assistant Professor, Computer Engg
- Mrs. Swati Varma, Assistant Professor, Computer Engg
- Mr. Kamlesh Bachkar, Assistant Professor, Mechanical Engg
- Mrs. Sneha Mhatre, Assistant Professor, Computer Engg
- Mr. Rishabh Melwanki, Assistant Professor, Mechanical Engg

Vidyavardhini's College of Engineering & Technology

Department of Computer Engineering

Academic Year : 2022-23

DAY 1 – 08/07/2022 (Friday)

Inauguration Function:

The One Week ISTE Approved online Short Term Training Program was organized from 08th July - 13th July 2022 on "**Reforms and Innovations in Examination System**". Programme started with a welcome note by Mrs Swati Varma and overview of contents by Convener Dr. Megha Trivedi, address note by Principal, Dr. Harish Vankudre. The function concluded with a Vote of thanks presented by Convenor Dr. Uday Aswalekar.

The Meet link for the sessions was as follows:

https://zoom.us/j/99663440547?pwd=NFd3UDV5WGUvN21vall6U05pYndvUT09

Meeting ID: 996 6344 0547

Passcode: 12345

Schedule for all six days is as follows:

Day #	Session #	Topics to be covered
Day 1 8th July, 2022	Session – 1 10.00 am to 11.30 am	• Context setting By Prof. Prakash Tewari
	Session – 2 11.45 am to 1.15 pm	Need for outcome based education (OBE) Elements of OBE By Prof. Prakash Tewari Dean Academics, KLE Technological University
	Practical Session 2:15 pm – 4- 15 pm	
Day 2 9th July, 2022	Session – 3 10.00 am to 11.30 am	• Understanding Graduate Attributes, Competencies and Performance Indicators By Prof. Prakash Tewari

	Session – 4 11.45 am to 1.15 pm	• Writing course outcomes (CO) using Bloom's Taxonomy, preparation of course articulation matrix Prof. B.B. Kottursheṭtar Dean Planning and Development KLE Technological University
	Practical Session 2:15 pm – 4- 15 pm	
Day 3 10th July, 2022	Session – 5 10.00 am to 11.30 am	• Use of Bloom's Taxonomy for design of question papers Prof. B.B. Kottursheṭtar
	Session – 6 11.45 am to 1.15 pm	• Use of Rubrics Prof. B.B. Kottursheṭtar
	Practical Session 2:15 pm – 4- 15 pm	
Day 4 11th July, 2022	Session – 7 10.00 am to 11.30 am	• Case studies: Course project and laboratory experience Prof. Tewari and Kottursheṭtar
	Session – 8 11.45 am to 1.15 pm	• Understanding SEE model question paper with CO, BL and PI • Q&A session Prof. Tewari and Kottursheṭtar
	Practical Session 2:15 pm – 4- 15 pm	
Day 5 12th July, 2022	Session – 9 10 am to 12:00 pm	Rubrics and Assessment Prof. Surendra S. Rathod Principal, Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai

	Session – 10 01.00 pm to 3.00 pm	• Innovation in teaching Prof. Vinay Anil Kulkarni Associate Professor DY Patil
	Practical Session 3:00 pm – 4- 15 pm	
Day 6 13th July, 2022	Session – 11 10 am to 12:00 pm	Stress Management Prof. Rakesh Himte Professor, Priyadarshini Institute of Engineering & Technology, Nagpur
	Session – 12 01.00 pm to 3.00 pm	National Education Policy Prof. Sanjay Uttarwar Principal, Vidharbha Institute of Technology, Nagpur
	Test and Valedictory function 3:00 pm – 4:15 pm	

Session details are as follows:-

Day 1 : 8 th July, 2022

Session – 1 [10.00 am to 11.30 am] [By Prof. Prakash Tewari]

Context setting

- AICTE Exam Reform Policy overview.
- Adaptation of OBE framework.
- Importance of Higher-order Abilities and Professional Skills
- Mapping Program Outcomes to Assessment (Examinations)

- Blooms Taxanomy for assessment design.
- Assessment methods for different Bloom's cognitive levels
- Case study of POs with competencies and PIs.

Session – 2 [11.45 am to 1.15 pm] [By Prof. Prakash Tewari]

Need for outcome based education (OBE)

Elements of OBE

- Need of Outcome Based Education and OBE Framework.
- Elements of OBE (PEO, PO, CO, LO).
- Difference between Traditional and Outcome based Education.
- Mapping Outcomes through Curriculum.
- Difference between POs and PSOs.
- Difference between PEOs and POs.

Session – 3 [10.00 am to 11.30 am] [By Prof. Prakash Tewari]

Understanding Graduate Attributes, Competencies and Performance Indicators

- Types of Graduate attributes are Knowledge oriented , Skill oriented, Attitude oriented,

Problem solving skill group

- Competencies and Performance indicator
- Outcome elements with Performance Indicators, educational strategies Specific activities,

Perceived weakness/gaps and opportunities were defined

- for Program Outcomes.
- Classification of Graduate Attributes.
- Competency Identification for Program Outcomes.
- Mapping of POs with Competencies and Performance Indicators.

Session – 4 [11.45 am to 1.15 pm] [By Prof. B.B. Kottursheltar]

Writing course outcomes (CO) using Bloom's Taxonomy, preparation of course articulation matrix

- What motivates students?
  a. The enjoyment of solving complex problems
  b. The desire to be able to make impressive things
  c. To make desire to make a positive difference to the world
- OBE Process
- The need for a taxonomy
- Cognitive domain in Blooms taxonomy
- OBE elements: PEO,PO, CO
- What are Cos
- Characteristics of COS
- Structure of CO: Action word and learning statement
- Steps towards writing effective learning outcomes
- Course articulation matrix

Session – 5 [10.00 am to 11.30 am] [By Prof. B.B. Kottursheltar]

Use of Bloom's Taxonomy for design of question papers

- Why assessment is required?
- Cognitive process
- Knowledge dimension
- Taxonomy table
- All levels of taxonomy are
  a. Remembering
  b. Understanding
  c. Analysing
  d. Applying
  e. Evaluating
  f. creating

Session – 6 [11.45 am to 1.15 pm] [By Prof. B.B. Kottursheltar]

Use of Rubrics

- Assessment design

- Course assessment plan
- Looms level taxonomy for assessment design
- Structure of question paper
- Lab assessment parameters
- Project assessment planning
- Assessment of professional skills
- What are rubrics
- Understanding task, scales, dimensions and descriptors
- Developing rubrics

Session – 7 [10.00 am to 12 pm] [Prof. Surendra S. Rathod]

Rubrics and Assessment

- What is the need for rubrics based assessment?
- Learning and teaching styles
- Fact of life
- Types of learners-
  a. Active/ reflective
  b. Visual or verbal
  c. Sensing or intuitive
  d. Sequential or global
- Human capabilities
- What is rubrics
- Tips for effective rubrics design
- Types of rubrics
- Online free rubrics maker
- Visual rubrics

Session – 8 [1.00 pm to 3.00 pm] [By Prof. Vinay Anil Kulkarni]

Innovation in teaching

- Evaluation and process
- Need to take small exam which are open minded

- Create small case study problems, open book tests
- Reform is improvisation and modification in existing system for achieving the gaps
- How are the present student's behaviour, psychology and how to approach to them?
- Regularity of exams
- What will be the pedagogy to assess students work from home?
- We can give some questions from competitive examination.
- Snake and Ladder game, kahoot quiz as a innovative method in teaching learning.

Session – 09 & 10 [3.00 pm to 5.30 pm] [By Prof. Prakash Tewari]

Case studies: Course project and laboratory experience

Understanding SEE model question paper with CO, BL and PI Q&A session

- Improving structure and quality of assessment
- While writing the question paper following things are to be considered

  a. Which are the cos we are addressing in exam

  b. What is the % weightage for each co

  c. Which are the PIs being tested
- Prepare quality Matrix
- Outcome alignment matrix
- Quality and alignment matrix include both BL distribution and CO distribution
- Experiment levels for any lab

  a. Demonstration

  b. Exercise

  c. Structured enquiry

  d. Open ended

Session – 11 [10.00 am to 12 pm] [By Prof. Rakesh Himte]

Art of living for stress management:

- Power of Thoughts- 50000 thoughts per day and 70 % are negative thoughts
- Live in Present
- Believe in yourself

- Do your work.
- Follow Rules

Session – 12 [1.00 pm to 3.00 pm] [By Prof. Sanjay Uttarwar]

National Education Policy

- Introduction of NEP and its significance
- Role of Teacher and his position
- NEP for school and Higher education
- Structure of NEP 2020

Dr. Megha Trivedi
convenor.

Dr. Tatwadarshi P.N.
co-ordinator.

About VCET

'Vidyavardhini' is a body committed to enhancement of knowledge. Vidyavardhini was established as a registered society in the year 1970 by late Padmashri H.G. alias Bhausaheb Vartak for the noble cause of the education in rural areas. Vidyavradhini's College of Engineering and Technology, Vasai is located on the sprawing campus of Vidyavardhini, spread over an area of 12.27 acres. VCET is approved by AICTE and affiliated to the University of Mumbai for the Bachelor's Degree in seven Programs Mechanical, Electronics and Telecommunication, Computer Engineering, Information Technology, Civil Engineering, Computer Science & Engineering (Data Science), Artificial Intelligence & Data Science Engineering and Post Graduate program in Civil Engineering (Structural Engineering).

Department of Computer Science and Engineering (Data Science)

The Department of Computer Science and Engineering (Data Science) was established in the academic year 2020-21. The Department has an intake of 60 students. The Department boasts of a qualified and technologically sound faculty with a good teaching and industrial experience. The Department consists of well-equipped, state-of-the-art labs with facilities conducive for the growth of students.

Department of Artificial Intelligence & Data Science

The Department of Artificial Intelligence and Data Science was established in 2020 to provide quality education in the emerging fields of Artificial Intelligence and Data Science. The department offers 60 seats for the Undergraduate program (BE). The department aims to create an environment for the development and fostering of proficient artificial intelligence and data science engineers who embody professionalism and civic responsibility. The department has dynamic, highly qualified and experienced faculty members, is equipped with the most modern software, and has state-of-the-art facilities for facilitating a coherent teaching-learning process.

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Dr. Harish Vankudre, Principal VCET

Conveners

Dr. Vikas Gupta

HoD, Computer Science and Engineering
(Data Science)

Dr. Tatwadarshi P. N.

HoD, Artificial Intelligence & Data Science

Co-ordinators

Mr. Yogesh Pingle

E-mail: yogesh.pingle@vcet.edu.in

Mobile No: +91 9665009742

Mrs. Sneha M. Yadav

E-mail: sneha.yadav@vcet.edu.in

Mobile No: +91 9075482037

Vidyavardhini's College of Engineering & Technology

Approved by AICTE and affiliated to the University of Mumbai
Accredited by NAAC
Four Programs Accredited by NBA

In association with

Presents

ISTE approved Six Days Short Term Training Programme (STTP) on

MLOps

A Modern Approach to Design, develop and Operate Machine Learning Models

(ISTE/Proceedings/STTP-SF-MAH-022/2023-24)

Date : 12 th June to 17 th June 2023

Organized by

Department of Computer Science and Engineering (Data Science)

&

Department of Artificial Intelligence & Data Science

K.T. Marg, Vasai Road (W),
Dist. Palghar, Maharashtra 401202
Contact No: 0250-2339486
Website: https://vcet.edu.in

About the Programme

The aim of this Short Term Training Program (STTP) is to make faculty members aware about the latest technologies in MLOps. This STTP will make attendees enhance their knowledge of current trends of machine learning, DevOps, MLOps, and tools.

Objectives

1. To explicate the concepts of Machine learning and integrate the knowledge.
2. To encourage participants for implementation and deployment of ML algorithms.
3. To acquaint participants to DevOps concepts for sustainable infrastructure for applications.

Key features of the STTP

1. Offline sessions by Industry experts and academician.
2. Hands-on sessions on latest software and equipment.
3. Platform to solve problems of real world applications.

Expected Outcomes

1. The participants will enable to design machine learning algorithms.
2. The participants will adopt the MLOps practices and principles using different tools.
3. The participant will understand the connection between two areas of ML : development of machine learning models and operating it in production

Topics To Be Covered

- ❑ Machine learning concepts
- ❑ Linear regression algorithm
- ❑ Hand's on Colaboratory
- ❑ What id DevOps & its application ?
- ❑ Hand's on Git and Jenkins
- ❑ Hand's on using Azure/AWS or Visual Studio
- ❑ Hand's on Docker and Selenium
- ❑ Overview of and comparison with AIOps and DevOps, MLOps lifecycle, CI/CD pipeline
- ❑ How to automate web browser ?
- ❑ How to build containerized apps ?

Resource Person

Mr. Shailendra Kadre

Senior Program Manager (ML), HP Inc.

Ms. Ankita Malani

Lead Software Engineer, MobileIron Company

Mr. Rohit Barve

Assistant Professor, VIT, Mumbai

Dr. Bhushan Jadhav,

Assistant Professor, TSEC, Mumbai

Dr. Tatwadarshi P. N.

Head of Department, AI&DS, VCET, Vasai,

Mr. Yogesh Pingle

Assistant Professor & Deputy HoD, CSE(DS), VCET, Vasai

Mode of conduction

The course will be conducted in OFFLINE/ONLINE mode.

Last Date

Date : 5th June 2023 till 5 pm

Registration fees can be paid through online bank transfer or GooglePay.

Programme Committee

Mrs. Maya Varghese

Mrs. Krunali Vartak

Mrs. Janisa Pereira

Mr. Sumeet Shingi

Mrs. Komal Champanerkar

Ms. Bhavika Gharat

Ms. Kshitija Gharat

Event Details

Date : 12th June 2023 – 17th June 2023

Time: 9.00 am to 5.00 pm

Venue: VCET Seminar Hall.

Registration

Beneficiary Name: Ms. Komal Champanerkar

Mobile No: 9168515415

UPI ID: 9168515415@upi

Registration Form available at :
https://vcet.edu.in/STTP/

For Registration Form, scan the given QR Code :

	Teaching	Industry
ISTE member	500 /- ISTE Certificate	500 /- ISTE Certificate
Non-ISTE member	500 /- Institute Certificate	1000 /- Institute Certificate

Report On

ISTE Approved One Week Short Term Training Program

"MLOps: A Modern Approach to Design, Develop and Operate Machine Learning Models"

(12th JUNE -17th June 2023)

Organized by,

Department of Computer Science and Engineering (Data Science)

&

Department of Artificial Intelligence & Data Science

Of

Vidyavardhini's College of Engineering & Technology, Vasai Road

About VCET

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About the STTP

Aim:

The aim of this Short Term Training Program is to make faculty members aware about the leatest technologies in MLOps. The STTP will make attendees enhance their knowledge of current trends of Machine Learning, DevOps, MLOps and tools.

Duration: 12th June 203 to 17th June 2023

Participants:

Faculty Members from Colleges of Engineering. There were 58 participants who have ISTE membership.

- **Objectives:-**
  1. To explicate the concepts of Machine Learning and integrate the knowledge.
  2. To encourage participants for implementation and deployment of ML algorithms.
  3. To acquaint participants to DevOps concepts for sustainable infrastructure for applications.

- **Key Features of the STTP**
  1. Offline Sessions by Industry Expert and Academicians.
  2. Hands- on sessions on latest Software tools
  3. Platform to solve problem of real world applications.

- **Expected Course Outcomes**

  Learner will be able to
  1. The participants will enable to design machine learning algorithms.
  2. The participants will adopt the MLOps practices and principles using different tools

  The participant will understand the connection between two areas of ML : development of machine learning models and operating it in production

Organizing Committee

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Patron

Shri . Arun Vartak, Chairman, Vidyavardhini

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Shri . Bhausaheb Mohol, Secretary, Vidyavardhini

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Dr. Tatwadarshi P. N.

HoD, Artificial Intelligence & Data Science

Co-ordinators

Mr. Yogesh Pingle

Assistant Professor, Computer Science and Engineering(Data Science)

Mrs. Sneha M. Yadav

Assistant Professor, Artificial Intelligence & Data Science

Programme Committee

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Mrs. Krunali Vartak

Mrs. Janisa Pereira

Mr. Sumeet Shingi

Mrs. Komal Champanerkar

Ms. Bhavika Gharat

Ms. Kshitija Gharat

DAY 1 – 12th June 2023 (Monday)

Inauguration Function:

The One Week online Short Term Training Program was organized from 12th June - 17th June 2023 on "**MLOps: A Modern Approach to Design, Develop and Operate Machine Learning Models**". Programme started with a welcome note by Mrs.Sneha M. Yadav and address note by Principal, Dr. Harish Vankudre , Dean of Academics Dr.Vikas Gupta and HOD of AI & DS Dr. Tatwadarshi Nagarhalli

Mrs. Sneha M. Yadav, Coordinator , gave the overview of contents to be covered in this program e along with schedule. The function concluded with a Vote of Thanks presented by Coordinator Mr.Yogesh Pingle. .

The Schedule for the session is given below:

Days	Date	Session	Time	Speakers	Contents	Link of Sessions
Day 1	12/6/ 2023	Session 1	10.00 am to 10.45 am	Inauguration Ceremony	Welcome address & address by principal	https://meet.google.com/qea-xwcy-mjt
			11.00 am to	Mr.Ankit Pandey Assistant Vice	Machine Learning	

			12.30am	President, JP Morgan Chase & Co.	Concepts and Linear regression algorithm	
		Session 2	1.30pm to 3.30 pm	Dr. Tatwadarshi P. N. HoD, AI & DS	Hands-On using Colaboratory	https://meet.google.com/qea-xwcy-mjt
Day 2	13/6/ 2023	Session 1	10 am to 12 pm	Mr. Yogesh Pingle, Asst. Professor ,VCET	DevOps and its applications in Software Development	https://meet.google.com/qea-xwcy-mjt
		Session 2	1 pm to 3 pm	Mr. Yogesh Pingle, Asst. Professor ,VCET	Hands-On using Jenkins and Git	https://meet.google.com/qea-xwcy-mjt
Day 3	14/6/ 2023	Session 1	10 am to 12 pm	Ms. Ankita Malani, Lead Software Engineer, MobileIron Inc.	Introductin to MLOps: Containarizatio n,Overview and comparison with AIOps and DevOps,Lifecy cle MLOps Features,Phase s,CSP, CI/CD Pipeline,Model Monitoring	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF
		Session 2	1 pm to 3 pm	Ms. Ankita Malani, Lead Software Engineer, MobileIron Inc.	Hands-On using Azure/AWS or Visual Studio.	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF
Day 4	15/6/ 2023	Session 1	10 am to 12 pm	Mr. Rohit Barve, Assistant Professor , VIT Wadala	Building,delive ring ,Scaling containerized apps.	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF
		Session 2	1 pm to 3 pm	Mr. Rohit Barve, Assistant Professor , VIT Wadala	Hands-On using Kubernetes,SA ST, Negios	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF

Day 5	16/6/ 2023	Session 1	10 am to 12 pm	Dr. Bhushan Jadhav, Assistant Professor, TSEC, Bandra	Applications of MLOps.	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF
		Session 2	1 pm to 3 pm	Dr. Bhushan Jadhav, Assistant Professor, TSEC, Bandra	Hands-On using Docker, Selenium,	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF
Day 6	17/6/ 2023	Session 1	10 am to 12 pm	Mr. Shailendra Kadre, Sr. Engg. Manager, HP Inc.	MLOps and its applications	https://drive.google.com/drive/folders/19hY9WyhVdBfNk_57ydrXIfQox0q0ZzDF
		Session 2	12 pm to 1 pm	Test or Quiz		
			1 pm to 3 pm	Valedictory Function		

Session details are as follows:-

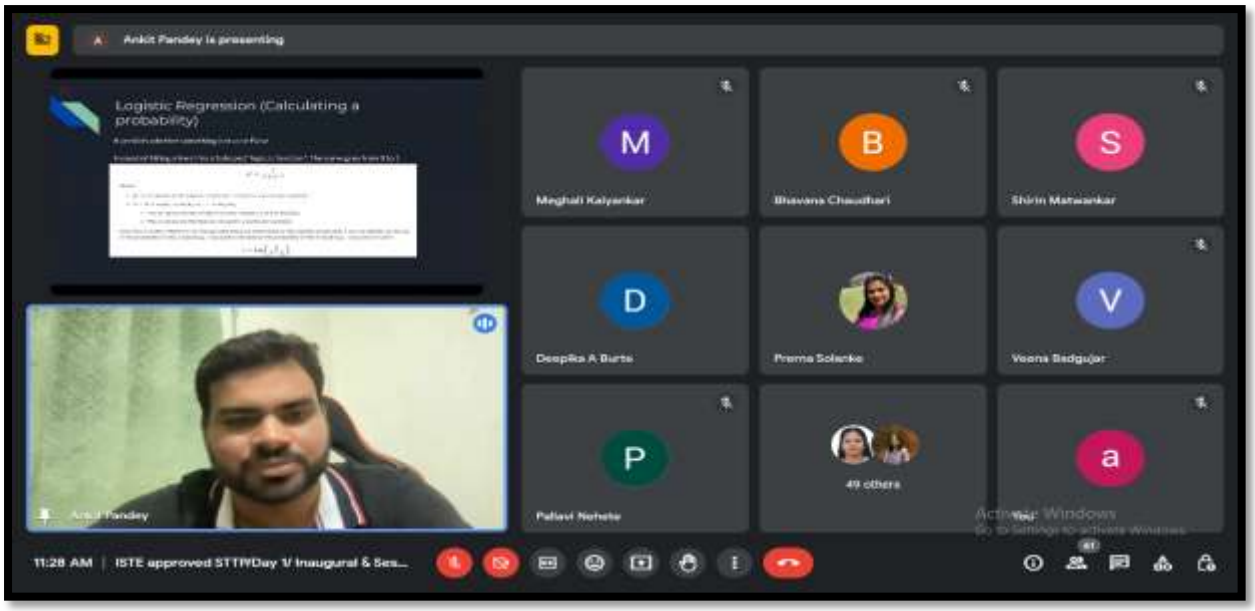
- **Day 1 (12th June 2023)**
- **Session 1 (11:00 am –12.30 pm) :**

  Speaker:- Mr. Ankit Pandey

  Topic:- Machine Learning and its Applications

  Mr. Ankit Pandey has described following points

- Types of Machine Le arning
- Key ML Terminologies
- Feature Engineering
- Decision Tree and Random Forest Algorithm
- Real World Example: Receipt and Invoice Processing and Credit Card Fraud Detection.



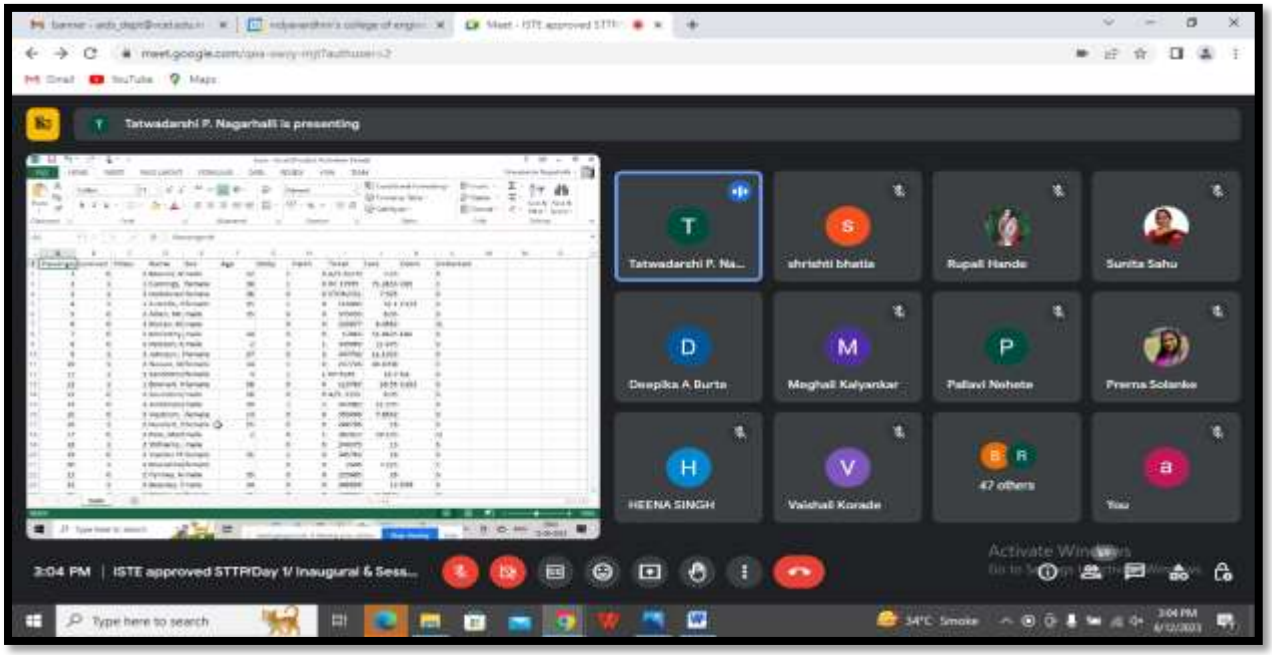
❖ **Session 2(1:30 pm –3:30 pm) :**

Speaker:- Dr. Tatwadarshi P. N.

Topic:- Hands On Machine Learning using COLAB and PyCharm Community Edition

Dr. Tatwadarshi P.N. has given hands on session on following points:

- Introduction and steps to create Kaggle account
- To generate Access Token Key and use data directly from Kaggle
- Handling of Categorical and Continuous Data
- Calculating Accuracy of different algorithms.
- Execution using Colab notebooks and PyCharm.



➢ **Day 2 (13th June 2023)**

❖ **Session 1 (10 am –12pm) :**

Speakers: Mr. Yogesh Pingle

Topic: DevOps and its applications in software development,

Mr. Yogesh Pingle discussed the following points.

- DevOps and its principles
- DevOps tools
- Application of DevOps
- Role of DevOp Engineer

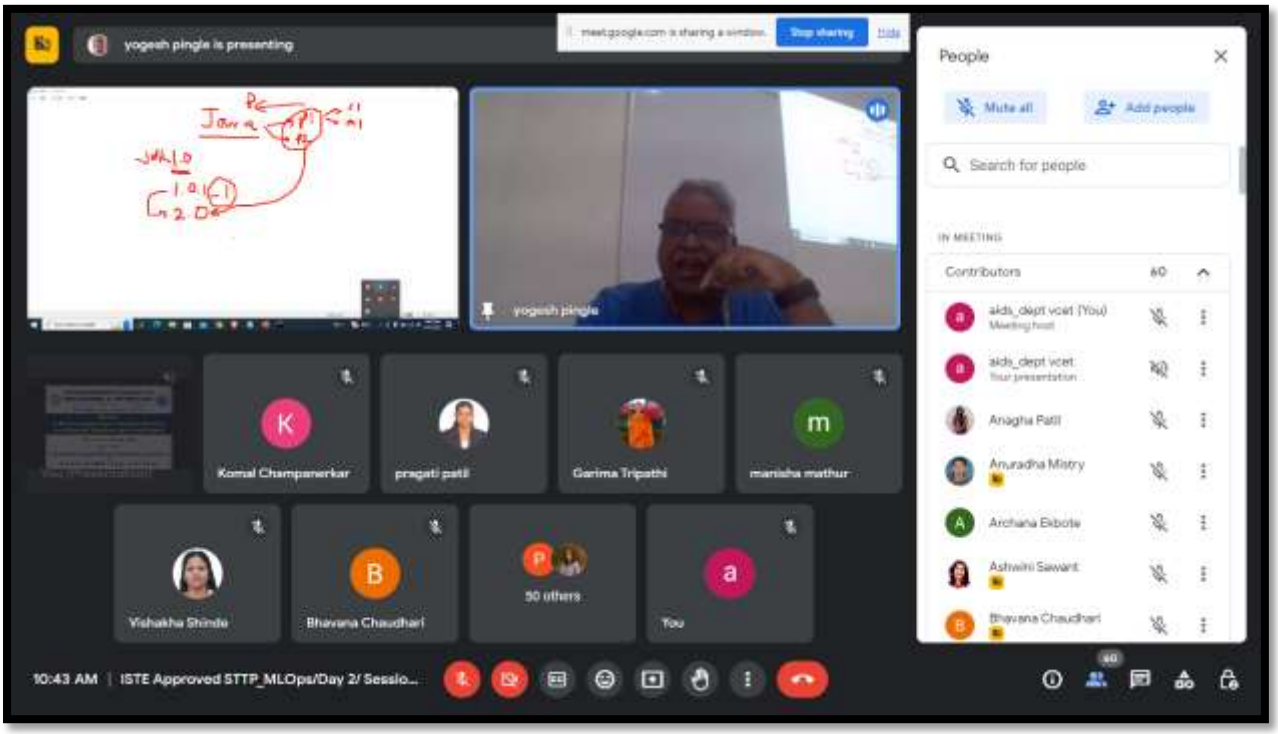
❖ **Session 2 (1 pm –3 pm) :**

Speaker: Mr. Yogesh Pingle

Topic: Hands-On using Jenkins & Git

Mr. Yogesh Pingle has given hands on session on following points:

- Installation of Jenkins
- Creating pipeline using Jenkin
- Installation of Git and Github.



➢ **Day 3 (14th June 2023)**

❖ **Session 1 (10.00 am -12.00 pm) :**

Speaker Ms. Ankita Malani, Lead Software Engineer, MonileIron Inc.

Topic -MLOps and its Lifecycle

Ms. Ankita Malani has described following points

- Lifecycle of Machine Learning
- ML process and its phases
- Overview and comparison of MLOps and DevOps
- MLOps Practices and lifecycle and its levels.

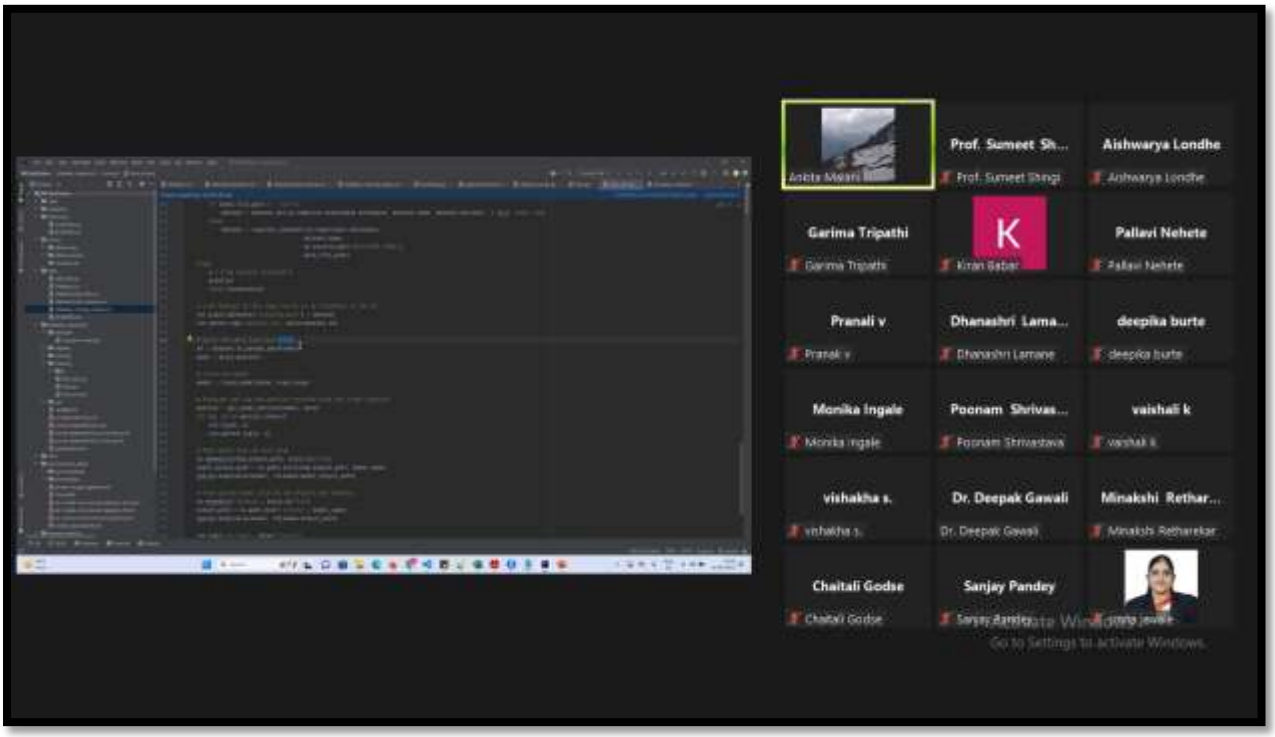
❖ **Session 2 (1 pm - 3 pm) :**

Speaker -Ms. Ankita Malani, Lead Software Engineer, MonileIron Inc.

Topic:- Hands on using Visual Studio or Intellij Community Edition

Ms. Ankita Malani has given has given hands on session on following points:

- Case study for diabetes
- Github code execution.



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➢ **Day 4 (15th June 2023)**

❖ **Session 1 (10.00 am -12.00 pm) :**

Speaker: Mr. Rohit Barve, Assistant Professor, VIT, Wadala

Topic –Building, Delivering & Scaling containerized apps.

Ms. Rohit Barve has described following points

- Docker and K8s, Containerization
- Comparison of VMS and Containers
- Introduction to Kubernetes, Nagios

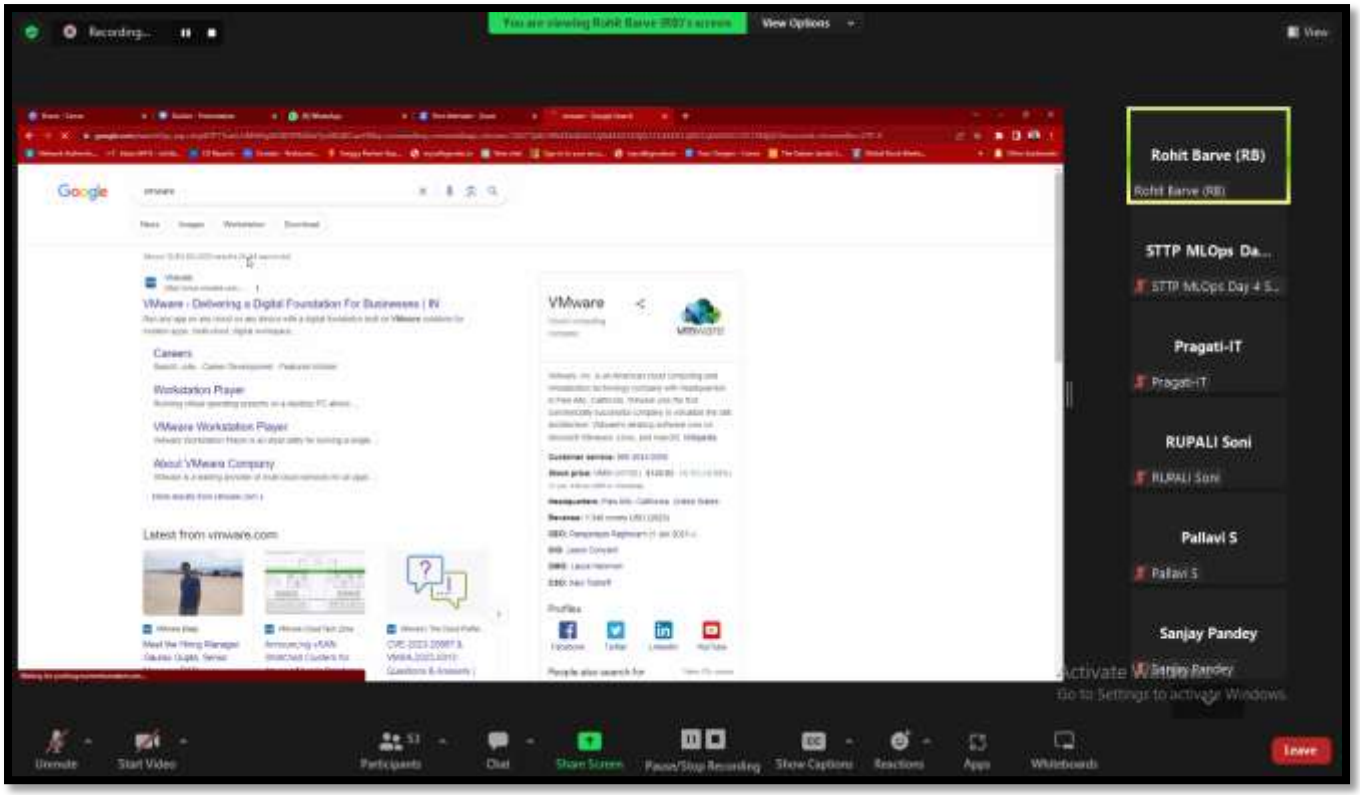
❖ **Session 2 (1 pm - 3 pm) :**

Speaker - Mr. Rohit Barve, Assistant Professor, VIT, Wadala.

Topic- Hands on using Kubernetes, Nagios

Ms. Rohit Barve has given has given hands on session on following points:

- Installation of VM with linux for containerization.
- Kubernetes for management of multiple containers,


Recording...
You are viewing Rohit Barve (RB)'s screen
View Options
View
Google
vmware
VMware - Delivering a Digital Foundation For Businesses | IN
Careers
Workstation Player
VMware Workstation Player
About VMware Company
Latest from vmware.com
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Pallavi S
Pallavi S
Sanjay Pandey
Sanjay Pandey
Activate Windows
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Unmute
Start Video
Participants
Chat
Share Screen
Pause/Stop Recording
Show Captions
Reactions
Apps
Whiteboards
Leave

➢ **Day 5 (16th June 2023)**

❖ **Session 1 (10.00 am -12.00 pm) :**

Speaker: Dr. Bhushan Jadhav, Assistant Professor, TSEC, Bandra

Topic –Applications of MLOps.

Dr. Bhushan Jadhav has described following points

- Practical implementation of Docker with Docker Container Information & Network Commands
- Introduction Jenkins
- Continuous Integration
- Jenkins Pipeline

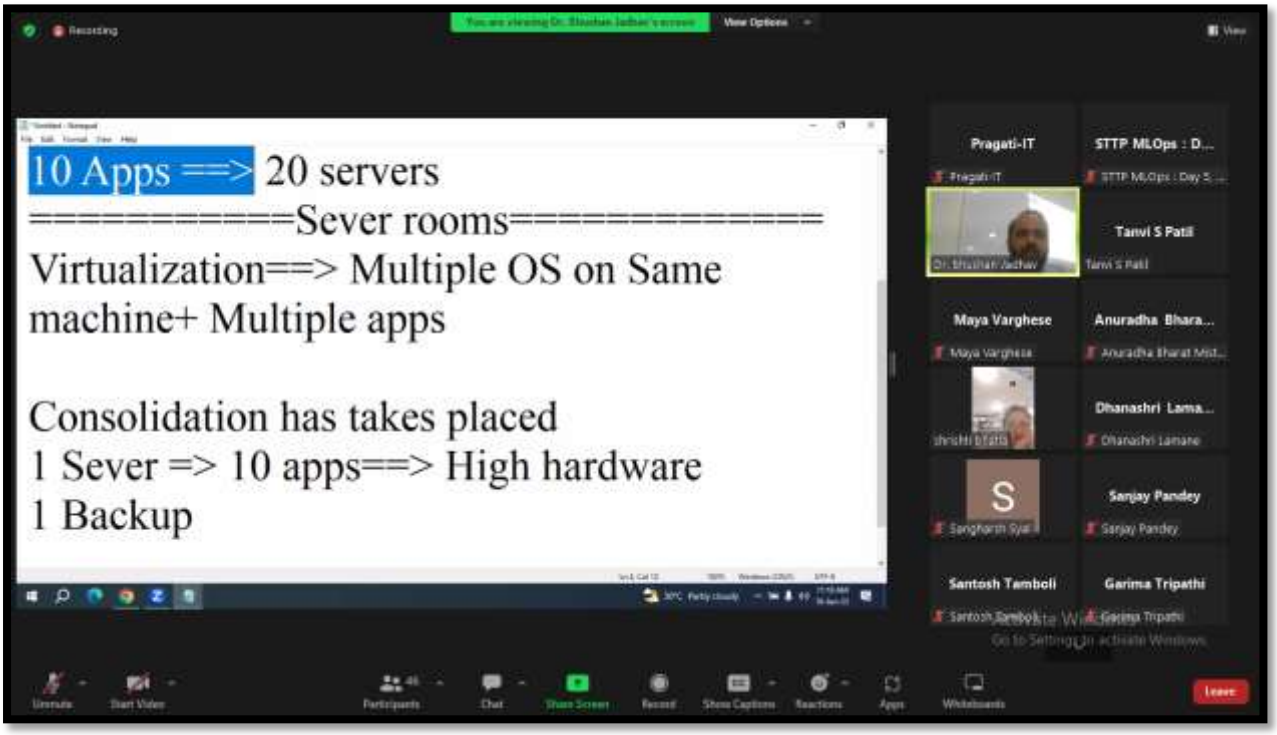
❖ **Session 2 (1 pm - 3 pm) :**

Speaker: Dr. Bhushan Jadhav, Assistant Professor, TSEC, Bandra

Topic – Hands –On using Selenium, Docker

Dr. Bhushan Jadhav has given has given hands on session on following points:

- Jenkins Installation and configuration
- Jenkins Programming
- Practical on GIT



- **Day 6 (17th June 2023)**

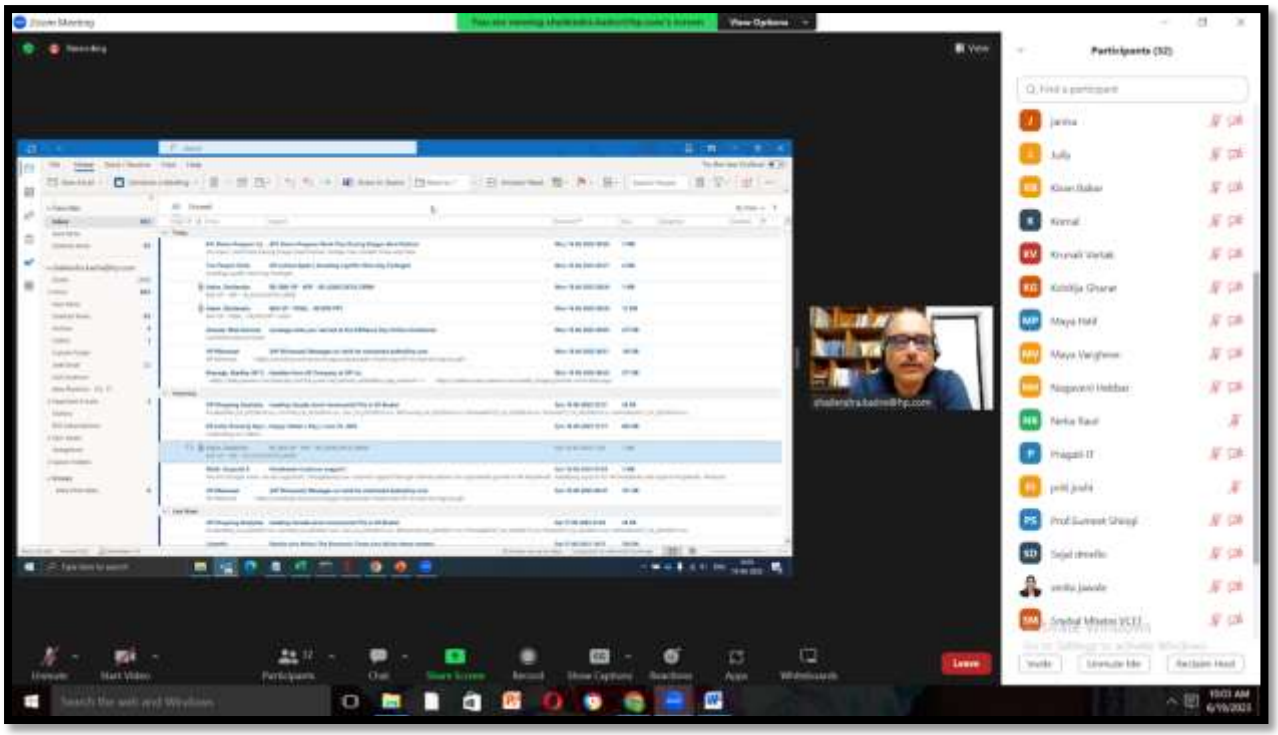
❖ **Session 1 (10 am - 12 pm) :**

Speaker: Mr. Shailendra Kadre, Sr. ML Engineer, HP Inc., Bengaluru.

Topic – MLOps: Industry Application.

Mr. Shailendra Kadre has described following points

- MLOps and its key components
- Data processing, model Training & Operations.
- MLOps Tools
- Trends in MLOps.
- Importance of MLOps.
- Case Study: Starbucks India.



Valedictory Function (1 pm-2 pm)

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Department of Electronics and Telecommunication Engineering

The Department of Electronics and Telecommunication Engineering was established in the year 1994 with the aim of providing state-of-the-art education in the field of Electronics and Telecommunication engineering. Since then, the department has evolved to match the ever-changing needs of the industry with highly qualified faculty members and staff. Ensuring the efforts for continuous development the Department is reaccredited by NBA. The department strives for the all-round development of the students by implementing Outcome Based Education systems with a regular focus on extra-curricular and co-curricular activities.

Department of Mechanical Engineering

Department of Mechanical Engineering was established in the year 1994 with the objective of imparting the knowledge and developing practical skills in the various areas of Mechanical Engineering. The Department has been Re-accredited by NBA and has an intake of 60 students. The Department imparts the skills and expertise in the areas of Design, Thermal sciences, Manufacturing and Renewable energy that are the backbone of Industries. The Department also offers consultancy in the field of Material testing, Product & Process Design, Energy Audit, ISO certification to the Industries. Department caters to the students varied interest through student activities. Team VCET Solecthon is renowned National level champion team for years together.

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Shri . Bhausaheb Mohol, Secretary, Vidyavardhini

Shri . Hasmukhbhai Shah, Treasurer, Vidyavardhini

Dr. Harish Vankudre, Principal VCET

Conveners

Dr. Amrita Ruperee

HoD, Electronics & Telecommunication Engineering

Dr. Uday Aswalekar

HoD, Mechanical Engineering

Co-ordinators

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E-mail: sunayana.jadhav@vcet.edu.in

Mobile No: +91 9766715766

Mr. Sanjay Lohar

E-mail: sanjay.lohar@vcet.edu.in

Mobile No: +91 9594906115

Vidyavardhini's College of Engineering & Technology

Approved by AICTE and affiliated to the University of Mumbai
Accredited by NAAC

In association with

Presents

ISTE approved One Week Student Development Programme (SDP)

on

Industry 4.0: Paradigm Shift in Technology

Date : 26th June to 01st July 2023

Organized by

Department of Electronics and Telecommunication Engineering
(NBA Accredited)

&

Department of Mechanical Engineering
(NBA Accredited)

K.T. Marg, Vasai Road (W),
Dist. Palghar, Maharashtra 401202
Contact No: 0250-2339486
Website: https://vcet.edu.in

About the Programme

The aim of this student development program is to make students aware about the latest technologies. This SDP will make attendees enhance their knowledge of current trends of automation, data exchange, IOT ecosystem, Cognitive & Cloud Computing.

Objective

1. To update Industry 4.0 among the academia and provide framework to the next generation.
2. To update the research scholars, academic faculties and people from industry with state-of-the art technologies.

Key features of the SDP

1. Offline sessions by Industry experts and academician.
2. Hands-on sessions on latest software and equipment.
3. Industrial Visit and discussion forum on research problems.

Expected Outcomes

1. Understand the Industry 4.0 architecture and eco-system.
2. Integrate hardware and software for the state of the art technology.
3. Apply smart methods of self-optimization, self-configuration, self-diagnostic, cognitive and intelligent support to complex problem.

Topics To Be Covered

- ❑ Building Blocks of IIOT
- ❑ Cyber Security
- ❑ AI & ML with its real time application
- ❑ Sensor Technology & its application
- ❑ Cloud Computing
- ❑ Condition Monitoring techniques
- ❑ Robotics and Automation
- ❑ Smart / Additive Manufacturing
- ❑ Augmented reality/Virtual reality/Mixed reality
- ❑ Digital Twin Technology
- ❑ 5G Technology

Eminent Speakers

Dr. Rita Jain
Co-Founder, AVRN Intellitech Pvt. Ltd Bhopal.

Dr. Harish Chandar
Founder, Director, INDIATECH

Dr. Satyanarayana Bheesette
Scientific Officer(H), Dept. of High Energy Physics, TIFR, Mumbai

Mr. B. A. Damahe,
Head- STA, L&T Skill Trainers Academy, Mumbai

Dr. Bhushan Jagyasi
Associate Director Accenture Technology, India

Dr. Shravani Shahapure
Data Security and Quantum Safe, Technical Head, Capgemini

Mr. Balasaheb Bhosale
Factory Head, Amul India Ltd., Mumbai

Dr. Harshit Dave
Associate Professor, SVNIT, Surat

Dr. Rajesh Buktar
Professor, SPCE, Mumbai

Dr. Saurabh Mehta
CAO, Professor, Vidyalankar Insititute of Technology, Mumbai

Dr. Dipti Patil
Dean Student Affairs, Cummins COE, Pune

Programme Committee

Mrs. Shraddha Gosavi

Mrs. Ekta Naik

Mrs. Trupti Shah

Mr. Vishwas Palve

Mr. Kamlesh Bachkar

Mr. Ganesh Wahile

Event Details

Date : 26th June 2023 - 01st July 2023

Time: 9.00 am to 5.00 pm

Venue: VCET Seminar Hall.

Registration

Registration Fees: ₹200/-

Fee Payment : Registration fees can be paid through Gpay or any third-party UPI application to

Beneficiary Name: EKTA RAJPAL

Mobile No: 9987622741

UPI ID: rajpal.ekta@okhdfcbank

Registration Form:
https://forms.gle/Kqu63MXym3gh1MEA7

Registration QR

Vidyavardhini's College of Engineering and Technology,
Vasai Road (W)

Program	**ISTE Approved One Week Faculty Development Program.**
Title	**Industry 4.0: Paradigm Shift in Technology**
Duration	26/06/2023 to 01/07/2023
Number of Participants	37
Organized by	Department of Electronics & Telecommunication and Department of Mechanical Engineering
Faculty	Dr. Deven Shah Dr. Bhushan Jagyasi Dr. Amit Bhende Dr. Ramchandra Sharad Mangrulkar Dr. Saurabh Mehta Mr. B. A. Damahe Dr. Rajesh Buktar Dr. Dipti Patil Dr. Harshit Dave Dr. Harish Chander Mr. K. K. Muley Mr. Abhishek Rane Rajyog Dr. Shravani Shahapure
Description	**26/06/2023** **Inauguration** **Chief Guest – Dr Devan Shah** Mrs. Shraddha Gowasi graciously welcomed the chief guest and participants as the inauguration ceremony commenced. The event commenced with the Saraswati Vandana, a reverential prayer dedicated to the goddess of knowledge, followed by the ceremonial lighting of the lamp. Followed by the rendition Maharashtra Geet. Dr. Amrita Ruperee, the Convener of the program and Head of the Electronics and Tele-communication Engineering department, provided a concise overview of the topics that will be covered during the ISTE approved STTP/FDP on Industry 4.0 Paradigm Shift in Technology, spanning six days. Dr. Harish Vankudre, the Principal of VCET, delivered an insightful address to the

participants, emphasizing the transformative advancements that the fourth industrial revolution has brought to the manufacturing industry.
Mr. Sanjay Lohar introduced the esteemed chief guest, Dr. Devan Shah, shedding light on his illustrious career accomplishments and numerous accolades. Dr. Devan Shah proceeded to deliver a comprehensive session on the importance of blockchain technology in Industry 4.0, providing participants with an in-depth introduction covering both fundamental and advanced concepts.
Concluding the ceremony, Dr. Uday Aswalekar, the Convener of the program and Head of the Mechanical Engineering Department, delivered the Vote of Thanks. He expressed gratitude to the Management of Vidyavardhini's College of Engineering and Technology, ISTE, and the principal, for their invaluable support in organizing the faculty development program. Dr. Uday Aswalekar also extended his appreciation to the coordinator for their dedicated efforts in arranging FDP. The ceremony concluded with the rendition of the National Anthem.

Session 1: Technology Innovation for Sustainable Development
Resource Person: Dr. Bhushan Jagyasi
Topics Covered:
Renewable Energy
Energy Storage
Smart Grids:
Circular Economy:
Precision Agriculture:
Sustainable Transportation:
Water Management:
Climate Monitoring and Adaptation:
Social Innovation:

Dr. Bhushan Jagyasi introduce advancements in solar, wind, and hydroelectric power technologies drive the transition to clean and sustainable energy sources. Technology promotes resource efficiency, waste reduction, and recycling through advanced analytics, AI, and IoT applications. Digital technologies enhance agricultural practices, optimizing resource use, reducing waste, and increasing crop yields. Technology, such as blockchain, fosters social innovation by promoting transparency, fair trade, and responsible sourcing

Session 2: Condition Monitoring in Industry 4.0 scenario.
Resource Person: Dr. Amit R. Bhende
Topics Covered

- Industrial Revolution
- Key Components of Industry 4.0
- History of condition monitoring
- Condition Monitoring in Industry 4.0
- Condition monitoring Before and After Industry 4.0

- Industry 4.0 Architecture in Condition Monitoring
- Design of IOT system
- Challenges in Industry 4.0 scenario.
- Cyber security

Dr. Amit Bhende delivered a session on the significance of condition monitoring in Industry 4.0, emphasizing the correlation between industrial development and economic growth. He provided insights into the concept of condition monitoring within the context of Industry 4.0, accompanied by a compelling case study illustrating motor condition monitoring.

Session 3: Emerging Industry 4.0 standard: Block chain technology
Resource Person: Dr. Ram Mangrulkar
Topics covered.

- Supply chain Management
- Why blockchain is important in industry 4.0.
- Overview of Industries using Supply chain solutions.
- Initiatives in India
- Solutions & Block chain frameworks
- Demo on blockchain technology(demoblockchain.org, blockchain.basics.com)
- example on Distributed blockchain.
- Demo of Mining and Validation (etherscan.io)
- Introduction to Merkle tree
- Understanding definition: Distributed, Transparent.

During his presentation, Dr. Ram Mangrulkar highlighted the significance of blockchain technology as it rapidly establishes itself as a standard in Industry 4.0. Blockchain offers a decentralized and transparent framework that ensures secure data sharing, traceability, and fosters trust among diverse stakeholders within the industrial ecosystem.

27/06/2023
Session 1:
Resource Person: Dr. Saurabh Mehta, CAO, Professor, Vidyalankar Insititute of Technology.

Topics Covered:

- Introduction to 5G technology
- Application of 5G technology
- Impact of 5G technology in IoT

Dr. Saurabh Mehta conducted session on 5G Technology. In this session Dr. Mehta introduced working of 5G technology and discussed basic architecture of 5G technology. Further, Dr. Mehta discussed 5G Nanocore features in detail

and covered upon design of 5G mobile network. Lastly, Dr. Mehta cleared doubts of participants on topic of 5G technology.

27/06/2023
Session 2:
Resource Person: Mr. B.A. Damahe, Head- STA, L&T Skill Trainers Academy, Mumbai

Topics Covered:
- Introduction to IoT and Industry 4.0.
- Architecture of IoT in applications in Industry 4.0
- Case study discussion and assignment solving.

Mr. B.A. Damahe conducted session on topic of applications of Industry 4.0, where he discussed applications of Industry 4.0 and its architecture. He further discussed IIoT- Art of Possibility and 09 pillars of IoT industry. Lastly he discussed on 06 principles of IoT in Industry 4.0 and concluded the session with question and answers from the participants.

27/06/2023
Session 3 &4:
Resource Person: Dr. Rajesh Buktar, Professor, SPCE, Mumbai
Topics Covered:
- Introduction to Industry 4.0.
- Different components of Industry 4.0
- Augmented reality
- Digital Twin & Smart Manufacturing

Dr. Rajesh Buktar, Professor, SPCE, Mumbai conducted session on Industry 4.0 & Augmented Reality and Digital Twin & Smart Manufacturing. Dr Buktar introduced the importance of smart manufacturing in Industry 4.0. He explained the concepts of AR/VR with numerous examples and showcased case studies related to it. He further discussed the concept of Digital Twin and its showcased case study example.

28/06/2023
Session 1: Industry 4.0 for smart healthcare
Resource Person: Dr. Dipti Patil
Topics Covered:
- Internet of Things (IoT) and Connectivity
- Big Data Analytics
- Artificial Intelligence (AI) and Machine Learning (ML)
- Robotics and Automation
- Telemedicine and Remote Care
- Cybersecurity and Data Privacy

- Personalized Medicine
- Collaborative Ecosystems

Dr. Dipti Patil discussed how Industry 4.0 technologies are transforming healthcare into a more interconnected, data-driven, and patient-centric ecosystem, offering numerous opportunities for improved healthcare delivery, cost reduction, and better health outcomes.

Session 2: Composite 3D Printing
Resource Person: Dr. Harshit Dave
Topics Covered:

- Material Variety
- Enhanced Material Properties
- Tailored Material Combinations
- Improved Structural Performance
- Lightweight Design
- Design Freedom
- Multi-Functionality
- Process Optimization
- Industrial Applications
- Sustainability

Dr. Harshit Dave highlighted the advancements and benefits of composite 3D printing, which has the potential to revolutionize manufacturing processes, enable new applications, and drive innovation in various industries**.**

Session 3 & 4 : Industrial Visit
Location: Sick India Ltd.

29/06/2023
Session 1 & 2:
Resource Person: Dr. Harish Chandar, Founder Director INDIATECH.

Topics Covered:

- Various modern cybercrimes.
- How to verify safe websites.
- Different methods to safeguard personal information.

Dr. Harish Chander, Founder Director INDIATECH, conducted session on Modern Cybercrimes and Security- A Practical Approach. In this session Dr. Chander showcased different methods which cyber criminals endorse to dupe people. He showcased different methods to safeguard against this crimes by doing hands on session. Dr. Chander also discussed various case studies in which such crimes were conducted and showcased ways to prevent this. Lastly, he cleared doubts of participants on topic related to cybercrimes.

29/06/2023
Session 3 & 4:
Resource Person: Mr. K.K. Muley

Topics Covered:
- Hnads on session on IOT and its real time applications.
- IOT Architecture
- Communications option in IOT

Mr. K. K. Muley and its team conducted hands on session on IOT and its real time application. He discussed various communication options in IOT and discussed IOT architecture. Mr. Muley conducted hands on session on IOT Microcontroller Kit and demonstrated its importance. Lastly, Mr. Muley cleared doubts of participants on topics related to sensors, controllers, etc.

30/06/2023
Session 1&2: Application of Robotics and IoT in Industry
Resource Person: Mr. Abhishek Rane

Topics Covered
- Robotics in Industry
- IoT in Industry
- Integration of Robotics and IoT
- Industry 4.0 and Smart Factories
- Industrial Applications

During his demonstration, Mr. Abhishek Rane showcased the Python programming code for a line-following robot. He also discussed the challenges involved in designing the robot, particularly emphasizing the variations in sensor grades used. Mr. Rane recommended using sensors that adhere to industry standards for optimal performance.

Session 3 & 4 : Industrial Visit
Location: Amul Diary Ltd, Virar.

01/07/2023
Session 1
Resource Person: Rajyog

Topics Covered:
- Importance of Yoga
- Yoga poses to build physical wellness.
- Importance of Mental strength.

Rajyog faculty demonstrated various yoga poses to build physical wellness. All participants did yoga poses along with trainer. BK Bharti held session on Importance of Mental strength and told numerous ways to keep mental wellness.

01/07/2023
Session 2
Resource Person: Dr. Shravani Shahapure, Data Security and Quantum Safe, Technical Head, Capgemini.

Topics Covered:
- Importance of Cybersecurity.
- Quantum computing
- Data Security

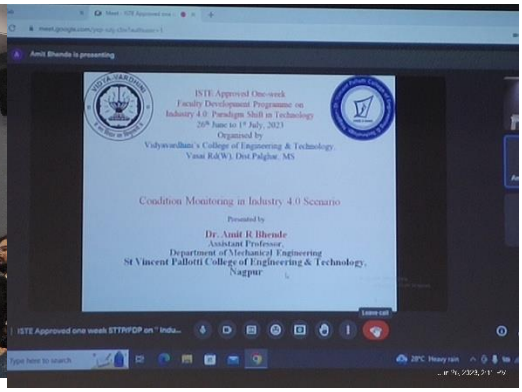
In this session Dr. Shravani Shahapure discussed on Importance of Cybersecurity in today's scenario. She further explained basic structure of cybersecurity and highlighted role of upcoming technologies like quantum computing in cybersecurity. Dr. Shahapure also discussed various roles in cybersecurity for new aspirants, and lastly she cleared participants doubts on topic related to cyber crimes and security aspects.

Valedictory Function:
Prof. Sanjay Lohar gave valedictorian speech where he summarised the sessions of different topics covered in the FDP. He further emphasized on importance of knowledge gained in FDP and its future scope. He further thanked all the participants for putting up their hard work for successfully completing the FDP.

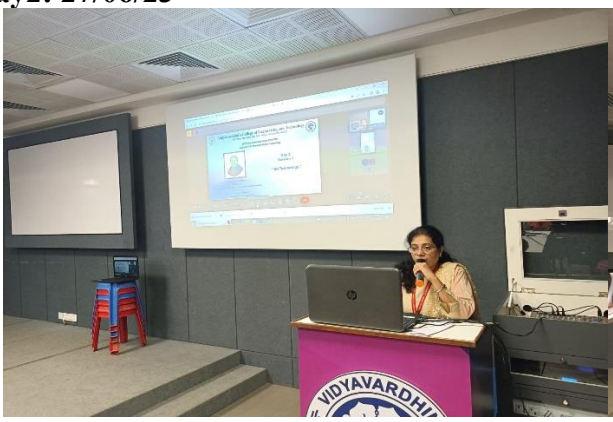
Photographs

Day1: 26/06/23

Vidyavardhini's College of Engineering and Technology,
Vasai Road (W)

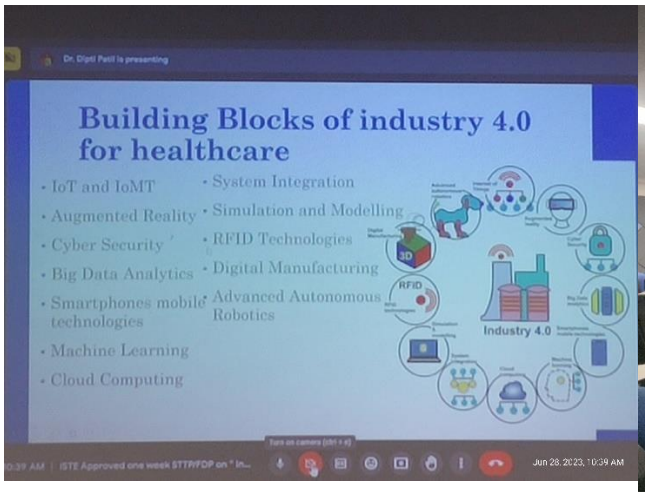


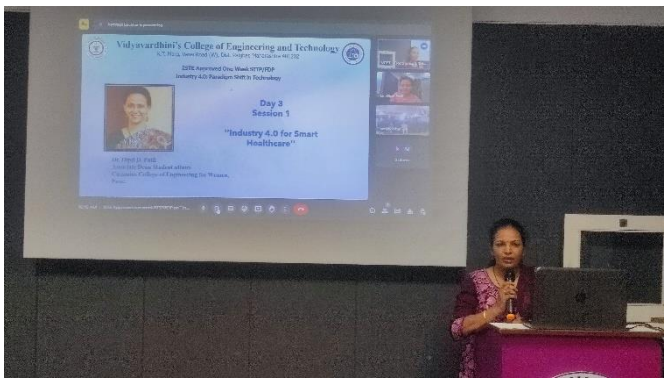
Day2: 27/06/23



Vidyavardhini's College of Engineering and Technology,
Vasai Road (W)

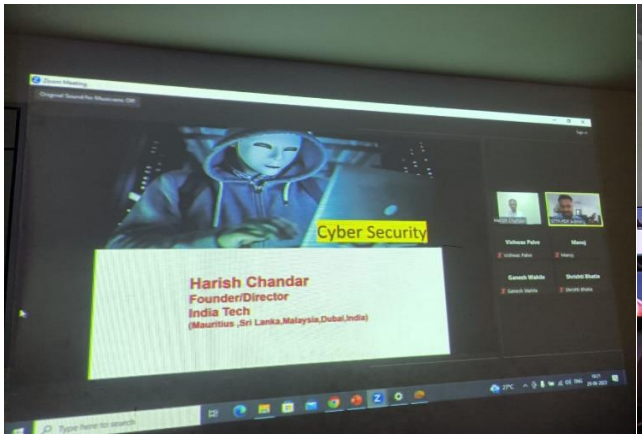

Day3: 28/06/23

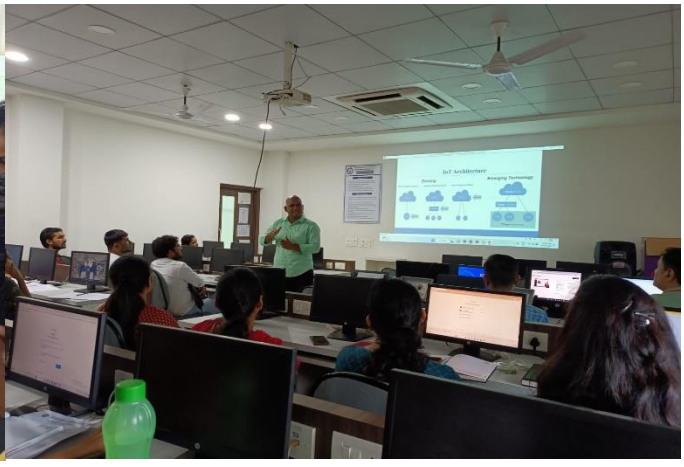




Vidyavardhini's College of Engineering and Technology,
Vasai Road (W)

Day4: 29/06/23





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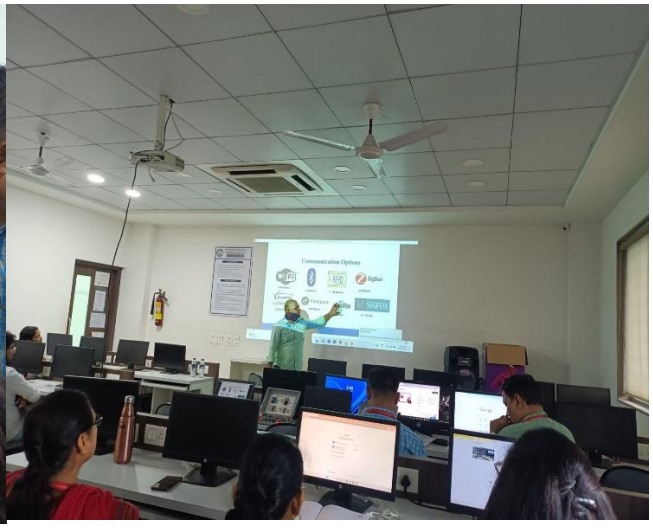
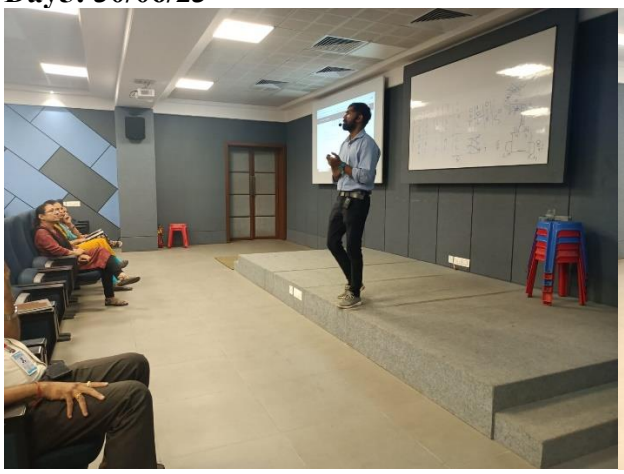
Vasai Road (W)

Day5: 30/06/23

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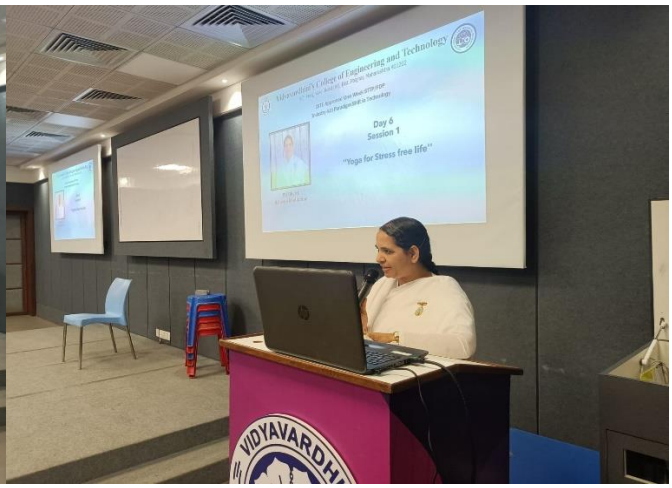
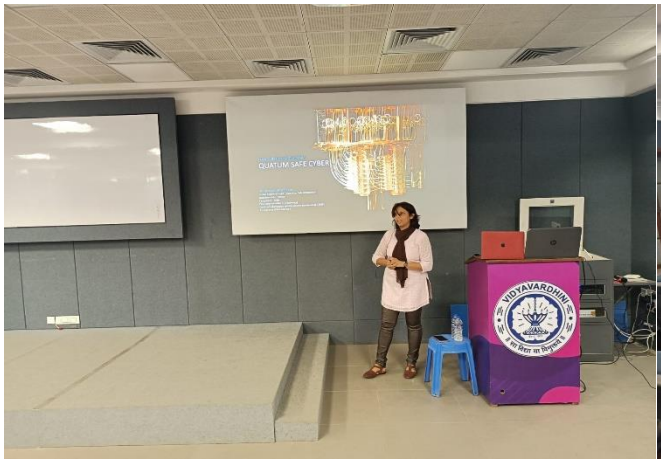
Vidyavardhini's College of Engineering and Technology,
Vasai Road (W)

Day6: 01/07/23





Vidyavardhini's College of Engineering and Technology,
Vasai Road (W)

Sign. with Date	

Sign. with Date	(Convenor) HEAD Dept of Electronics and Telecommunication Engg. Vidyavardhini's College of Engineering & Technology. Vasai Road 401202.

2020-21

Dates (From-to) (DD-MM-YYYY)	Title of the FDP/ Professional Development/ Administrative Training Program	Page No.
2020-21		
From 14-6-2021 to 25 -6-2021	STTP on Internet Programming: The Full Stack Approach	1
From 21-6-2021 to 26-6-2021	STTP on Cyber Security: Individual, Technology and Research Trends	7
From 28-6-2021 to 3-7-2021	STTP on Resent Trends Research and Challenges in IOT Applications	28

About VCET

Vidyavardhini means a body committed to enhancement of knowledge. Vidyavardhini Society was established as a registered society in 1970 by Late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July 1994. The Institute is affiliated to the University of Mumbai for the four-year degree program leading to the Degree of Bachelor of Engineering. The Institute is accredited by NAAC. Four programs of the Institute were also accredited by NBA for period of three years from 2012 to 2015.

About IT Department

Department of Information Technology was established in the year 1999. The Department has an intake of 60 students. The Department boasts of a qualified, dynamic and technologically sound faculty with a good teaching and industrial experience. The Department consists of 9 well-equipped, state-of-the-art labs with facilities conducive for growth of the students. The sincere efforts by the staff and graduating students each year bring laurels to the Department by their academic and placement records.

Patrons

Chief Patron

- **Shri. Vikas Vartak,** President, Vidyavardhini

Patrons

- **Shri. Arun Vartak ,** Chairman, Vidyavardhini
- **Shri. Shantaram Jadhav,** Vice President, Vidyavardhini
- **Shri. Pandurang Naik,** Vice President, Vidyavardhini
- **Shri. P. D. Kodolikar,** Vice President, Vidyavardhini
- **Shri. Bhausaheb Mohol,** Secretary, Vidyavardhini
- **Shri. Hasmukhbhai Shah,** Treasurer, Vidyavardhini
- **Dr. Harish V. Vankudre,** Principal, VCET

Conveners

- **Dr. Ashish Vanmali**
  Associate Professor and HOD - IT
- **Prof. Chandan Kolvankar**
  Assistant Professor

Coordinators

- **Prof. Sainath Patil**
  Assistant Professor
  E-mail: sainath.patil@vcet.edu.in
  Mobile: 9422488969
- **Prof. Anagha Patil**
  Assistant Professor
  E-mail: anagha.patil@vcet.edu.in
  Mobile: 9004078402

Vidyavardhini's College of Engineering & Technology

K.T. Marg, Vasai Road (West), Dist. Palghar – 401202, Maharashtra

ISTE Approved
Two weeks Online STTP on

Internet Programming: The Full Stack Approach

(ISTE/Proceedings/Online STTP-SF-MAH-002/2021-22)

14th June to 25th June 2021

Organized by

Department of Information Technology
Vidyavardhini's College of Engineering & Technology

Visit: https://vcet.edu.in/STTP/
E-mail: sttp.ip@vcet.edu.in

Course Objectives

- To expose participants to JavaScript to develop interactive web pages
- To orient participants to basics of React along with installation
- To orient participants to fundamentals of node.js
- To expose participants to node.js applications using express framework.

Topics Covered

- **Bootstrap:** Navigation, Tables, Forms, UI
- **Java Script:** Introduction to ES6, Language fundamentals, Events, OOPs, Client-server communication, Asynchronous JavaScript.
- **React:** NPM, Installation, Environment Setup, Folder and file structure, Components, Render, State and props, Router and Single page applications, UI design, Class components and functional components, Web Pack.
- **ReactNative:** App, Flexbox, HTTP, UI, Running over Android.
- **Node.js:** Environment Setup, Asynchronous Programming, Callback, Event Loops, REPL, Event Emitter, HTTP Concepts.
- **Express:** Introduction, Express router, REST API, Sessions, Integrating with React, MongoDB.

Key Resource Persons

- **Mr. Swapnil Mistry**, Sr. Software Engineer, Cimpress
- **Mr. Shahbaz Khan**, Freelance Data Scientist and Software Developer
- **Mr. Mihir Dave**, Co-founder/Developer, Bombay Studio
- **Mr. Tarun Singh**, Jr. Application Engineer, Raw Engineering Pvt. Ltd.
- **Akhil Kumar,** Sr. Full Stack Developer, iSchoolConnect
- **Prof. Chandan Kolvankar**, Assistant Professor, Dept. of IT, VCET
- **Prof. Chetan Mahajan,** Assistant Professor, Dept. of IT, SAKES
- **Prof. Yogesh Pingle**, Assistant Professor, Dept. of IT, VCET

Organizing Committee

Core Team

- Prof. Archana Ekbote
- Prof. Madhavi Waghmare
- Prof. Vaishali Shirsath
- Prof. Bharati Gondhalekar
- Prof. Yogesh Pingle
- Prof. Maryam Jawadwala
- Prof. Swati Varma
- Prof. Dhanashree Raut

Supporting Team

- Mr. Nitin Shingane
- Mrs. Harita Raut
- Mrs. Komal Shringarpure

Mode of Conduction

The course will be conducted in online mode using Google Meet platform.

Registration Fees

For Teaching Faculty : **Rs. 500/-**

For Industry Person : **Rs. 1000/-**

Note: ISTE membership is mandatory for registration of the course. If a person does not have ISTE membership, he/she should apply for the same and submit the scanned copy of the application form and DD submitted while registration.

How to apply

Registration fees can be paid through online bank transfer or GPay.

Details for online transfer:

Beneficiary Name: Sainath Patil
A/C No.: 320602011002223
Bank : Union Bank of India
Branch: Vidyavardhini College Road
IFSC Code: UBIN0562556

Details for GPay:

Beneficiary Name: Sai Patil
Mobile No.: 9422488969

After paying registration fees, complete the registration form available on the course webpage https://vcet.edu.in/STTP/ on or before 9th June 2021.

Vidyavardhini's College of Engineering & Technology
Department of Information Technology

Report of Two weeks ISTE approved Online STTP on

"Internet Programming: The Full Stack Approach"

Title	Internet Programming: The Full Stack Approach
Duration	14th June 2021 – 25th June 2021 (11 Working Days)
Timings	Morning Session : 9:30 am to 12:30 pm Afternoon Session : 2:00 pm to 4:30 pm
Mode of Conduction	Online through Google Meet
Description	This course was designed to learn Internet Programming using Full Stack technology. This course focused on various topics like: ● Bootstrap: Navigation, Tables, Forms, UI ● Java Script: Introduction to ES6, Language fundamentals, Events, OOPs, Client-server communication, Asynchronous JavaScript. ● React: NPM, Installation, Environment Setup, Folder and file structure, Components, Render, State and props, Router and Single page applications, UI design, Class components and functional components, Web Pack. ● ReactNative: App, Flexbox, HTTP, UI, Running over Android. ● Node.js: Environment Setup, Asynchronous Programming, Callback, Event Loops, REPL, Event Emitter, HTTP Concepts. ● Express: Introduction, Express router, REST API, Sessions, Integrating with React, MongoDB.
Objectives	1. To expose participants to JavaScript to develop interactive web pages. 2. To orient participants to basics of React along with installation. 3. To orient participants to fundamentals of node.js. 4. To expose participants to node.js applications using express framework.
Participants	Faculties from different engineering institutes.
No. of Participants	60 (53 ISTE Members + 07 Non-ISTE Members)
Convenors	• Dr. Ashish Vanmali, HOD-IT, VCET • Mr. Chandan Kolvankar, Assistant Professor, VCET
Coordinator	• Mr. Sainath Patil, Assistant Professor, VCET • Mrs. Anagha Patil, Assistant Professor, VCET
Speakers	• Mr. Mihir Dave, Co-founder/developer, Bombay Studio • Mr. Afzal Sayed, Lead Frontend Engg., KeepWorks Technologies Pvt. Ltd. • Mr. Saquib Khan, Web Developer, TCS • Mr. Swapnil Mistry, Senior Software Engineer, Cimpress • Mr. Tarun Singh, Jr. Application Engineer, Raw Engineering Pvt. Ltd. • Mr. Akhil Kumar, Sr Full Stack Developer, iSchoolConnect

	• Mr. Chandan kolvankar, AP, VCET • Mr. Sainath Patil, AP, VCET • Mrs. Anagha J. Patil, AP, VCET • Mr. Yogesh Pingle, AP, VCET • Ms. Swati Varma, AP, VCET

Link of FDP program brochure or template:
https://drive.google.com/file/d/1w8F7CJz20B6t7LcchLSra3rQptUQ0Cdy/view?usp=sharing

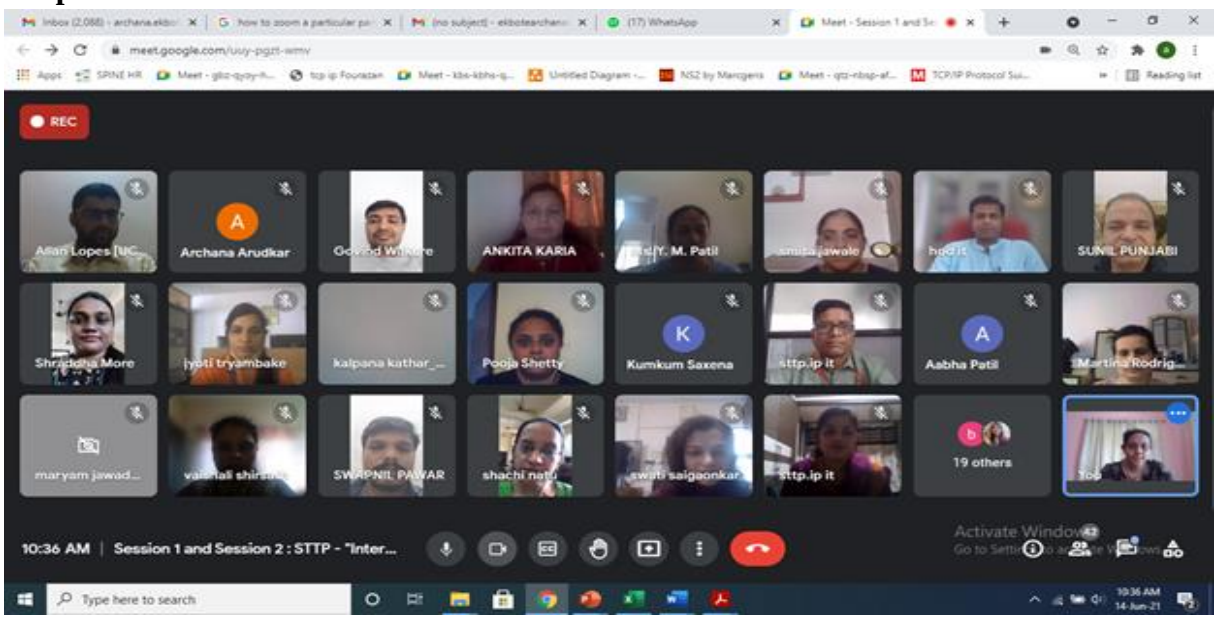
Schedule of the STTP:
https://drive.google.com/file/d/1xbJL2X3f_c-2qY5xuCcAz9LlL-F6ea3z/view?usp=sharing

List of Participants with Institute details, E-mail id, ISTE LM number and Marks obtained:
https://docs.google.com/spreadsheets/d/1p0w1dxaK32yzBaTIJHkc9mKIulzT3WOGplPO5BsT8W0/edit?usp=sharing

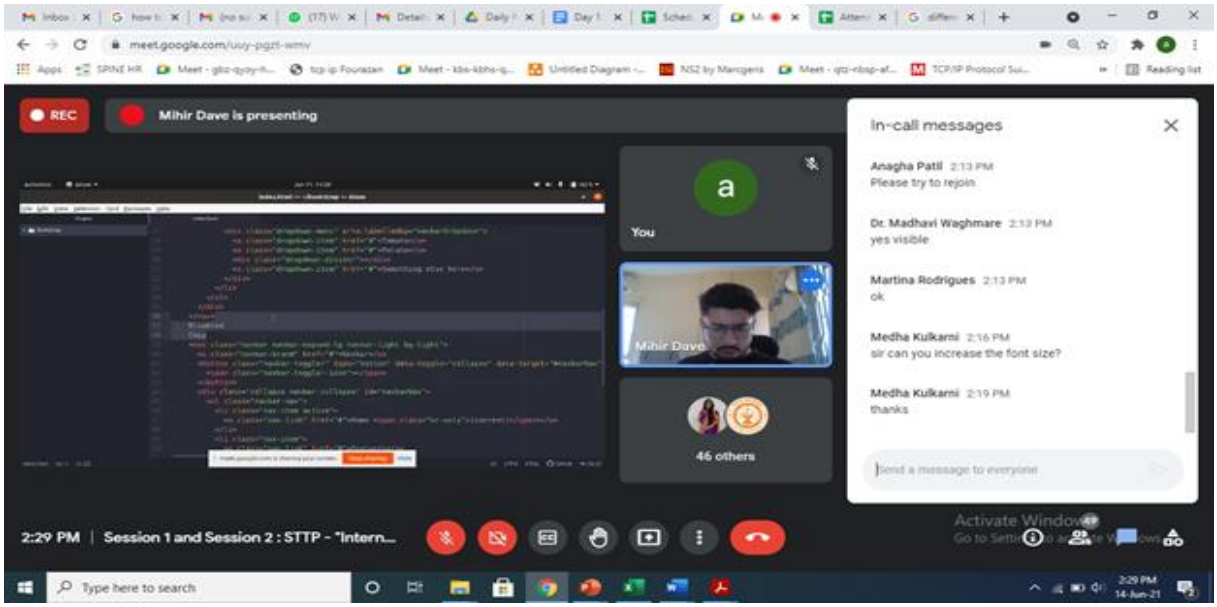
Link of Course Material:
https://drive.google.com/drive/folders/1GHB9qAMFNTn30LXLh4SMKb5vjaEhxaSS?usp=sharing

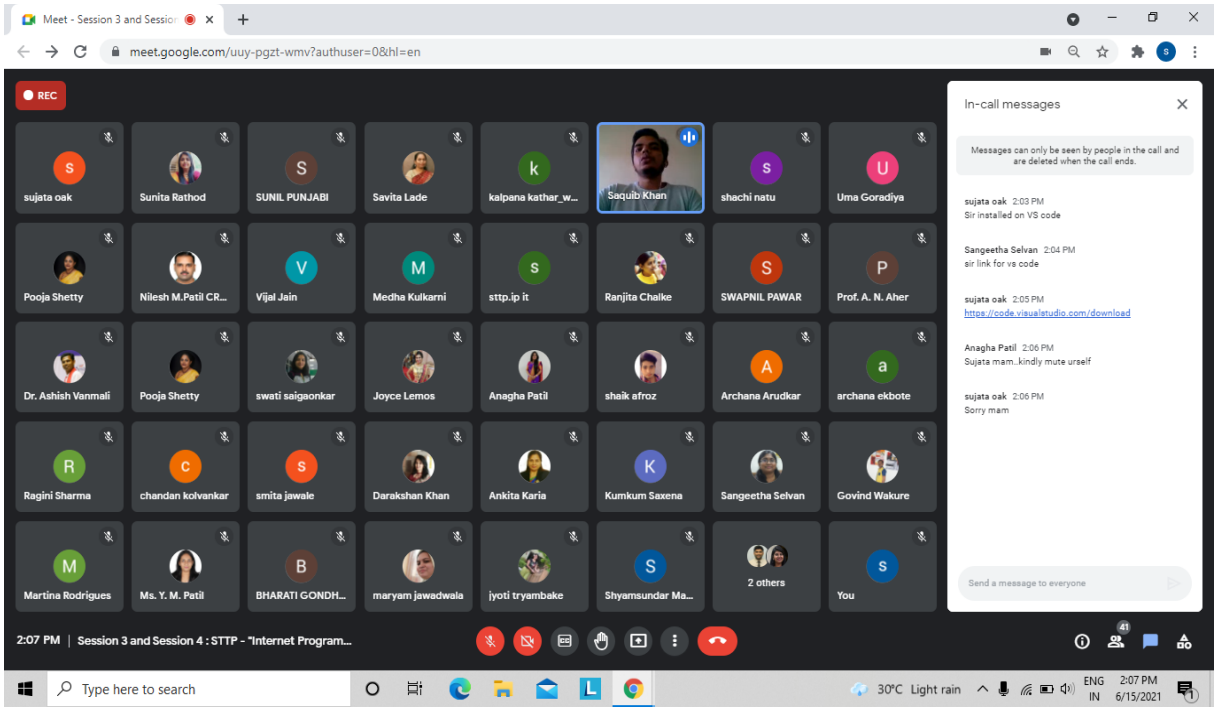
Link of YouTube Channel:
https://youtu.be/IVoqyXH6Mk8

Snapshots of STTP:

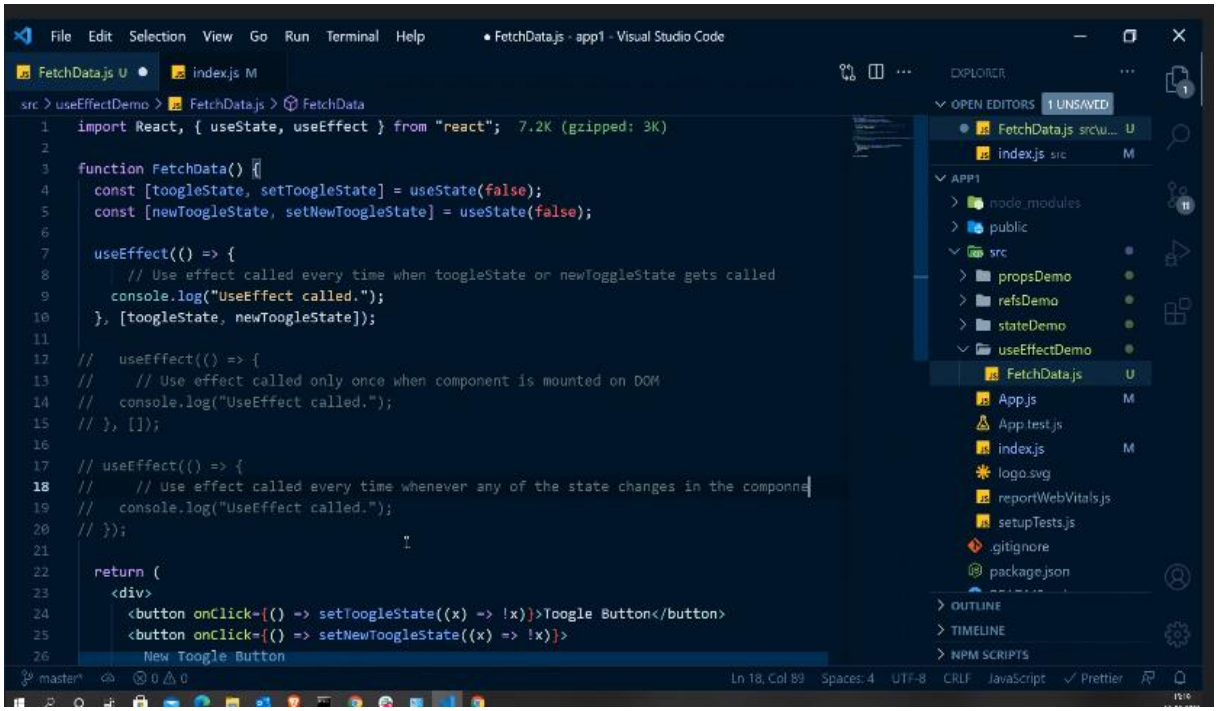


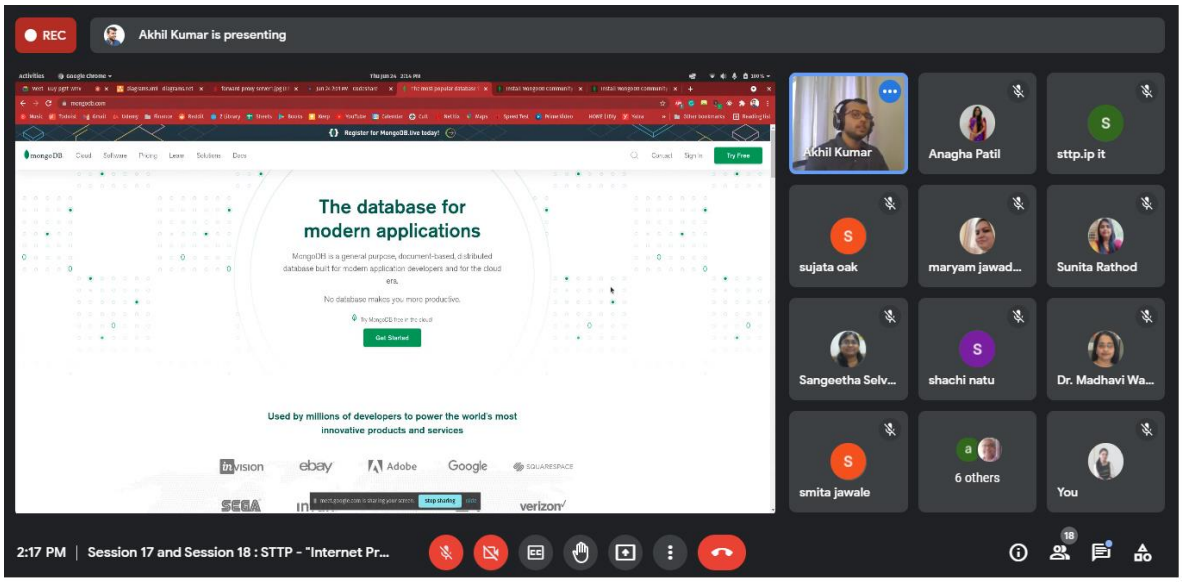
Vidyavardhini's College of Engineering & Technology
Department of Information Technology





Vidyavardhini's College of Engineering & Technology
Department of Information Technology





Mr. Sainath Patil,
Assistant Professor, VCET

Mrs. Anagha Patil,
Assistant Professor, VCET

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Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai.

It is approved by AICTE and affiliated to the University of Mumbai for the Bachelor's Degree in Mechanical, Electronics and Telecommunication, Instrumentation, Computer Engineering, Information Technology, Civil Engineering, Computer Science & Engineering (Data Science) and Artificial Intelligence & Data Science Engineering.

ABOUT DEPARTMENT OF COMPUTER ENGG.

Department of Computer Engineering was established in the year 1999 with the objective of imparting the knowledge and developing practical skills in various areas of computer engineering. The Department was accredited by NBA and has an intake of 60 students. The department motivates its students to participate in co-curricular and extra-curricular activities essential for development and nurturing of team spirit and developing organizational skills. Department has clear vision to become center of excellence in the varied domain of computer engineering. The department has expert and well trained human resources and well equipped laboratories to impart domain specific knowledge.

PATRONS

Chief Patron

Shri. Vikas Vartak, President, Vidyavardhini

Patron

Shri. Arun Vartak, Chairman, Vidyavardhini

Shri. Shantaram Jadhav, Vice President, Vidyavardhini

Shri. Pandurang Naik, Vice President, Vidyavardhini

Shri. P. D. Kodolikar, Vice President, Vidyavardhini

Shri. Bhausaheb Mohol, Secretary, Vidyavardhini

Shri. Hasmukhbhai Shah, Treasurer, Vidyavardhini

Dr. Harish V. Vankudre, Principal, VCET

CONVENER

Dr. Megha Trivedi

Associate Professor & HOD, Computer Engineering

CO-CONVENER

Dr. Tatwadarshi P. N.

Assistant Professor, Computer Engineering

COORDINATORS

Prof. Smita Jawale

Assistant Professor, Computer Engineering

Email: smita.jawale@vcet.edu.in

Mob. No.: 9226428440

Prof. Sneha Mhatre

Assistant Professor, Computer Engineering

Email: sneha.mhatre@vcet.edu.in

Mob. No.: 9272888970

Vidyavardhini's College of Engineering & Technology

Approved by AICTE and affiliated to the University of Mumbai

Accredited by NAAC

ISTE approved One week

Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Organized by

Department of Computer Engineering

K.T. Marg, Vartak College Campus, Vasai Road (W.), Dist. Palghar, Maharashtra 401202

No.: 0250-233 9486

: https://vcet.edu.in/

ABOUT THE COURSE

The world is becoming more and more interconnected because of the Internet. It is the internet which are enabled people to stay connected and continue with their work during the Covid19 pandemic global lockdown. The global lockdown also forced many people to transact online over the internet. On the flip side, this has also brought about the increase in the cyber attacks.

The course intends to familiarise the participants with the importance of cyber security, understand the technologies and understand the research trends in the field of cyber security.

COURSE OBJECTIVES

- To familiarise participants with the idea of, importance and need of Cyber Security
- To familiarise participants with the idea of securing oneself
- To familiarise participants with cybercrimes, reporting, data privacy laws, and mitigations
- To familiarise participants with the new technologies like Machine Learning and Deep Learning used in Cyber Security
- To familiarise participants with Internet of Things and wearable device security
- To familiarise participants with the tools used for checking the vulnerabilities in the systems and websites
- To familiarise participants with the Research trends in Cyber Security

TOPICS COVERED

- Need for Cyber Security
- Cyber Security Fundamentals
- Biometric Security
- Individual Security, Cybercrimes and Data Privacy Laws
- IoT Security
- Security Tools
- Technologies in Cyber Security
- Zero Trust Security
- Research Trends in Cyber Security

EMINENT SPEAKERS

Eminent Speakers from Industry and Academia including,

- **Dr. Parikshit N. Mahalle**, Professor and HOD, Computer Engineering, Smt. Kashibai Navale College of Engineering, Pune.
- **Dr. Narendra Shekokar**, Professor, DJSCE, Mumbai
- **Dr. Nilanjan Dey**, Associate Professor, JIS University, Kolkata. Editor-in-Chief: Int. J. of Ambient Computing and Intelligence (Scopus, DBLP, ACM dl, WoS)
- **Dr. Ramchandra Mangrulkar**, Associate Professor, DJSCE, Mumbai
- **Prof. Dayanand D. Ambawade**, Associate Professor, SPIT
- **Prof. Yogesh Jadhav**, Corporate Trainer and Assistant Professor, Amity University
- **Mr. Sachin Dedhia**, CISA, CEH, CEI, ISO 27001 LA, Founder - Skynet Secure
- **Mr. Vicky Shah**, Advocate Cybercrime, Data Protection and Privacy
- **Mr. Mithil Gharat**, Deputy Manager, Deloitte

PROGRAMME COMMITTEE

Dr. Swapna Borde, Dean Alumni & Assistant Professor, Computer Engg.

Prof. Anil Hingmire, Assistant Professor, Computer Engg.

Prof. Vishal Patil, Assistant Professor, Computer Engg.

Technical Support

Mr. Sanjiv Vedpathak, Sys. Programmer, Computer Engg.

EVENT DETAILS

Date: **21st - 26th June, 2021**

Sessions: **Two Sessions per Day**

Mode of Conduction: **Online**

REGISTRATION

Registration Fees:

For Teaching Faculty: **₹ 200/-**

For Industry Person: **₹ 500/-**

Fee Payment:

Registration fees can be paid through Gpay or any third party UPI applications to

Beneficiary Name: Sneha Mhatre

Mobile No.: 9272888970

UPI ID: srmhatre21@okaxis

Registration Form:

After paying the registration fees kindly complete the registration by filling the following form

http://tiny.cc/ISTE_STTP_Cybersecurity

Vidyavardhini's College of Engineering & Technology

K. T. Marg, Vasai Road(W), Dist. Palghar, Maharashtra

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Department of Computer Engineering

organizes

ISTE approved One week Short Term Training Programme on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Topics

- Need for Cyber Security
- Cyber Security Fundamentals
- Biometric Security
- Individual Security, Cybercrimes and Data Privacy Laws
- IoT Security
- Security Tools
- Technologies in Cyber Security
- Zero Trust Security

Speakers: Eminent persons from Industry and Academia

Registration Fees:

For Teaching Faculty: ₹ **200/-**

For Industry Person: ₹ **500/-**

Fee Payment:

Registration fees can be paid through Gpay or any third party UPI applications to

Beneficiary Name: Sneha Mhatre

Mobile No.: 9272888970

UPI ID: srmhatre21@okaxis

Registration Form:

After paying the registration fees kindly complete the registration by filling the following form

http://tiny.cc/ISTE_STTP_Cybersecurity

Patron

Dr. Harish V. Vankudre, Principal, VCET

Convener

Dr. Megha Trivedi

Associate Professor & HOD, Computer Engineering

Co-convener

Dr. Tatwadarshi P. N.

Assistant Professor, Computer Engineering

Coordinators

Prof. Smita Jawale

Assistant Professor, Computer Engineering

Mob. No.: 9226428440

Prof. Sneha Mhatre

Assistant Professor, Computer Engineering

Mob. No.: 9272888970

For more details visit: https://vcet.edu.in/wp-content/uploads/2021/06/ISTE-STTP-Cyber-Security-1.pdf

Vidyavardhini's College of Engineering & Technology

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Accredited by NAAC

Department of Computer Engineering

ISTE approved One week Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 1 : Session 2

Topic: Cyber Security Fundamentals

Date: 21st June, 2021

Time: 2:00 PM

Speaker: Prof. Yogesh Jadhav,
Corporate Trainer and Assistant Professor, Amity University

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Department of Computer Engineering

ISTE approved One week Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 1 : Session 1

Topic: Smart Healthcare/Medical IoT and Access Control Frameworks

Date: 21st June, 2021

Time: 10:30 AM

Speaker: Dr. Parikshit Mahalle,
Professor and HOD, Comp. Engg, SKNCOE, Pune

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ISTE approved One week Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 2 : Session 1

Topic: Biometric Security

Date: 22nd June, 2021

Time: 10:30 AM

Speaker: Dr. Nilanjan Dey,
Associate Professor, JIS University, Kolkata
Editor-in-Chief: IJACI (Scopus, DBLP, ACM dl, WoS))

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ISTE approved One week Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 2 : Session 2

Topic: Securing Oneself in the cyber world

Date: 22nd June, 2021

Time: 2:00 PM

Speaker: Mr. Sachin Dedhia,
CISA, CEH, CEI, ISO 27001 LA, Founder - Skynet Secure

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on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 3 : Session 1

Topic: ML-DL in Cyber Security

Date: 23rd June, 2021

Time: 10:30 AM

Speaker: Mr. Amey Tambe,
Director, SoftTech Data Securities

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on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 3 : Session 2

Topic: Kali Linux and Open Source Security Tools hands on

Date: 23rd June, 2021

Time: 2:00 PM

Speaker: Dr. Dayanand Ambawade,
Associate Professor, SPIT, Mumbai

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Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 4 : Session 1

Topic: Technology and Research Trends in Cyber Security

Date: 24th June, 2021

Time: 10:30 AM

Speaker: Dr. Narendra Shekokar,
Professor, DJSCE, Mumbai

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on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 4 : Session 2

Topic: Security tools Hands on

Date: 24th June, 2021

Time: 2:00 PM

Speaker: Prof. Yogesh Jadhav,
Corporate Trainer and Assistant Professor, Amity University

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on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 5 : Session 1

Topic: Cybercrimes, reporting, data privacy laws, and mitigations

Date: 25th June, 2021

Time: 10:30 AM

Speaker: Mr. Vicky Shah,
Advocate Cybercrime, Data Protection and Privacy

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on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 5 : Session 2

Topic: IoT Wearable devices: Security and Digital Forensics

Date: 25th June, 2021

Time: 2:00 PM

Speaker: Dr. Ramchandra Mangrulkar,
Associate Professor, DJSCE, Mumbai

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Accredited by NAAC

Department of Computer Engineering

ISTE approved One week Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 6 : Session 1

Topic: Zero Trust Security Model

Date: 26th June, 2021

Time: 10:30 AM

Speaker: Mr. Devesh Mathur,
Associate Consultant, Tata Consultancy Services

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Accredited by NAAC

Department of Computer Engineering

ISTE approved One week Short Term Training Programme

on

Cyber Security: Individual, Technology & Research Trends

21st - 26th June 2021

Day – 6 : Session 2

Topic: Recent Trends in Cyber Security and Market Opportunities

Date: 26th June, 2021

Time: 2:00 PM

Speaker: Mr. Mithil Gharat,
Advisory, Cyber and Strategic Risk Services, Deloitte

ISTE Approved One Week Online Short Term Training Program (STTP)

On

"Cyber Security: Individual, Technology & Research Trends"

Duration: 21st - 26th June 2021

Participants: Faculty from Colleges of Engineering

- **Course Objectives:-**
  1. To familiarise participants with the idea of, importance and need of Cyber Security
  2. To familiarise participants with the idea of securing oneself
  3. To familiarise participants with cybercrimes, reporting, data privacy laws, and mitigations
  4. To familiarise participants with the new technologies like Machine Learning and DeepLearning used in Cyber Security
  5. To familiarise participants with Internet of Things and wearable device security
  6. To familiarise participants with the tools used for checking the vulnerabilities in the systems and websites
  7. To familiarise participants with technology & Research Trends used in Cyber Security

Faculty Involved:

1. Convener
   - Dr. Megha Trivedi
2. Co-Convener
   - Dr. Tatwadarshi Nagarhalli
3. Coordinator
   - Prof. Smita Jawale
   - Prof. Sneha Mhatre
4. Organizing Committee
   - Dr. Swapna Borde
   - Prof. Anil Hingmire
   - Prof. Vishal Patil

Responsibilities of committees:

Sr. No.	Name of Faculty	Committee	Responsibilities
	Dr. Megha Trivedi	Overall Co-ordination	To coordinate with other committee members for smooth conduction of the program. In case of absence of any committee members, need to make alternate arrangements. Timely reporting Principal about the activities

DAY 1 – 21/06/2021 (Monday)

Inauguration Function:

The One Week ISTE Approved online Short Term Training Program was organized from 21st June - 26th June 2021 on "**Cyber Security: Individual, Technology & Research Trends**". Programme started with a welcome note by HOD, Dr. Megha Trivedi and address note by Principal, Dr. Harish Vankudre. Prof. Smita Jawale, Co-ordinator of STTP, gave the overview of contents to be covered in this programme along with schedule. The function concluded with a Vote of Thanks presented by Coordinator Prof.Sneha Mhatre

The Online STTP was attended by about 60 participants.

The Meet link for the sessions is shown in the table:-

Date	Time	Title of Topic	Expert	Host/Guest Link	YouTube link
Monday, June 21, 2020	**10.30 to 12.00**	Smart Healthcare/Medical IoT and Access Control Frameworks	Dr.Parikshit Mahalle, Professor and HOD, Comp. Engg, SKNCOE, Pune	**http://meet.google.com/xmo-tbzc-fip**	
	2 pm to 4 pm	Cyber Security Fundamentals	Prof. Yogesh Jadhav, Corporate Trainer and Assistant Professor, Amity University	**http://meet.google.com/xmo-tbzc-fip**	
Tuesday, June 22, 2020	**10.30 to 12.00**	Biometric Security	Dr. Nilanjan Dey, Associate Professor, JIS University, Kolkata. Editor-in-Chief: Int. J. of Ambient Computingand Intelligence (Scopus, DBLP, ACM dl, WoS)	**http://meet.google.com/xmo-tbzc-fip**	
	2 pm to 4 pm	Securing Oneself in the cyber world	Mr. Sachin Dedhia, CISA, CEH, CEI, ISO 27001 LA, Founder - Skynet Secure	**http://meet.google.com/xmo-tbzc-fip**	
Wednesday, June 23, 2020	**10.30 to 12.00**	ML-DL in Cyber Security	Mr. Amey Tambe, Director at SoftTech Data Securities	**http://meet.google.com/xmo-tbzc-fip**	
	2 pm to 4 pm	Kali Linux and Open Source Security Tools hands on	Dr. Dayanand Ambawade, Associate Professor, SPIT, Mumbai	**http://meet.google.com/xmo-tbzc-fip**	

Thursday, June 24, 2020	**10.30 to 12.00**	Technology and Research Trends in Cyber Security	Dr. Narendra Shekokar, Professor, DJSCE, Mumbai	**http://meet.google.com/xmo-tbzc-fip**	
	2 pm to 4 pm	Security tools Hands on	Prof. YogeshJadhav, Corporate Trainer and AssistantProfessor, Amity University	**http://meet.google.com/xmo-tbzc-fip**	
Friday, June 25, 2020	**10.30 to 12.00**	Cybercrimes, reporting, data privacy laws, and mitigations	Mr. Vicky Shah, Advocate Cybercrime, Data Protectionand Privacy	**http://meet.google.com/xmo-tbzc-fip**	
	2 pm to 4 pm	IoT Wearable devices: Security and Digital Forensics	Dr. Ramchandra Mangrulkar, Associate Professor, DJSCE, Mumbai	**http://meet.google.com/xmo-tbzc-fip**	
Saturday, June 26, 2020	**10.30 to 12.00**	**Zero Trust Security Model**	Mr. Devesh Mathur, Associate Consultant, Tata Consultancy Services	**http://meet.google.com/xmo-tbzc-fip**	
	2 pm to 4 pm	**Online Quiz and Valedictory function**		**http://meet.google.com/xmo-tbzc-fip**	

ssion details are as follows:-

- **Day 1 Report (21 June 2021)**

- **Session 1 (10:30 am –12.00 pm) :**
  Speaker:- Dr.Parikshit Mahalle

  Topic:- Smart Healthcare/Medical IoT and Access Control Frameworks

  Dr.Parikshit Mahalle has described following points

- Basics of Cyber Security
- Medical IOT application
- **Access framework Protocols like OAuth 2.0 and UMA 2.0**

- **Session 2(2 pm –4 pm) :**
  Speaker:- Prof. Yogesh Jadhav

Topic:- Cyber Security Fundamentals

Prof. Yogesh Jadhav has given hands on session on following points:

- Information about cyber security
- Challenges that we faces in cyber world
- What precautions should be taken in the cyber world?
- Tools that can be used to check the authenticity of emails.

□ **Day 2 Report (22 June 2021)**

❖ **Session 1 (10:30am –12.30 pm) :**
Speakers: Dr. Nilanjan Dey

Topic: Biometric Security (Deep Biometrics)

Dr. Nilanjan Dey discussed the following points

- Different Biometrics based Authentication
- Fingerprint, Iris, ears metrics and authentication
- Mouse eye movement data for authentication
- Deep Learning finger vein based authentication

❖ **Session 2 (2pm –4pm) :**
Speaker: Mr. Sachin Dedhia

Topic: Securing Oneself in the cyber world

Mr. Sachin Dedhia discussed following points

- Recent data breaches
- Securing GMail
- FlexiSpy
- Haveibeenpawned website
- Different ways of securing oneself

□ **Day 3 Report (23 June 2020) Katkar sir**

❖ **Session 1 (10.30 am -12.30 pm) :**
Speaker - Mr. Amey Tambe, Director at SoftTech Data Securities.
Topic: ML-DL in Cyber Security

Mr. Amey Tambe has described following points

- What exactly Cyber Security
- Practical case study about using ML and DL for solving facial detection
- Direct application of threat and threat analysis
- Different Malware Analysis Tools.
- Fireeye Cyber Threat Map.
- Zero Day Vulnerability

❖ **Session 2 (2 pm -4.30 pm) :**
Speaker -Mr. Dayanand Ambawade, Assistant Professor, SPIT, Mumbai

Topic:- "Kali Linux and Open Source Security Tools hands on"

Mr. Dayanand Ambawade has given a brief description about the following topics.

- Setting up Lab for Cybersecurity Hands-on Practice
- Kali Linux
- Open Source Security Tools
- Internet Footprinting
- Network/web/Host Scanning using nmap, nikto and fping
- Network Sniffing using tcpdump/wireshark/tshark/ettercap
- Session Hijacking
- Security Visualization
- InfoSec coding using scapy
- Vulnerability Assessment and System Hacking
- Firewall Configuration
- InfoSec coding using scapy
- Digital Forensics- Disk Forensics/ Memory Forensics/ Network Forensics

Day 4 Report (24 June 2021)

❖ **Session 1 (10.30 am - 12.30 pm) :**
Speaker - Dr. Narendra Shekokar, Professor & HOD, DJSCE Mumbai

Topic - Technology and Research Trends in Cyber Security

Dr. Narendra Shekokar gave a presentation on Technology and Research Trends in Cyber Security . He has described
following points

- Concept of Phishing Attacks
- Detection of Phishing attacks using ML Techniques
- Guideline to select ML Algorithms
- IOT in Healthcare
- 6LowPAN protocol stack
- Vulnerability in RPL protocol

❖ **Session 2 (2pm –4pm) :**
Speaker - Prof. Yogesh Jadhav
Topic: Security tools Hands on

- Prof. Yogesh Jadhav has described following points
  - WireShark
  - OpenSH
  - SPYRIX,ParrotOS
  - Tools that can be used to check the authenticity of emails.

Day 5 Report (25 June 2021)

❖ **Session 1(10.30 am -12.30 pm) :**
Speaker - Mr. Vicky Shah, Advocate Cybercrime, Data Protectionand Privacy

Topic: Cybercrimes, reporting, data privacy laws, and mitigations

Mr. Vicky Shah has given a brief description about **Cybercrimes**. He has described following points

- Internet disadvantages
- Online Risk
- Social Networking and blogs

- Computer related offences-cyber crime
- Crime against Individual

❖ **Session 2(2 pm to 4 pm) :**

Speaker:- Dr. Ramchandra Mangrulkar, Associate Professor, DJSCE, Mumbai

Topic:- IoT Wearable devices: Security and Digital Forensics

- **Dr. Ramchandra Mangrulkar** has described following points
- IoT wearable Technology
- IoT cloud platform
- Wearable:Case Studies
- IoTAnalysis
- IoT Security
- IoT Forensics

□ **Day 6 Report (26 June 2020)**

❖ **Session 1(10.30am -12.30 pm) :**
Speaker: Mr. Devesh Mathur

Topic: Zero Trust Security Model

Mr. Devesh Mathur discussed the following points
- Basic Architecture of Zero trust security model
- Principle components in Zero trust security

- Course Outcomes:- Learner will be able to

1. The Participants will be able to understand the importance of Cyber security and take measures to secure oneself in the cyber world.
2. The Participants will have the necessary information in order to report a cyber crime and appreciate the privacy laws.
3. The Participants will be able to make use of new technologies like Machine Learning and Deep Learning in the cyber security domain.
4. The Participants will be able to appreciate the security challenges in securing IoT and wearable devices.
5. The Participants will be able to use different open source security tools available on Kali linux for experimentations

About VCET

Vidyavardhini means a body committed to enhancement of knowledge. Vidyavardhini Society was established as a registered society in 1970 by Late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July 1994. The Institute is affiliated to the University of Mumbai for the four-year degree program leading to the Degree of Bachelor of Engineering. The Institute is accredited by NAAC. Four programs of the Institute were also accredited by NBA for period of three years from 2012 to 2015.

About EXTC Department

The Department of Electronics and Telecommunication Engineering (EXTC) was established in the year 1994. With the highly qualified faculty members, we strive to develop the Telecommunication Engineers capable of effectively using the scientific and technical knowledge for the betterment of society. The Department conducts various technical activities on advanced topics to get updated with the latest technological advancements which prepare them for industry environments and higher education.

Patrons

Chief Patron

- **Shri. Vikas Vartak,** President, Vidyavardhini

Patrons

- **Shri. Arun Vartak ,** Chairman, Vidyavardhini
- **Shri. Shantaram Jadhav,** Vice President, Vidyavardhini
- **Shri. Pandurang Naik,** Vice President, Vidyavardhini
- **Shri. P. D. Kodolikar,** Vice President, Vidyavardhini
- **Shri. Bhausaheb Mohol,** Secretary, Vidyavardhini
- **Shri. Hasmukhbhai Shah,** Treasurer, Vidyavardhini
- **Dr. Harish V. Vankudre,** Principal, VCET

Convener

Dr. Vikas Gupta
Dean Academics, Professor and HOD - EXTC

Coordinators

- **Mrs. Shaista Khanam**
  Assistant Professor
  E-mail: shaista.khan@vcet.edu.in
  Mobile:9321562213
- **Mrs. Trupti Shah**
  Assistant Professor
  E-mail: trupti.shah@vcet.edu.in
  Mobile: 9867397081

2021

Vidyavardhini's College of Engineering & Technology

K.T. Marg, Vasai Road (West), Dist. Palghar – 401202, Maharashtra

ISTE Approved
One week Online STTP on

"Recent Trends Research and Challenges in IoT Applications "

28th June to 3rd July 2021

enhance knowledge in the Emerging Trends and applications of IoT.

•To give Industrial exposure in IoT domain.

•To explore challenges & issues related to IoT as per necessity of various development areas.

Topics Covered

- Harnessing the power of machine learning using IoT.
- Reinforcement Learning for IoT
- IoT - Considerations and Applications
- Challenges and Research Trends in IoT
- Industry 4.0 and Industrial IoT
- Product development using IoT

Organizing Committee

Dr.**Amrita Ruperee, Associate Professor**

Dr.Sunayana Jadhav, Assistant Professor

Mrs.Shraddha Gosavi, Assistant Professor

Mrs.Sandhya Supalkar, Assistant Professor

Mrs.Ashwini Katkar, Assistant Professor

Mrs.Neha Gharat, Assistant Professor

Mrs.Ekta Naik , Assistant Professor

Resource Persons

- **Mr. B.A.Damahe** - Head – CTEA Madh Corporate Technical Training, Larsen and Toubro,Mumbai
- **Mr. Asim Sinha** – CEO IIoT expert, Industry 4.0 Solution Provider(India Partner of Vorne Industries Inc. USA),Banglore
- **Mr. Jeetendra Shenoy,** Architect , L&T Infotech ,Mumbai
- **Mr. Manoj Mulay** , Associate Manager - Design , Crompton Greaves Consumer Electrical Limited,Mumbai
- **Dr. Rita Jain** ,Co-founder of AVRN labs, Bhopal
- **Mr. Vinay Sharma** , Director Technical Ni logic Pvt Ltd, Pune
- **Mr. Arpit Shrivastava,** Technical Head InfilOT, pune
- **Dr. Saurabh Mehta,**Chief Academic Officer & professor in VIT, Mumbai.
- **Mr.Vineet Jaruhar** Chief Software Architect, AVRN Intellitech Private Limited, Bhopal
- **Dr.Anand Kakade,** Founder,Anand-Techno creations,Satara.
- **Dr. Prashant Bhopale , ,** Assistant Professor VJTI,Mumbai
- **Mr. Chandan Kolvankar,** Assistant Professor, Dept. of IT, VCET-Vasai
- **Mr. Sainath Patil,** Assistant Professor, Dept. of IT, VCET-Vasai
- **Mr. Yogesh Pingle,** Assistant Professor, Dept. of IT, VCET-Vasai
- **Mrs. Shaista Khanam,** Assistant Professor, Coordinator VCET Texas Instrument Innovation Lab, Vasai

Mode of Conduction

The course will be conducted in online mode using Google Meet platform.

How to apply

Registration fees can be paid through online bank transfer or GPay.

Details for online transfer:

Beneficiary Name: Ansari Shaista Khanam
A/C No.: 320602011022598
Bank : Union Bank of India
Branch: Vidyavardhini College Road
IFSC Code: UBIN0562556

Details for GPay:

Beneficiary Name: Khan Shaista
Mobile No.: 9321562213

UPI:- shaistashafin@okaxis

Registration Fees

For Teaching Faculty : **Rs. 200/-**

For Industry Person : **Rs. 500/-**

Link:- https://tinyurl.com/STTP-IoT

vardhini's College of Engineering & Technology Department

onics & Telecommunication Engineering

Report of One weeks ISTE approved Online STTP on

"Recent Trends Research and Challenges in IoT Applications"

Title	Internet Programming: The Full Stack Approach
Duration	28nd June 2021 – 3rd July 2021 (6 Working Days)
Timings	Morning Session: 10:00 am to 1:00 pm Afternoon Session: 2:00 pm to 4:00 pm
Mode of Conduction	Online through Zoom Meeting
Description	This course was designed to learn recent trends research and challenges in IoT. This course focused on various topics like: • Harnessing the power of machine learning using IoT. • Reinforcement Learning for IoT • IoT - Considerations and Applications • Challenges and Research Trends in IoT • Industry 4.0 and Industrial IoT • Product development using IoT
Objectives	1. To enhance knowledge in the Emerging Trends and applications of IoT. 2. To give Industrial exposure toIoT domain. 3. To explore challenges and issues related to IoT as per necessity of various development areas.
Participants	Faculties from different engineering institutes.
No. of Participants	52 (47 ISTE Members + 05 Non-ISTE Members)
Convenors	• Dr. Vikas Gupta, HOD-EXTC, VCET
Coordinator	• Mrs. Shaista Khanam, Assistant Professor, VCET • Mrs. Trupti Shah, Assistant Professor, VCET
Speakers	• **Mr. B.A.Damahe** - Head – CTEA Madh, Corporate Technical Training,Larsen and Toubro,Mumbai • Mr. **Asim Sinha** – CEO IIoT expert, Industry 4.0 Solution Provider(India Partner of Vorne Industries Inc. USA),Banglore • **Mr. Jeetendra** Shenoy, Architect , L&T Infotech ,Mumbai •

Vidyavardhini's College of Engineering & Technology
Department of Information Technology

	• **Dr. Saurabh Mehta**,Chief Academic Officer & professor in VIT, Mumbai. • **Mr.Vineet Jaruhar** Chief Software Architect, AVRN Intellitech Private Limited, Bhopal • **Dr.Anand Kakade,** Founder,Anand-Techno creations,Satara. • **Dr. Prashant Bhopale , ,** Assistant Professor VJTI,Mumbai • **Mr. Chandan Kolvankar**, Assistant Professor, Dept. of IT, VCET-Vasai • **Mr. Sainath Patil**, Assistant Professor, Dept. of IT, VCET-Vasai • **Mr. Yogesh Pingle**, Assistant Professor, Dept. of IT, VCET-Vasai • **Mrs. Shaista Khanam**, Assistant Professor, Coordinator VCET Texas Instrument Innovation Lab, Vasai • **Mrs. Trupti Shah**, Assistant Professor, Member VCET Texas Instrument Innovation Lab, Vasai • **Mrs. Ekta Naik,** Assistant Professor, Member VCET Texas Instrument Innovation Lab, Vasai

Link of FDP program brochure or template:

https://drive.google.com/file/d/1L4zDZCF2j1uluBlx_XeZWCYOM4AL0fb6/view?usp=sharing

Schedule of the STTP:

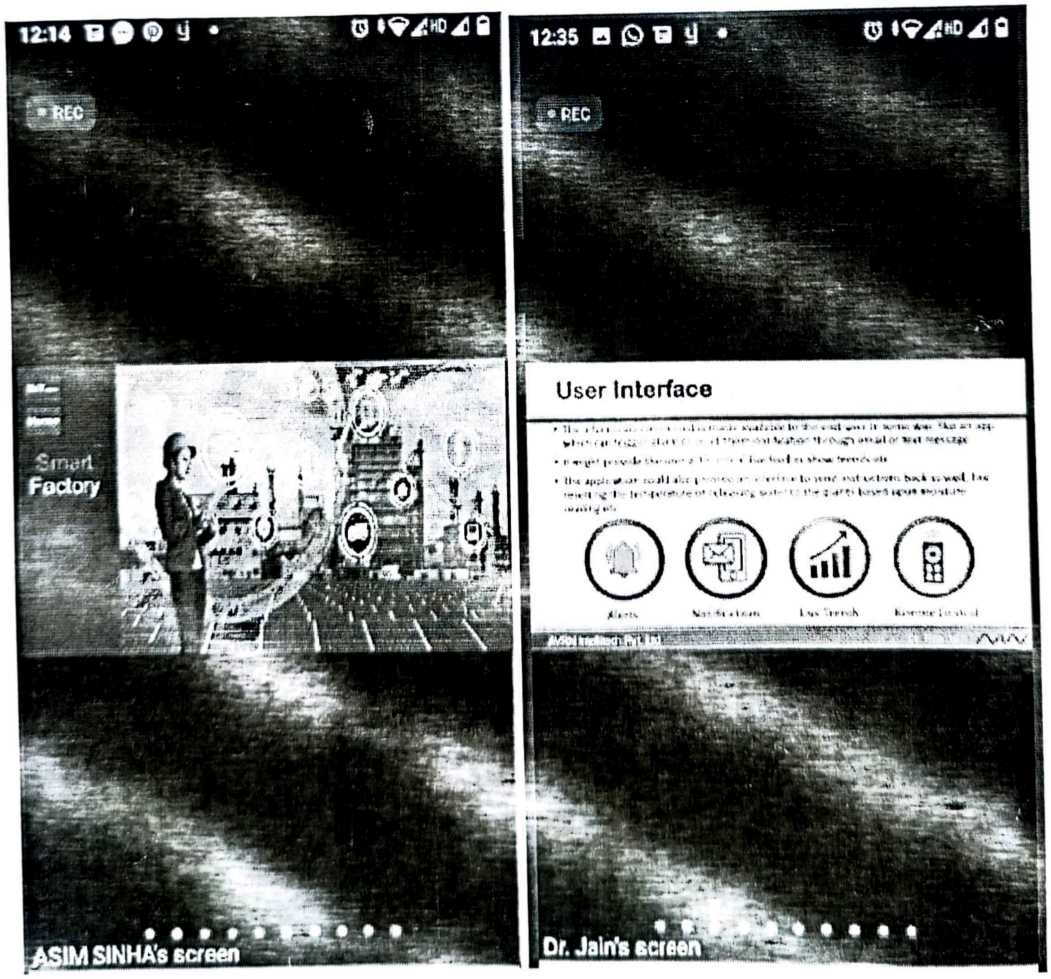
https://drive.google.com/file/d/1LJNPAEgKJgFJ5SOhVOj2ymW1eqod22Av/view?usp=sharing

List of Participants with Institute details, E-mail id, ISTE LM number and Marks obtained:
https://docs.google.com/spreadsheets/d/1lEWRmZAf5mK09ppFzbA_BgJALyZQ1ncUNKtMT64XEhg/edit?usp=sharing

Link of Course Material:
https://drive.google.com/drive/folders/188vLVRdX4ZVUdzV0U0t66Sjoo0itVOg1?usp=sharing

Vidyavardhini's College of Engineering & Technology
Department of Information Technology

Snapshots of STTP:



Vidyavardhini's College of Engineering & Technology
Department of Information Technology

Mrs. Shaista Khanam,
Assistant Professor, VCET

Mrs. Trupti Shah,
Assistant Professor, VCET

Click here for summary page

2019-20

Dates (From-to) (DD-MM-YYYY)	Title of the FDP/ Professional Development/ Administrative Training Program	Page No.
2019-20		
From 1-7-2019 to 6-7-2019	STTP on Emerging Trends in Embedded systems and DSP Applications	1
From 17-1-2020 to 21-1-2020	STTP on Repairs, Rehabilitation and Retrofitting of Reinforced Concrete Structures for Sustainable Development	10
From 18-5-2020 to 27-5-2020	FDP on Virtual Labs	29
From 22-6-2020 to 26-6-2020	STTP on Natural Language Processing and Deep Learning	36

Registration Form

AICTE-ISTE approved
One Week
Short Term Training Program
On

"EMERGING TRENDS IN EMBEDDED SYSTEMS AND DSP APPLICATIONS"

1st July to 6th July,2019

Name:_____
Qualification:_____
Designation:_____
Institute/Company name:_____
Address:_____
_____
Email:_____
Mobile No.:_____
Details of Registration fees:_____
DD NO./Online Transition id :-
_____
Amount:_____
Bank:_____

Date:-

Signature of Applicant

Patrons

- Shri. Vikas Vartak, President, Vidyavardhini.
- Shri. Arun Vartak, Chairman, Vidyavardhini.
- Shri. Uddhav Gharat, Secretary, Vidyavardhini.
- Shri. Bhausaheb Mohol, Secretary, Vidyavardhini.
- Shri. Hasmukhbhai Shah, Treasurer, Vidyavardhini.
- Dr. Harish V. Vankudre, Principal, VCET.

Convener

- Dr. Vikas Gupta, Dean Academic, HOD, EXTC.

Co-ordinators

1. Prof. Shaista Khanam , Assistant Professor, Mobile - 9321562213
2. Prof. Trupti Shah, Assistant Professor, Mobile - 9867397081

Organizing Committee

Department committee:
Prof. Amrita Ruperee
Prof. Sunayana Jadhav
Prof. Shraddha Gosavi
Prof. Sandhya Supalkar
Prof. Ashwini Katkar
Prof. Neha Gharat
Prof. Ekta Naik
Mrs. Madhu Lade, Lab Technician
Mrs. Bhagyashree Rane, Lab Technician

TI committee:
Prof. Archana Ekbote
Prof. Sunil Katkar
Prof. Vidya Patil
Prof. Kamlesh Bachker

Vidyavardhini's College Of Engineering And Technology

K.T. Marg,Vasai Road(West),Palghar-401202
Affiliated To University Of Mumbai
NAAC Accredited - 2019

AICTE-ISTE APPROVED
ONE WEEK
Short Term Training Program
on

"EMERGING TRENDS IN EMBEDDED SYSTEMS AND DSP APPLICATIONS"

1st July to 6th July,2019
Organised by

TI university program

Department of Electronics and Telecommunication Engineering
Under TI University Program

Contact: 0250-2338234(Ext-306)
Visit:www.vcet.edu.in
E-mail: vcet_es19@vcet.edu.in

Report

Vidyavardhini's College of Engineering & Technology

Department of Electronics and Telecommunication Engineering

AICTE-ISTE APPROVED ONE WEEK STTP

on

"EMERGING TRENDS IN EMBEDDED SYSTEMS AND DSP APPLICATIONS"

1st July to 6th July 2019

Course Objectives:

- To understand Embedded Systems and Development of Real time applications for small and distributed Embedded System.
- To understand the various optimization strategies applicable to design DSP and Embedded Systems.

Introduction:

An **embedded system** is a controller with a dedicated function within a larger mechanical or electrical system. Embedded systems are commonly found in consumer, industrial, automotive, medical, commercial and military applications.

The **Internet of things** (IOT) is the extension of internet connectivity into physical devices and everyday objects. The extensive set of applications for IOT devices is often divided into consumer, commercial, industrial, and infrastructure spaces.

A **digital signal** processor (**DSP**) is a specialized microprocessor (or a SIP block), with its architecture optimized for the operational needs of digital signal processing. The goal of DSP is usually to measure, filter or compress continuous real-world analog signals. Most general-purpose microprocessors can also execute digital signal processing algorithms successfully but may not be able to keep up with such processing continuously in real-time. Also, dedicated DSPs usually have better power efficiency, thus they are more suitable in portable devices such as mobile phones because of power consumption constraints.

Day1 (1st July 2019):

Time: (10 am– 10.45am)

Inauguration:

Inauguration ceremony begins in a presence of Chief Guest Mr.Balaji T.S ,Application Engineer Edgate Technology(Texas Instruments University Program),Banglore, Principal Dr.Harish Vankudre,Dean Academics ,HOD EXTC and Convener of STTP Dr.vikas Gupta ,Coordinators Prof.Shaista Khanam & Prof.Trupti Shah.Chief Guest gave Emphasis on Exposure to industry products and hands on Practice.Chief Gueset also explained about embedded system and its application in IoT(Internet of things).

Session 1:

Time: (11.15 – 1.15am)

Speaker: Mr. Balaji T.S, Application Engineer Edgate Technology (Texas Instruments University Program),Banglore.

1. Speaker started with brief introduction of TIVA – C Launch Pad ARM cotex 4 (TM4C123G) and explained the Architecture of the microprocessor.
2. He explained its features like Timers, Communication Protocol supported , Number of GPIO pins ,ADC , Interrupts ,Low voltage dropout voltage regulator, Hibernation modes.
3. Started with Code Composer Studio (CCS) and API functions by which launch pad can be programmed.
4. First programme to blink the LED has been done using CCS and also done variation in programme to blink different LEDs and color combinations

Session 2:

Time: (2pm – 5 pm)

1. Hands on session started by programming switch of TIVA-c Launch pad and combination of Switch and LEDs.
2. Interfacing external analog sensors and reading the values in digital format with the help of ADC.
3. Also explained method to unlock Switch 2 of launch pad.

Day2 (2nd July 2019):

Time: (9.30 – 5 pm)

Speaker: Mr.Balaji T.S, Application Engineer Edgate Technology (Texas Instruments University Program), Bangalore.

Session 1:

Time: (11.15 – 1.15am)

1. Introduction to energia IDE
2. Hands on session on LED , Switch and ADC using Energia
3. Introduction to IOT(Internet of Things)
4. Brief description of OSI Layers.
5. Lab session on Wi – Fi Connection, acquiring IP, Gateway IP, static and Dynamic IP.

Session 2:

Time: (2pm – 5 pm)

1. Introduction to Hypertext Transfer Protocol (HTTP) which is used for data communication.
2. Lab session on IO manipulation on Launch pad using HTTP Web browser.
3. Lab session on Design of simple web server to monitor sensors.
4. Introduction to Blynk mobile Application
5. Lab session on BLYNK application to control launch pad and observed sensed parameter on App.
6. Demonstration of RSLK board interfaced with MSP 430.

Day 3 (3rd July 2019):

Speaker: Mr.Balaji T.S, Application Engineer Edgate Technology (Texas Instruments University Program), Bangalore. Timing: 9.30am to 5.00 pm.

Time: (9.30 am – 5 pm)

1. Mr. Balaji has given introduction to DSP processor; he explains architecture of C6000 processor (Texas DSP processor C6000 series).
2. In morning session participant have performed hands on practicals on Linear Convolution and Circular Convolution.
3. In afternoon session participant have performed hands on practicals on speech processing like audio Loopback using Interrupt and Polling method.
4. Participants also observe DSP processor application in audio delay and Audio Echo generation.

Day 4 (4th July 2019):

Speaker: Mr. Balaji (Application Engineer at Edgate Technoplogy, Banglore)

Time: (9.30 am – 5 pm)

1. Mr. Balaji has given hands on practice on sine wave generation using DIP switches and LEDS using code composer Studio.
2. Participant have performed hands on practicals on application of DSP as a Average filtering to remove noise from audio signal.
3. In afternoon session participant have performed hands on practicals on IIR filter Design using C6000 and MATLAB FDA TOOL.
4. Participants also performed hands on practicals on FIR filter Design using C6000 and MATLAB FDA TOOL.

Day 3 (3rd July 2019):

Speaker: Mr.Balaji T.S, Application Engineer Edgate Technology (Texas Instruments University Program), Bangalore. Timing: 9.30am to 5.00 pm.

Time: (9.30 am – 5 pm)

1. Mr. Balaji has given introduction to DSP processor; he explains architecture of C6000 processor (Texas DSP processor C6000 series).
2. In morning session participant have performed hands on practicals on Linear Convolution and Circular Convolution.
3. In afternoon session participant have performed hands on practicals on speech processing like audio Loopback using Interrupt and Polling method.
4. Participants also observe DSP processor application in audio delay and Audio Echo generation.

Day 4 (4th July 2019):

Speaker: Mr. Balaji (Application Engineer at Edgate Technoplogy, Banglore)

Time: (9.30 am – 5 pm)

1. Mr. Balaji has given hands on practice on sine wave generation using DIP switches and LEDS using code composer Studio.
2. Participant have performed hands on practicals on application of DSP as a Average filtering to remove noise from audio signal.
3. In afternoon session participant have performed hands on practicals on IIR filter Design using C6000 and MATLAB FDA TOOL.
4. Participants also performed hands on practicals on FIR filter Design using C6000 and MATLAB FDA TOOL.

Day 5 (4th July 2019):

Session1:

Time: (9.30 am – 5 pm)

Speaker: Mr.Prathmesh Satardekar, System Engineer, Eduvance.

Topic: Emerging trends in wireless communication.

The seminar started with the basic definition of embedded system. Where these embedded systems can be used and how to use it.

He explain detailed discussion of IOT i.e. how the Iot works, some basics about IOT, applications of IOT i.e. how we can use Iot in our day-to-day life i.e. in medical, building smart homes. It doesn't end there and then took the discussion of Iot with the help of the cloud. Gave idea about how embedded system can be used in IOT and some discussion of various number of embedded i.e .raspberry pie, banana pie etc.

At the end wifi, bluetooth and LoRa technologies were explained.

Session2:

Time: (2 pm to 5 pm)

Speaker: Prof. Trupti Shah and Prof. Ekta Naik (Assistant Professor in Vidyavardhini's College of Engg. & Technology)

Prof. Trupti Shah and Prof. Ekta Naik gave activities to participants based on TIVA board, IOT and DSP processor.

1. Activities such as temperature sensor interface using TIVA board, IOT based MQTT protocol as a subscriber and publisher.
2. Activity based on dynamic IP
3. Activity based on HTTP protocol based on web sensor monitor.
4. Timer based activity on TIVA board
5. Activity based on BLYNK app.

Day 6 Report (06 July 19)

Session1:

Time: (10 am to 1 am)

Speaker: Prof. shaista khanam (Assistant Professor in Vidyavardhini's College of Engg. & Technology)

Topic: Real Time Applications and Embedded System and Processor:

1. Session started with detailed explanation of Embedded system. An **embedded system** is a controller with a dedicated function within a larger mechanical or electrical system. Embedded systems are commonly found in consumer, industrial, automotive, medical, commercial and military applications.
2. Speaker Explained real time embedded system and given many examples of real time system.
3. Real time system requirements and issues were discussed.
4. Different microprocessors and Microcontrollers discussed with its special features .and also told how the processor are selected for a particular Applications.

Speaker: Prof. shaista khanam & Prof.Trupti Shah (Assistant Professor in Vidyavardhini's College of Engg. & Technology)

Session2:

Time: (10 am to 1 am)

Topic: Hands on Sensors & Arduino:

1. Session started by explaining Different types of sensors and actuators .
2. Architecture of Arduino Board input output pins, analog digital pins explained.
3. Arduino IDE explained.
4. Hand on session conducted on :
    a. Programming Switch and LEDs.
    b. Dimming of LED using PWM pin.
    c. Reading and writing data using Serial communication.
    d. Interfacing external analog sensors and reading the values in digital format with the help of ADC.
    e. Controlling Devices (LED) using BLUETOOTH module.

Session2: (3.15 – 4 pm)

Topic: Valedictory Ceremony.

Course concluded with valedictory ceremony in the presence of Shri M.N. alias Bhausaheb Mohol, Secretary vidyavardhini's College of Engineering and Technology, Principal Dr.Harish Vankudre, Dean Academics, HOD EXTC and Convener of STTP Dr.vikas Gupta, Coordinators Prof.Shaista Khanam & Prof.Trupti Shah, Teaching & Non-Teaching Faculties. Convenor congratulated course coordinators and organizing committee for successful conduction of the course and to the participants for successful completion of course. Valedictory ceremony ended with vote of thanks by Prof. Sunayana Jadhav. Participants has given a good feedback about the course specially about the hands-on sessions.

Course Outcomes: Learner will be able to

1. Understand MSP430, TIVA – C launch pad and its interfacing Lunch pad.
2. Understand digital signal processor (DSP) processor (TIC6000 – DSP processor (DSP).
3. Develop small applications based on Embedded System.

Course Coordinator

Dr. Vikas Gupta

PATRONS

- **Shri. Vikas Vartak**,
  (President, Vidyavardhini)
- **Shri. Arun Vartak**,
  (Chairman, Vidyavardhini)
- **Shri. Uddhav Gharat**,
  (Secretary, Vidyavardhini)
- **Shri. Bhausaheb Mohol**,
  (Secretary, Vidyavardhini)
- **Shri. Hasmukhbhai Shah**,
  (Treasurer, Vidyavardhini)

ORGANISING CHAIRMAN

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  (Principal, VCET)

CONVENOR

- **Dr. Sunil Kirloskar**
  (Head of Department, Civil Engg.)

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- **Dr. Ganesh Kame** (Principal, MHSSCOE)
- **Dr. Rajendra Magar** (HOD Civil Engg., AIKTC)
- **Dr. Ajay Radke** (HOD Civil Engg., DMCE)
- **Dr. Gopal Mulgund** (Principal, SJCET)
- **Er. M.D. Lele** (Retd. Engineer, CIDCO, Navi Mumbai)

CO-ORDINATOR

- **Mr. Vikrant Kothari** **(99706 99774)**

CO-COORDINATOR

- **Mr. Viren Chandanshive** **(79727 77790)**
- **Mr. Arbaz M. Kazi** **(8454889160)**

WORKING COMMITTEE

- **Mr. Jaydeep Chougale**
- **Mrs. Puja Kadam**
- **Mr. Prakash Panda**
- **Mr. Jignesh Mistry**
- **Mrs. Anu Murali**

REGISTRATION FORM

AICTE - ISTE Approved
One Week
Short Term Training Program
on
"*Repairs, Rehabilitation and Retrofitting of Reinforced Concrete Structures for Sustainable Development*"
(17Th - 21St Jan, 2020)

I would like to register for the above programme as a participant. I am furnishing my particulars as below:

Name

Mr./Ms./Mrs._____

Designation: _____ Age: _____

Organization: _____

Address: _____

_____

_____

Mobile No.: _____

E-mail: _____

Member of ISTE: Yes/ No

ISTE Membership No._____

Registration Category: Faculty/ Industry/ Student

Details of Registration Fess: DD No./ Online Transaction ID

_____

Bank Name:_____

Amount:_____

Date: _____ Place: _____

Signature: _____

Vidyavardhini's College of Engineering and Technology

Founder President Late Padamshree H.G.Vartak

(NAAC Accredited, 2019)

AICTE - ISTE Approved
One Week
Short Term Training Program
on
"*Repairs, Rehabilitation and Retrofitting of Reinforced Concrete Structures for Sustainable Development*"
(17Th - 21St Jan, 2020)

Organized by:

Department of Civil Engineering

Vidyavardhini's College of Engineering & Technology,
K.T Marg, Vasai Road (W),
Palghar - 401 202
Visit: www.vcet.edu.in

ABOUT THE COLLEGE

Vidyavardhini means a Body committed to enhancement of Knowledge. Vidyavardhini's College of Engineering and Technology (VCET), is an engineering college in Vasai Road (West), Mumbai. The college is affiliated to University of Mumbai and offers undergraduate (Bachelor) degree in Engineering. The college has been top graded by DTE and was accredited by NBA and NAAC. Vidyavardhini's College of Engineering and Technology is located on the serene and sprawling educational campus of Vidyavardhini, spread over an area of 12.27 acres. It is an iconic place, within two minutes walk from Vasai Road (W) Railway Station. VCET is the oldest engineering college in the western belt which was established by Padmashri Shri. Bhausaheb Vartak 25 years back.

VISION

To be a premier institution of technical education, aiming at becoming a valuable resource for industry and society.

MISSION

- To provide technologically inspiring environment for learning.
- To promote creativity, innovation and professional activities.
- To inculcate ethical and moral values.
- To cater personal, professional and societal needs through quality education.

ABOUT THE DEPARTMENT

The Department of the Civil engineering was established in 2013 at VCET. The Civil Engineering department aims to be a prominent department by generating professionals with higher degree of technical knowledge, proficient skills and principled values. The Department of Civil Engineering along with its multi-layered faculty sustains its robust relations with the industry and other institutes by organizing various technical events The students are always invigorated to participate extra-curricular and co-curricular events which are essential for the building a team spirit and development of administrative skills result in their personality development.

ABOUT STTP

Sustainable development has become the challenge for humanity particularly with rapid growth of urbanization. There is a growing national/international concern about the premature deterioration of our buildings/ structures particularly concrete structures. Though concrete is quite strong mechanically, it is highly susceptible to deterioration and damage and even fail ultimately, unless some means are adapted to counter deterioration. The minimum maintenance of concrete structures requires an integral approach which needs the introduction of as much practical measures as possible in accordance with the basic established concept – "prevention is better than cure".

Repair/retrofitting/rehabilitation is the fast-growing segment of the construction industry. Thus new technologies and new repairing materials, extensively being used by the advanced countries, are also being tried in developed countries like India.

STTP OBJECTIVES

- To recognize the mechanisms of degradation of concrete structures, provide the participants with the knowledge of available techniques and their application for strengthening or upgrading existing structural systems.
- To explore the knowledge about how to conduct field monitoring and non-destructive evaluation of reinforced concrete structures.

COURSE CONTENTS

- **Introduction to Repairs, Rehabilitation and Retrofitting of Concrete Structure**
- **Repair Materials & Techniques**
- **Structural Audit & its importance**
- **Non-Destructive Evaluation Techniques**
- **Water-proofing: Materials & Techniques**
- **Scope of Consultancy in Repairs, Rehabilitation and Retrofitting of reinforced concrete structures.**

PROBABLE SPEAKERS

1. **Mr. Ratnakar Chaudhary** (PM Consultant Redevelopment of Housing Societies)
2. **Mr. Satish Diwakar** (Sr. Manager, TCE)
3. **Mr. Dada Patil** (Asst. Prof., AIKTC)
4. **Mr. Santosh Gidh** (Structural Consultant, BVP-Vasai)
5. **Mr. Nagraj T. Chinivar** (NDT Consultant, Enlab Services)
6. **Mr. Mohit Lamba** (Specialist in Waterproofing, Repairs and Painting)
7. **Mr. Tirtha Banerjee** (Waterproofing Expert, Pidilite)

WHO SHOULD ATTEND

The course is open to persons from academia like teaching faculty, students (UG/PG) and research scholars of any institute across the country.

REGISTRATION

Registration of participants can be made in advances by remitting the registration fees in advance as indicated below along with the registration form

Faculty (ISTE Members)	=	**Rs. 1500/-**
Faculty (Non-ISTE Members)	=	**Rs. 2000/-**
Industry Person/Non-ISTE members	=	**Rs. 2500/-**
Students (UG/PG/Research Scholar)	=	**Rs. 500/-**

Remittance of the fee should be made through online transaction, local pay order, DD in favour "Principal, VCET".

- Registration for ISTE membership can be done on the spot.

Use the below link for the STTP Registration

Or

https://forms.gle/h3w9pcfgcf8kJTxE6

Scan the QR Code below for registration of STTP Program

Vidyavardhini's College of Engineering and Technology, Vasai
Affiliated to the University of Mumbai

DEPARTMENT OF CIVIL ENGINEERING

REPAIRS, REHABILIATION & RETROFITTING OF REINFORCED CONCRETE STRUCTURES FOR SUSTAINABLE DEVELOPMENT

DAY 1:

Session 1: **Inauguration & Introduction to Repairs & Rehabilitation**

(10:00 am to 11:15 am)

Speaker: Prof. Santosh Gidh.

MR. SANTOSH GIDH GIVING OPENING REMARKS ABOUT STTP

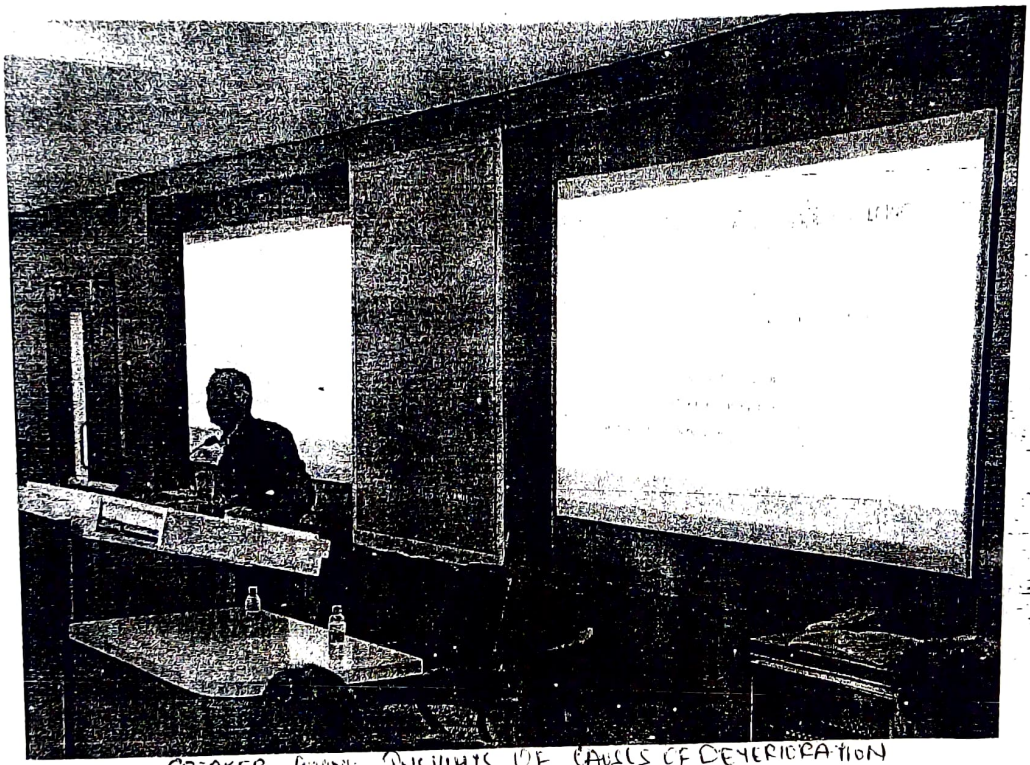
The session began in the presence of Chief Guest Prof. Santosh Gidh, Structural Auditor, Dr. Harish Vankudre, Principal VCET, Dr. Vikas Gupta, Dean Academics VCET, Dr. Sunil G. Kirloskar. H.O.D Civil Engineering Department, VCET.

Detail Outline of the STTP was elaborated by Prof. Vikrant Kothari, followed by Speech of Dr.Kirloskar Sir & Dr. Harish Vankudre Sir, in which Expectation from this STTP was discussed and also the importance of Repairs was elaborated.

DAY 1:

Session 1: Introduction to Repairs & Rehabilitation: (11:30 am to 12:45 pm)

Speaker: Prof. Santosh Gidh.



SPEAKER GIVING INSIGHTS OF CAUSES OF DETERIORATION

The Session was carried out by our Chief guest Prof. Santosh Gidh. In this Session introduction to repairs, rehabilitation & retrofitting was given to participants. Also causes of deterioration was discussed which included 1) Poor Structural Design, 2) Poor workmanship 3) Poor Maintenance, 4) Environmental Factors, 5) Natural Calamity & 6) Indiscriminate Additions and Alterations.

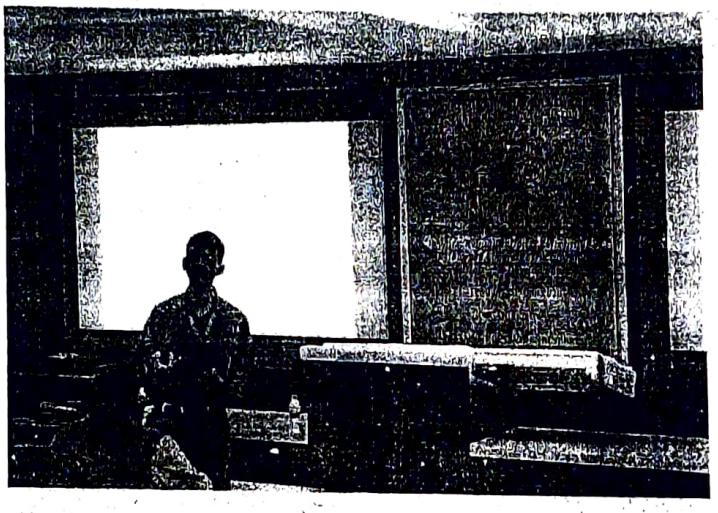
All the above-mentioned causes were described in detail by guest speaker, which were well understood by the participants.

General awareness about the timely maintenance of the R.C.C Structures was pointed out by Speaker in the end.

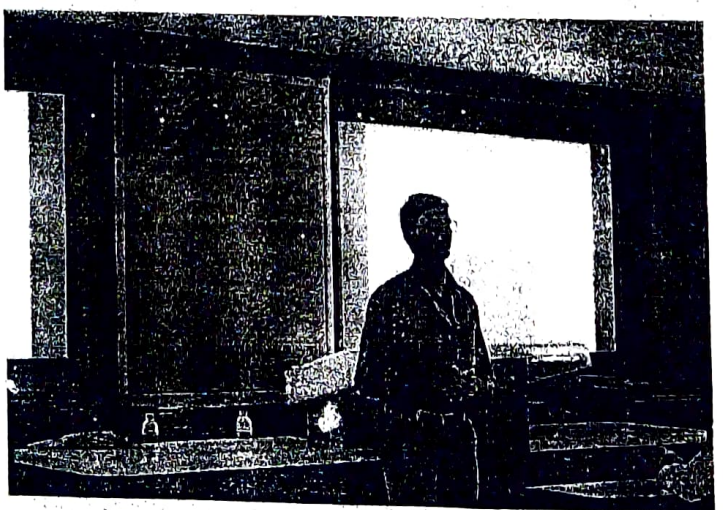
DAY 1:

Session 2: **Repair Materials & Techniques (02:00 pm to 03:15 pm & 3:30 pm– 4:45 pm)**

Speaker: Prof. Dada Patil.

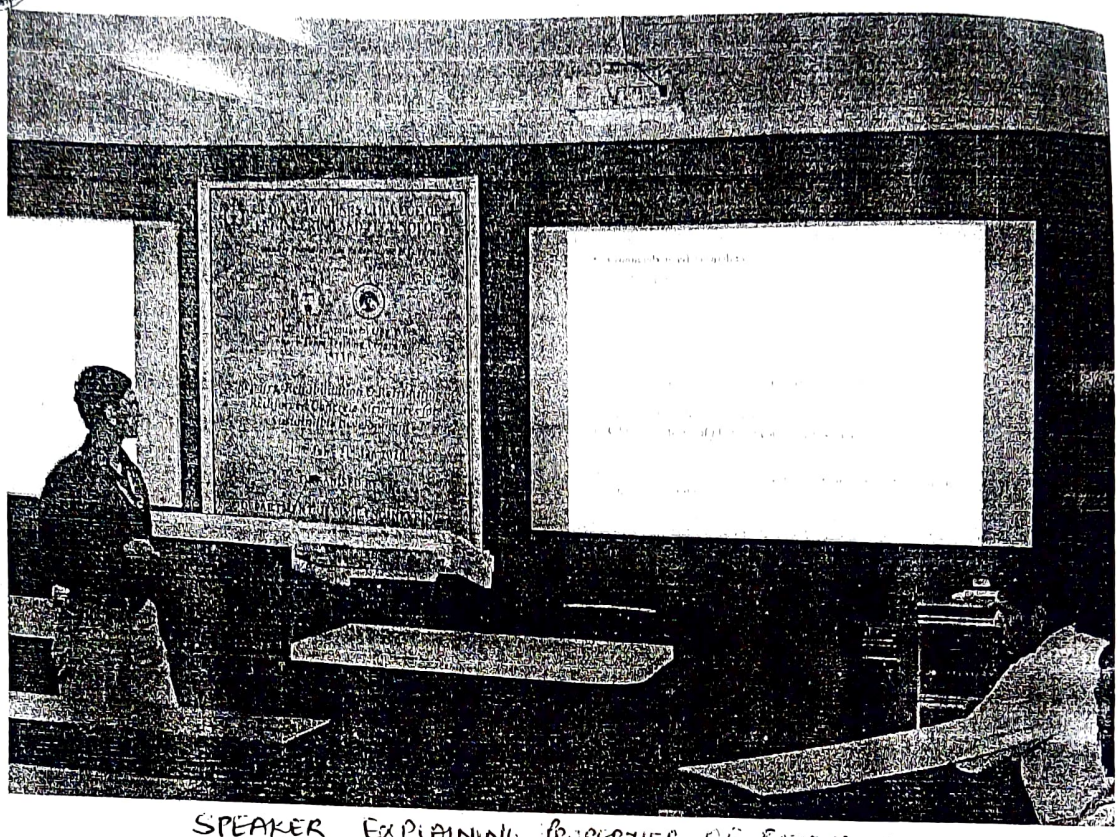


(a)



(b)

In both (a) & (b) SPEAKER is EXPLAINING ABOUT FACTORS TO BE CONSIDERED WHILE SELECTING REPAIR MATERIAL.



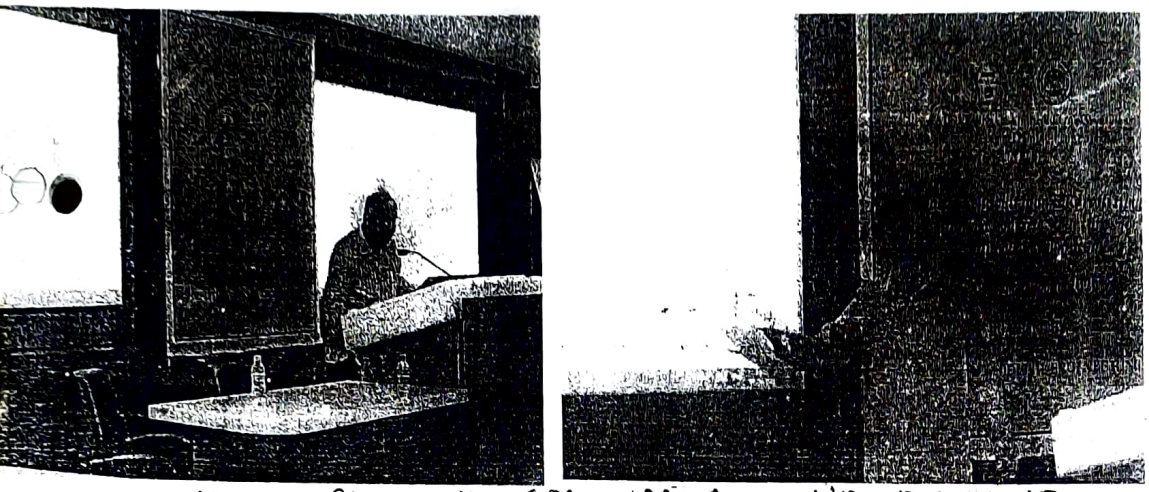
SPEAKER EXPLAINING PROPERTIES OF RETARDERS

This Session was carried out by Prof. Dada Patil, in this session Repair materials and various Repair Techniques were discussed in detail. More than 20 types of different Repair material categories & more than 10 Repair Techniques were described by the speaker. Step wise procedure and specifications of the materials were explained during the session. Factors affecting selection of materials in the slide were explained, to have an accurate judgement while selecting the correct type of repair material from the options.

DAY 2:

Session 3: **STRUCTURAL AUDIT – Its Importance (10:00 am -12: 45 pm)**

Speaker: Prof. Santosh Gidh.



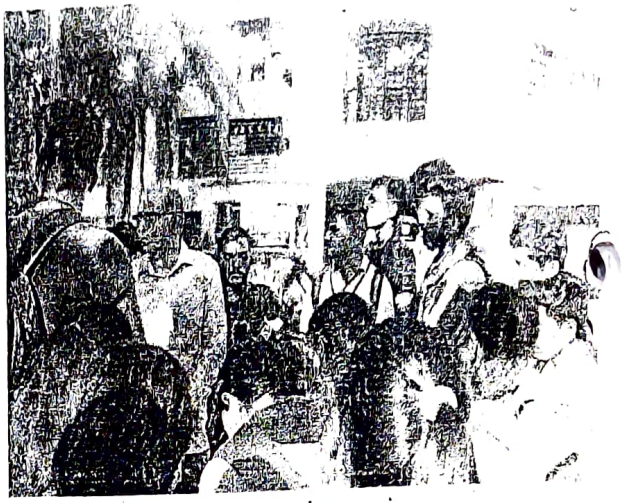
MR. GIDH SHARING HIS STRUCTURAL AUDIT WORK EXPERIENCE

In this session our guest speaker Prof. Santosh Gidh dealt with the Importance of Structural Audit. Speaker also made awareness about the By Laws laid down by government regarding structural audit of R.C.C structures. As per Building By-laws it is mandatory to conduct the structural audit of structures old than 30-35 years at regular intervals. Stepwise procedure of conducting the Structural Audit was elaborated by the speaker. Distress mapping example was taken with the help of actual plan of a structure and marking the relevant distresses observed on the structural members. Altogether internal and external audit of the structure to know the present condition of it was very well explained by the speaker.

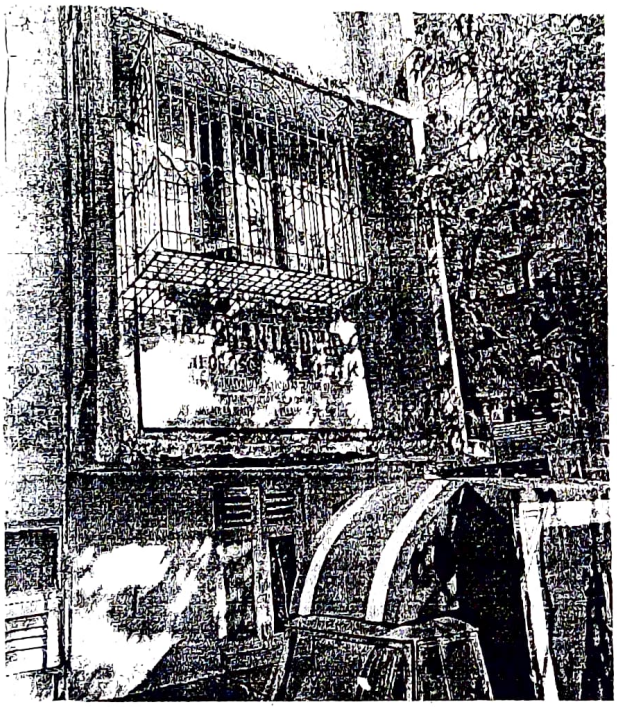
DAY 2:

Session 4: Site Visit – A case study of Structural Audit (02:00 pm -04: 45 pm)

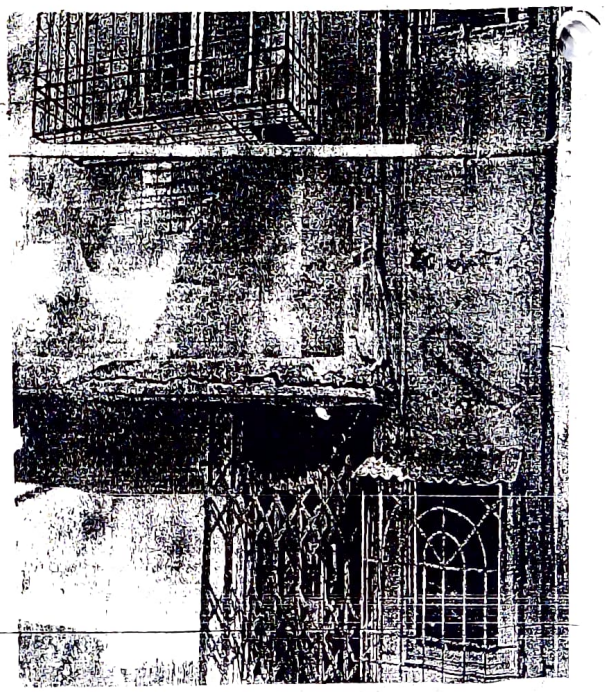
Speaker: Prof. Santosh Gidh.



Various photographs of the Site Visit to a dilapidated structure in vasai



In this session, all the participants were taken to a site visit at "Shantadeep Co-Op Housing



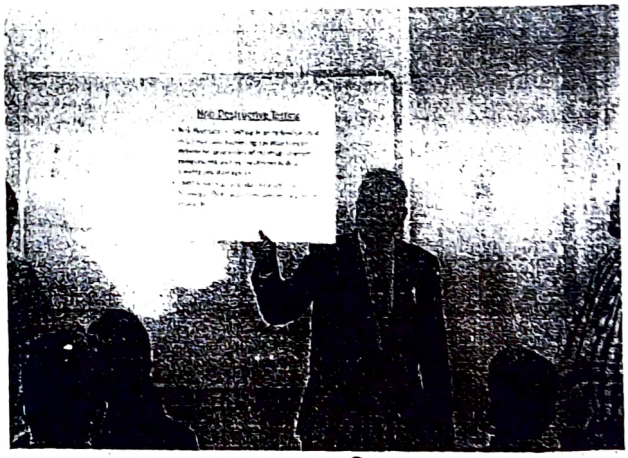
Society, Ambadi Road, Vasai West". It is 10 minutes walking distance from VCET, all the participants conducted structural audit and mapped distress in the structure. Investigation of the condition of structure was done by the participants from exterior as well as interior of the building. All the participants were provided with the plan of the building and were asked to locate the distress observed in the structure, to get a better understanding of the process. Site visit was successfully conducted, and we concluded that structure, which was audited, falls in C2-A category i.e. it needs urgent Major repairs.

DAY 3:

Session 5: **Non-Destructive Evaluation Techniques (NDT)** (10:00 am -12: 45 pm)

Speaker: Mr. Nagraj T. Chinivar (NDT Consultant)

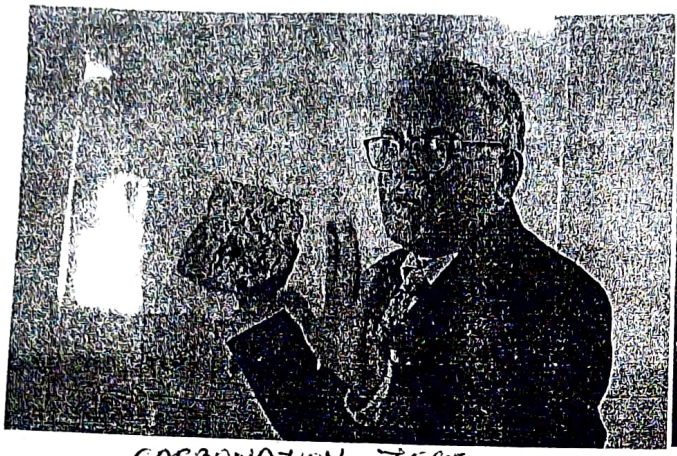
(a)



(b)

MR. NAGRAJ EXPLAINING DIFFERENT TYPES OF NDT.

Following photographs pertain to, Mr. Nagraj's training on NDT to the participants

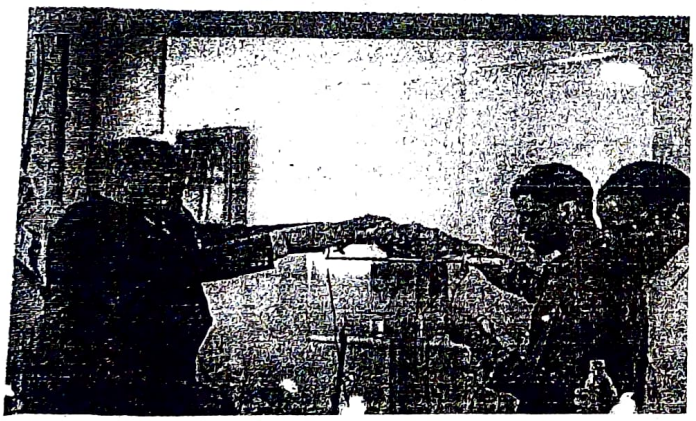


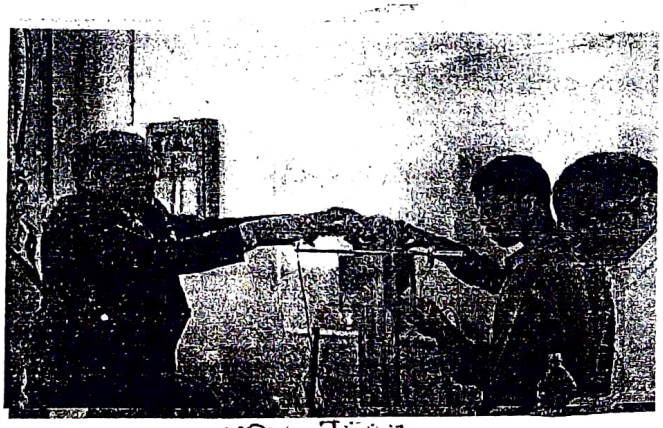
CARBONATION TEST

HALF CELL POTENTIAL TEST

This session carried out by Mr. Nagraj who is a NDT consultant and has a wide experience in the field. Total 6 NDT test were performed and explained to the participants, which includes:

1) Rebound Hammer test
2) Ultrasonic Pulse velocity Test (UPV)
3) Carbonation Test
4) Half-Cell potential Meter test.





UPV TEST

5) Core Cutting Test

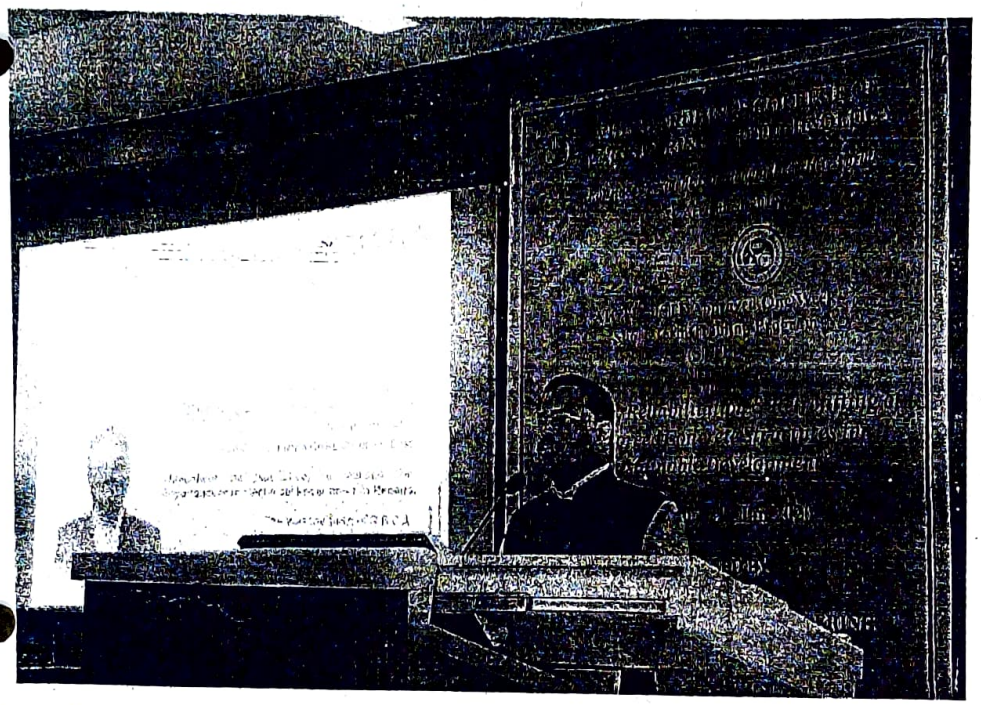
6) Cover Meter (Profoscope)

All the tests were explained in detail and participants were asked to use the NDT equipment's and get hands-on experience of the same.

DAY 3:

Session 6: **Repairs & Rehabilitation: A practical Approach** (02:00 pm -04: 30 pm)

Speaker: Mr. Ratnakar Choudhary, RB Choudhari & Associates.



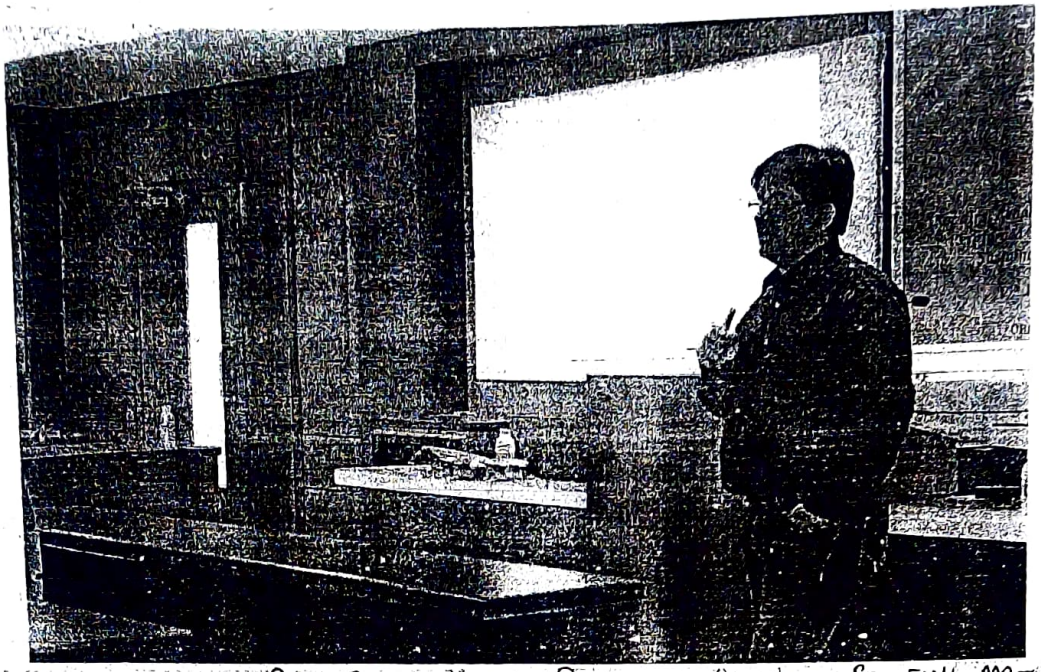
This session was carried out by Mr. Ratnakar Choudhary, Director of RB Choudhary & Associates. In this session Practical difficulties and challenges faced while carrying out repair works were discussed with the participants. Various case studies were taken to explain different challenges encountered by the speaker while conducting the repair or rehabilitation works. Question and answer round took place at the end of the session wherein all the participants interacted in a very enthusiastic manner and involvement of the participants was appreciated by the speaker as well.

Participants also got to know the scope of repair industry and career opportunities in the repair field.

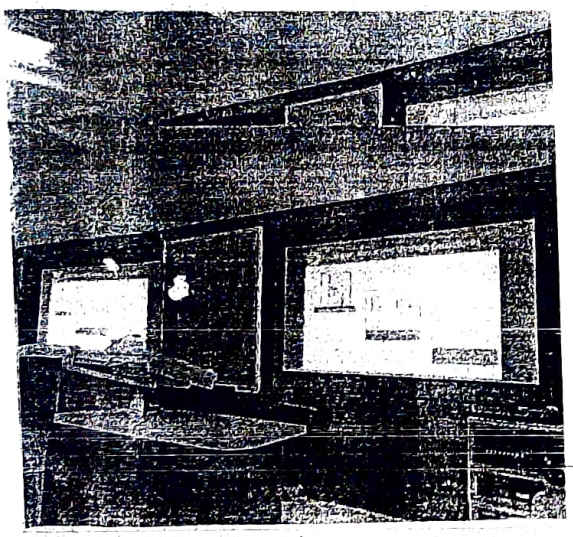
DAY 4:

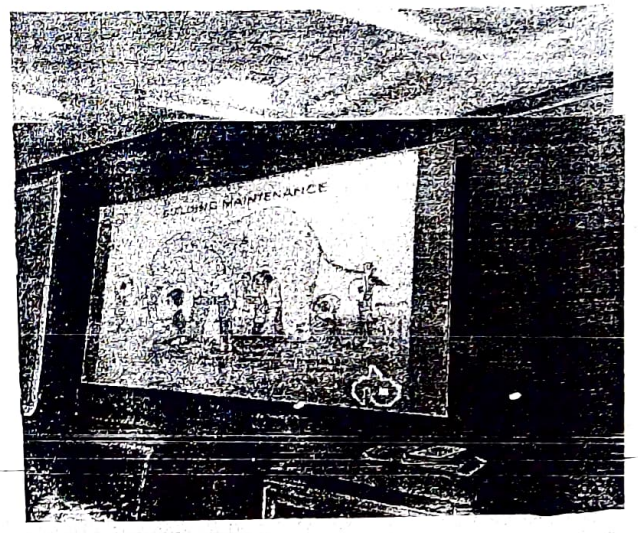
Session 7: Waterproofing: Materials & Techniques (10:00 am -12:45 pm)

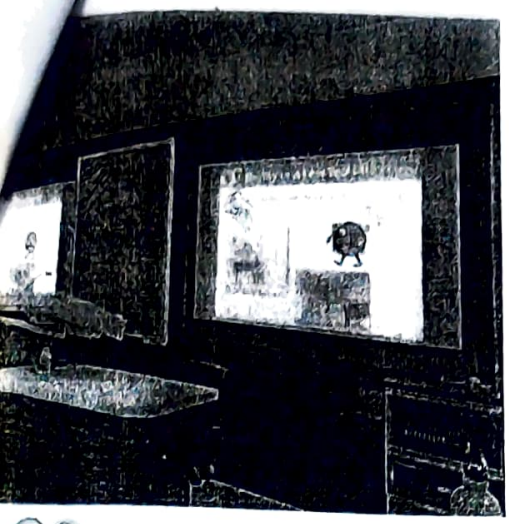
Speaker: Mr. Tirtha Banerjee, Head Training, Dr. Fixit Institute.

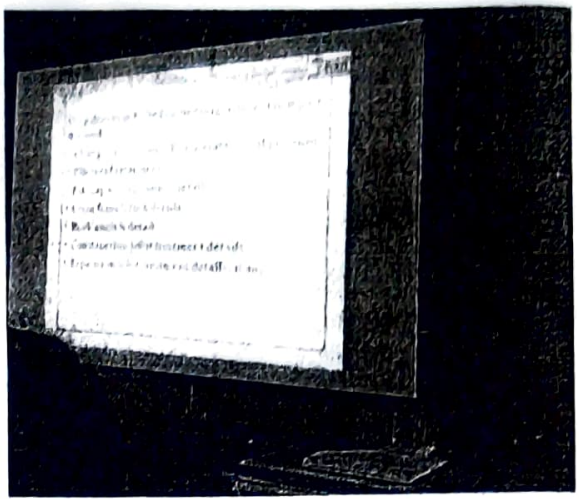


MR. BANERJEE GIVING INSIGHTS ON WATER PROOFING MATERIALS









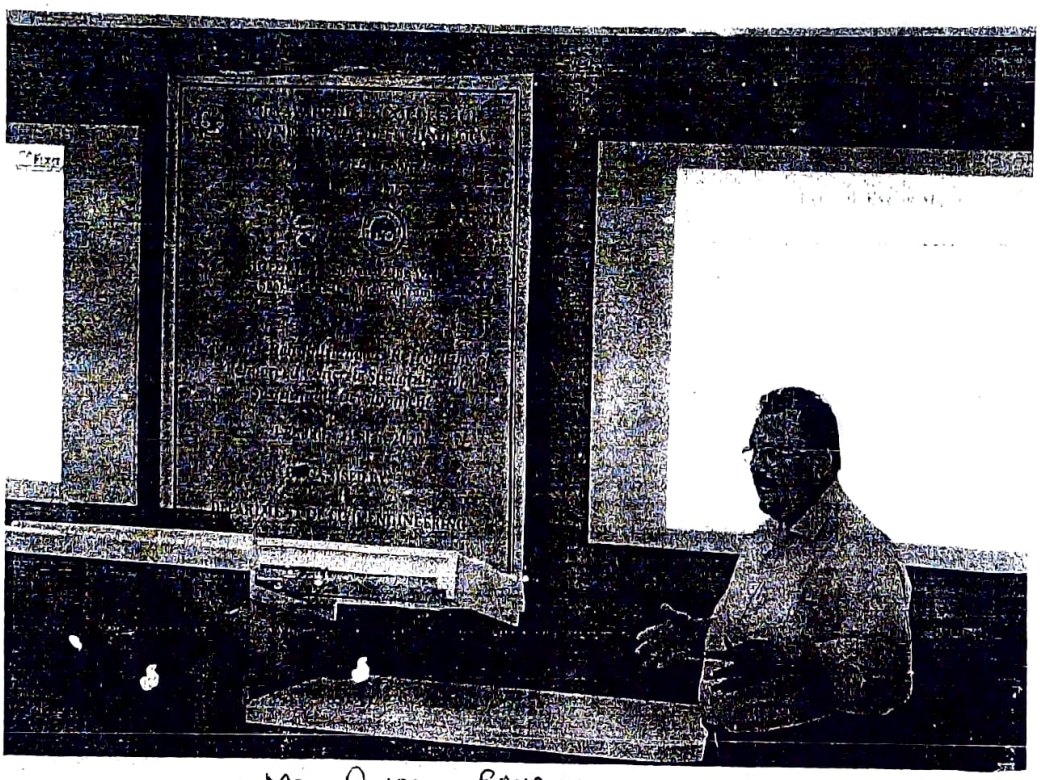
PPT PICTURES OF MR. BANERJEE ON CORRECT METHODOLOGY FOR DOING WATER PROOFING.

Mr. Tirtha Banerjee, Head Training, Dr. Fixit Institute, took a very interesting session on Waterproofing. Basic understanding of the term waterproofing was targeted by speaker. Causes of dampness/ leakages were discussed and explained in detail to the participants. Minute details which are usually ignored by human beings which ultimately leads to deterioration (Leakages) were also touched during session. Regular maintenance and repairs are crucial to keep a structure waterproof was concluded by Tirtha sir. Interesting PowerPoint presentation lead to a better understanding on the concept of waterproofing.

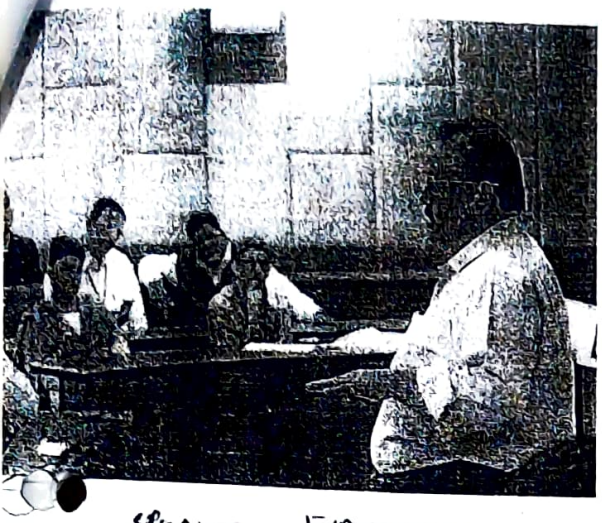
DAY 4:

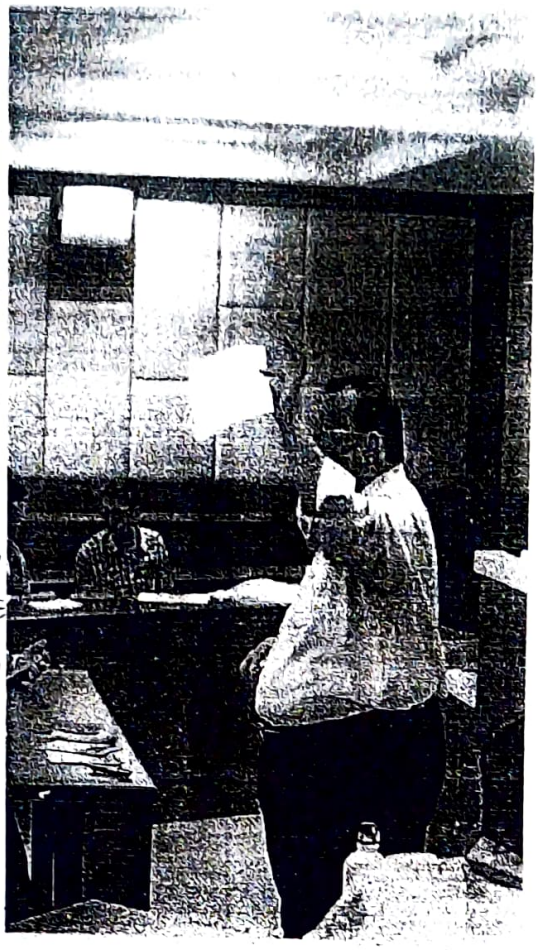
Session 8: Waterproofing: Materials & Techniques (Case Study) (02:00 pm -04: 30 pm)

Speaker: Mr. Dinesh Rajpoot, Business Development Manager, Pidilite Industries Ltd.



MR. DINESH RAJPOOT.





SPEAKER EXPLAINING IMPORTANCE OF WATER PROOFING BY HANDS ON WITH MEMBRANE (WATER PROOFING MATERIAL)

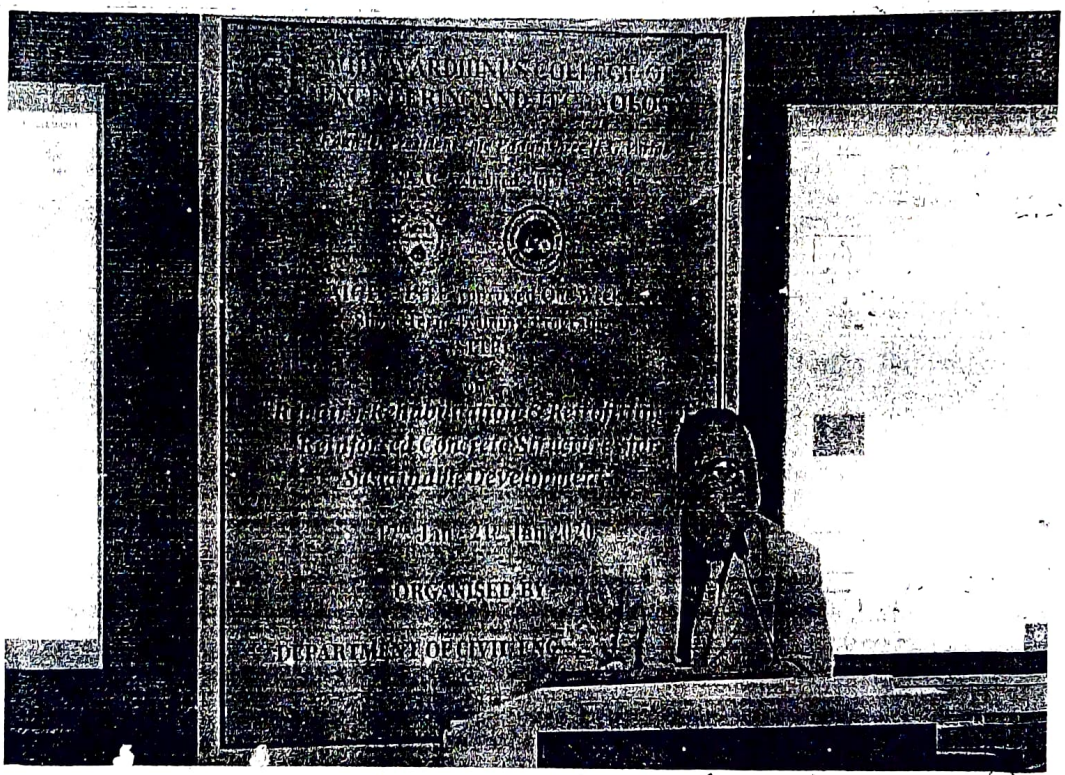
- CASE STUDY TAKEN FOR EXPLAINING JOINTS.

Mr. Rajpoot in this session dealt with various waterproofing techniques for different site conditions. Waterproofing techniques for open cut excavation, box excavation, basement etc were explained step by step to the participants by the speaker. Also Mr. Rajpoot took a live case study of our college itself to find out the areas of leakages. Points of leakages were observed and investigated to find out the probable causes & solution of the same was given by the speaker. In this case study it was identified that Expansion joint was not properly packed and hence over the period leakage took place through the gaps of expansion joint. It was recommended by the speaker to properly fill the joint with some gout or waterproofing materials to stop the leakage. This is how the whole day session on waterproofing was ended with the case study discussion.

DAY 5:

Session 9: Scope of Consultancy in Repairs & rehabilitation (10:00 am -11: 30 am)

Speaker: Mr. Mohit Lamba, Director, Image Décor.



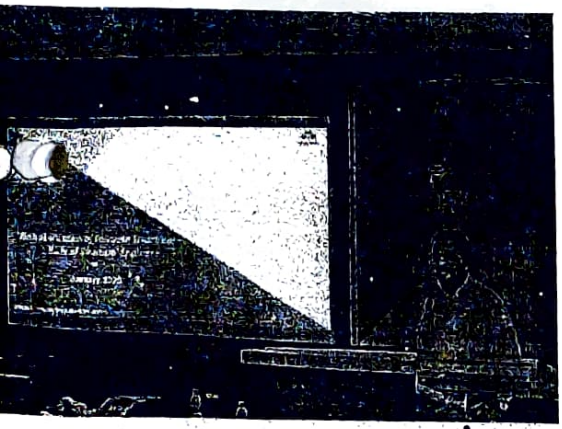
MR. MOHIT LAMBA EXPLAINING SCOPE OF REPAIR INDUSTRY

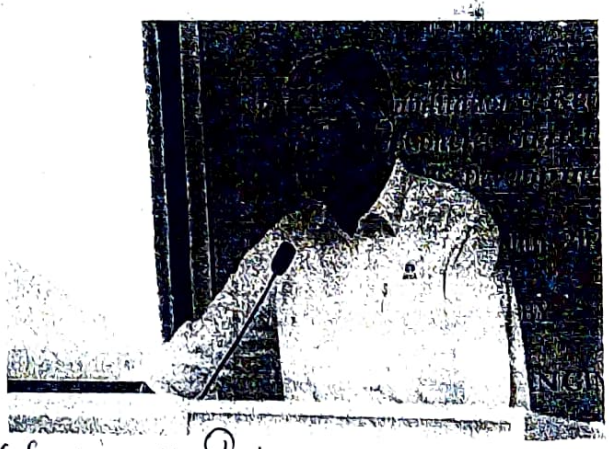
In this Session Mr. Mohit Lamba showered some light on scope of repair consultancy. For beginners it was truly a worth session to get some tricks and tips to start of a career in Repair Industry. Life story of the speaker was shared to influence the participants and make them realize the magnitude of Repair Industry in Mumbai Region. According to the speaker Repair Industry is 2000 Crore industry in Mumbai region and there is a lot of scope for the engineers to make a career in this field. Question Answer round in the end helped in making session more beneficial for all and get a better understanding on the doubts related to "how to start".

DAY 5:

Session 9: Scope of Consultancy in Repairs & Rehabilitation (11:30 am -01: 45 pm)

Speaker: Mr. Satish Diwakar, Sr. General Manager, Tata Consultancy Engineering.

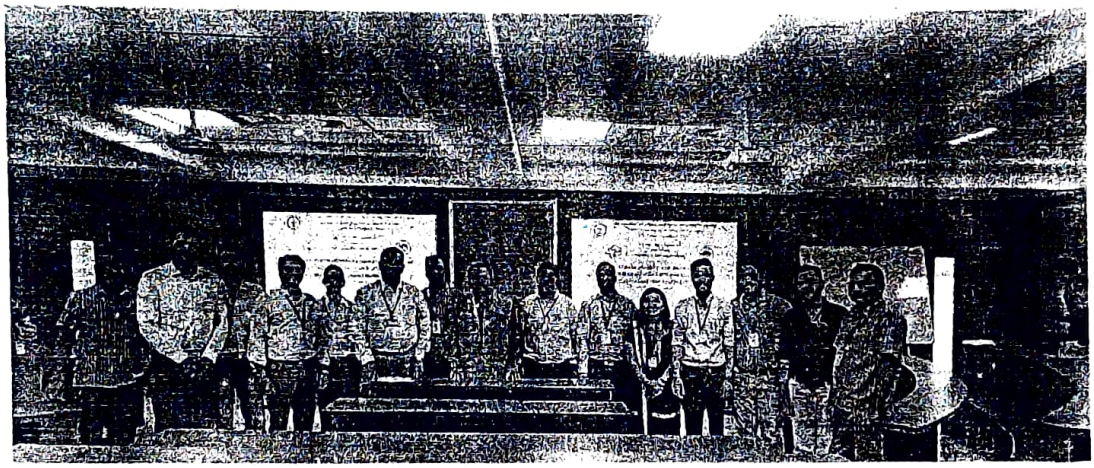




MR. DIWAKAR from TCS giving INSIGHTS ON CONSULTANCY ASPECT OF REPAIR INDUSTRY.

In this session Mr. Satish Diwakar, stressed on role of a structural engineer in repairs & rehabilitation field. He pointed out the responsibilities of a structural engineer in am manner it should be. Experience at Tata Consultancy Engineering was shared by the speaker and it was made clear that all the big construction companies are now directing towards repairs as well and hence scope of the industry will be multiplied soon. However scope of repair consultancy was discussed in short as it was already explained in previous session. In the End few technical queries of the participants were addressed by the speaker.

At the end of the session all the participants were asked to undergo a quiz based on learning of all the 5 days of the STTP & the quiz was followed by the Valedictory function were the presence of all the participants was recognized and appreciated.



Participants of the STTP.

Vidyavardhini's College of Engineering and Technology, Vasai

Affiliated to the University of Mumbai

Staff & Students Organizing Team for STTP

VIDYAVARDHINI'S COLLEGE OF ENGINEERING & TECHNOLOGY
CIVIL Engg.

HEAD
DEPT. OF CIVIL ENGG.
Vidyavardhini's College of Engineering & Technology
Vasai Road (W)- 401202.

Prayog-Experiments on Click

Vidyavardhini's College of Engineering and Technology

Department of Instrumentation Engineering

Presents

A Two Week Faculty Developement Program on Virtual Labs

18th to 27th May 2020

Virtual Lab

An Initiative of Ministry of Human Resource Development (MHRD) Under the National Mission on Education through ICT. The basic motive is to provide remote-access to Labs in various disciplines of Science and Engineering and cater to students at the undergraduate level, post graduate level as well as to research scholars.

Participating Institutes of VL

IIT Bombay, IIT Kanpur, IIT Hydrabad, IIT Madras, IIT karnataka, IIT Roorkee, IIT Delhi, IIT Guwahati, COE Pune, NIT Karnataka, Amrita Vishwas Vidyapitham, Dayalbagh Educational Institutes

Last date of Registration

18th May 2020
till 12 pm noon

Principal

Dr. Harish Vankudre

Convenor

Dr. Deepak Gawali

Coordinators

Mugdha Salvi Prafulla Patil
Vishal Pande Vidya Pamale

Organizers

Kanchan Sarmalkar
Deepti Patne
Trupti Mane Furia
Sandeep Pawar

Who can attend Prayog?

Faculty of Degree and Diploma Engineering colleges across the India who can implement the use of virtual labs in their subjects for students in remote access mode.

Streams Available

- *Electrical and allied branche*
- *Electronics and allied branches*
- *Mechanical and allied branches*
- *Civil and allied branches*
- *Computer & IT Engineering*
- *Instrumentation Engineering*

No Registration Fees!!

E-Certificate

would be awarded to the participants after successful completion of FDP

Registration Link

Visit us

vcet.edu.in

Contact Person

Vidya Pamale 99605 71967
Vishal Pande 7718883314
Prafulla Patil 7710070966
Mugdha Salvi 7738120792

Visit VLabs

vlab.co.in

Telegram Group Link

Gmail vishal pande <vishal.pande@vcet.edu.in>

Report on Faculty Development Program "Prayog Experiment on click"

2 messages

prafulla patil <prafulla.patil@vcet.edu.in> Wed, Jun 17, 2020 at 12:19 PM
To: sda.instru@coep.ac.in, Amod Avinash Harankhedkar <aah.vlab@coep.ac.in>
Cc: principal@vcet.edu.in, vishal pande <vishal.pande@vcet.edu.in>

Respected Sir,

Department of Instrumentation Engineering, Vidyavardhini's College of Engineering & Technology, Vasai in association with Virtual Lab portal, College of Engineering Pune successfully organized and completed a two-week FDP "Prayog Experiment on click" from 18th to 27th May 2020. Participants for this program were faculties of Engineering colleges and Polytechnics across India. Each participant was provided by the laboratory experiment link every second day. Participants had performed assigned work for every two days. i.e. performed experiments and created two MCQs for every experiment. Developed four Cos for every Laboratory and map those Cos with 12 Pos. Sample sheets of CO and MCQs were provided to every participant. At the end of every second day participant uploaded COs and MCQs on google form provided. Also uploaded a word file for CO PO mapping. Program Coordinators supervised their presence on the portal. Participants who performed all the experiments and completed all the tasks were awarded with a eCertificate from Vidyavardhini's College and Virtual lab COEP.

Total 1772 faculties of 130 colleges from 15 different states across India participated in this program. 398 participants completed all the tasks and were awarded with a certificate.

Note- FDP data link is shared with your email Id

Coordinators

Mugdha Salvi

Prafulla Patil

Vishal Pande

Vidya Patil

--
Prafulla Patil
Assistant Professor,
Dept. of Instrumentation Engg.
Vidyavardhini's College of Engg. and Technology, Vasai.
Mobile-7710070966

Amod Avinash Harankhedkar <aah.vlab@coep.ac.in> Wed, Jun 17, 2020 at 2:46 PM
To: prafulla patil <prafulla.patil@vcet.edu.in>, "sda.instru@coep.ac.in" <sda.instru@coep.ac.in>
Cc: "principal@vcet.edu.in" <principal@vcet.edu.in>, vishal pande <vishal.pande@vcet.edu.in>

Thank you sir for your report.

From: prafulla patil <prafulla.patil@vcet.edu.in>
Sent: 17 June 2020 12:19
To: sda.instru@coep.ac.in <sda.instru@coep.ac.in>; Amod Avinash Harankhedkar <aah.vlab@coep.ac.in>
Cc: principal@vcet.edu.in <principal@vcet.edu.in>; vishal pande <vishal.pande@vcet.edu.in>
Subject: Report on Faculty Development Program "Prayog Experiment on click"

Automatus 2020-Make Automation Yours

Vidyavardhini's College of Engineering and Technology

Department of Instrumentation Engineering

Presents

A Full Time AICTE-ISTE approved Self Financing Refresher Programme

About VCET

Vidyavardhini was established as a registered society in 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas. Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering in six branches. (For more information: vcet.edu.in)

About Department

The Department of Instrumentation was established in the year 1994, has 8 well equipped laboratories , has a dynamic team of 9 qualified and experienced faculties, headed by Dr. Deepak Gawali. The department has two Centres of Excellence, AVEVA and Siemens where industrial training is provided to students and industry professionales.

No Registration Fees!!
Registration Link:
https://forms.gle/NqYY3yWMjJnhCQoJ6

Contact Person

Kanchan Sarmalkar 9820148104
Deepti Patne 9869978340
Trupti Mane Furia 9820414522
Sandeep Pawar 7350757075

automatus 2020 "Make Automation Yours"

A Two Week National Level Faculty Developement Program on PLC & SCADA Training

1st to 12th June 2020

Principal Dr. Harish Vankudre
Convenor Dr. Deepak Gawali
Coordinator Kanchan Sarmalkar
Co-coordinators Deepti Patne, Trupti Mane Furia, Sandeep Pawar
Organizers Mugdha Salvi, Prafulla Patil, Vishal Pande, Vidya Pamale

FDP Highlights

- Online training on Indusoft Web Studio a SCADA Software
- Online training on PLC Programming
- Participants successfully completing the FDP would be awarded with E-Certificate from the Institute
- For receiving certificate from AICTE-ISTE, participants who are ISTE members need to pay certification fees of Rs. 400/- [Rs. 354 + Rs. 46 (postage charges form our college to your home/college)]
- Not ISTE members yet?? Take life time membership of ISTE by paying one time fee of Rs. 3459/- and opt for ISTE certificate of this FDP with additional fees of RS. 400/-

Last Date of Registration
31st May 2020
Hurry up !! Limited Seats Available!!

technical collaborations

OMRON, ALLIED ELECTRICALS — Contributors in PLC Training

CIERTO CONTROL AND SOLUTIONS, InduSoft Web Studio — Contributor in SCADA Training

भारतीय तकनीकी शिक्षा संस्था
INDIAN SOCIETY FOR TECHNICAL EDUCATION
(Under the Societies' Registration Act XXI of 1860)

Prof. Vaidya Vijay Dattatray
Executive Secretary

ISTE/Proceedings/STTP-SF/MAH-014/2020-21 May 27, 2020

Proceedings of Executive Secretary, ISTE

Sub.: Sanction to conduct full-time AICTE-ISTE Self Financing orientation/refresher programmes for the year 2020-2021.

Please refer to your proposal for conducting STTP on Self Financing Basis. In this regard it is informed that ISTE has signed MoU with AICTE to conduct Orientation and Refresher programs on Self Financing basis. These programs will be jointly certified by ISTE and AICTE. The aims for the conduct of the programmes are: -

- Updating the knowledge improving organizational and pedagogical skills of teachers.
- To update the knowledge providing an opportunity for interaction and mutual exchange of ideas between teachers interested and/or working in particular areas of specialization.
- Providing an opportunity for teachers to familiarize themselves with modern engineering practices, including the latest technological advances adopted by industry keeping in view the National needs and priorities and relevant technologies.
- Opening up before teachers new vistas in technology at the frontiers of knowledge and the challenges and opportunities these provide to the dedicated and hard working.

It is my pleasure to consider your program under this plan. In this connection sanction is hereby accorded to you for the conduct of the programme on self-financing basis under AICTE-ISTE Self Financing orientation/refresher programme.

Name of Institution	:	Vidyavardhini's College of Engg. & Tech. Palghar – 401 202
Topic	:	AUTOMATUS 2020 – Make Automation Yours
Name & Address of Coordinators	:	Dr. Deepak Gawali, HOD, IE Dept. Prof. Kanchan S., Asst. Prof.
Duration	:	Two Weeks (Minimum 10 Working Days)
Proposed dates	:	01-06-2020 to 14-06-2020

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 DD in favour of ISTE New Delhi along with proposal.

--/-2

1 ISTE Life membership is necessary to attend SF programmes. However, If any participant is not having life membership he/she may take membership of ISTE before the starting of the course and apply by paying the fee to the course coordinator at the spot before the commencement of the programme. The Life Membership fee Rs. 3540/- (Incl. 18% GST) to be paid by DD in favour of ISTE New Delhi.

2 This will be a full-time program and duration of 1 week/2 weeks/4 weeks.

3 A processing and operational charges @Rs.354/- (Incl. 18% GST)per participants including certificate printing and handling and postage charges is to be paid to ISTE Headquarters after the program along with the final report as mentioned in item 6 below.

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

5 Within 15 days after completion of the Programme the final report including list of participants (with their ISTE Membership Number or filled up application forms/list of non-members with Life Membership fee), detailed schedule of the programme with dates, copy of the course notes, list of resource persons invited with full address, contact details, topics, minimum five photographs and a video CD of selected sessions must be sent to ISTE Headquarters, Delhi along with a combined DD @Rs354/- per participant as mentioned above and membership fee for non-members, if any, in favour of **"ISTE, New Delhi".**

6 As per the guidelines of AICTE, a test will be conducted by the institute at the end of the programme & copy of question paper, result sheet of the successful participants is to be submitted to ISTE. Certificates will be issued to those participants only who have attended the programme and have qualified in the test.

7 The EC/SMC Member of ISTE preferably from nearby area may be invited during the STTP.

8 Participation Certificates will be issued jointly by ISTE Hqs. & AICTE New Delhi to the participants. Course Coordinator to kindly ensure correctness of the names in the list/soft copy of participant's names to enable ISTE to print names exactly the same as appear in the list provided. ISTE HQs Delhi will send participation certificates back to the course coordinator ISTE will ensure that the certificates shall be issued only to those participants who meet the above norms.

9 The Programmes shall be considered for the Career Advancement Scheme of AICTE.

Executive Secretary

To,

Dr. Harish V. Vankudre
Principal
Vidyavardhini's College of Engineering & Technology
Vasai –(W), Palghar – 401 202
Maharashtra State

Copy to:

Dr. Deepak Gawali
Coordinator
Vidyavardhini's College of Engineering & Technology
Vasai –(W), Palghar – 401 202
Maharashtra State

Vidyavardhini's College of Engineering and Technology

Department of Instrumentation Engineering

automatus 2020

1st to 12th June 2020

A Report on
Two Week National Level Faculty Development Program on PLC And SCADA

It gives us immense pleasure to present the report on "AUTOMATUS 2020" – A Two Week National Level Faculty Development Program Based on PLC and Scada Training. The FDP began with the inaugural ceremony which was streamed live on YouTube through the official channel of VCET - "Forum for Instrumentation". The Coordinators of the event, Dr. Deepak Gawali and Mrs. Kanchan Sarmalkar then welcomed all the participants and shared their views about importance of automation and how a well-trained faculty can influence students and that might lead to "*Atmanirbhar Bharat*" as guided by our Honourable Prime Minister Shri Narendra Modi. They also mentioned that the entire content of FDP would be based on training the faculty on free software used largely in Automation Industry and encouraging them to extend their learnings to the students and make them skilful. This was followed by the address of Dr. Harish Wankudre, Principal, VCET and Dr. Vikas Gupta, Dean Academics, VCET who encouraged the organizing committee to make Automatus 2020 a reality.

A telegram group was made with all the participants and coordinators for daily communication. The DAY 1 began with the session on 'Supervisory Control and Data Acquisition' by Mr. Vilas Chitnis (CEO, Cietro Control Pvt Ltd. LLP). In the Session he briefed about SCADA as technology and use of Indusoft Web Studio (IWS) software in detail. The guidelines were provided to the participants to download and install the IWS software on their PCs/Laptops. Mr Megha Jantre from Cietro Control Pvt. Ltd. Provided necessary technical support in installation. By the end of the day, a quiz was given to the participants based on the technical session and installation guidelines to test their knowledge.

The hands-on training on IWS continued from Day 2 to Day 7. The Video Tutorial links were posted on the telegram group every day to generate SCADA mimic diagrams. All the participates were asked to prepare a Course journal for each day which included Learning

Outcome of the Day and screenshot of IWS screen for each video. The participants were provided with the link to attempt daily quiz based on video tutorials where they also attach the daily course journal in the same link.

The hands-on training on PLC then took place from Day 8 onwards. The Day 8 began with a technical session on 'New Applications in Automation' by Mr. Rishikesh Bhagat, Strategic manager, Honeywell Automation India Pvt. Ltd. wherein he briefed about importance of automation in the various fields. Then Mr. Soju Sasindran, Senior Product Trainer, Education from Omron Automation India Pvt. Ltd conducted three technical sessions for two days based on introduction to the basics of PLC, HMI and its programming using programming tools of OMRON. After the hands-on training, participants were asked to develop ladder logic programs on Day 8 and 9, which were also made a part of course journal. The participants attempted quiz on both the days as well.

The Day 10 was engaged by Mr. Vagish Nishad and Mr. Sunish Suresh from Allied Electricals Pvt. Ltd. with a technical session on Zeliosoft PLC software, its introduction, installation as well as programming. This very simple and user-friendly software helped the participants perform ladder logic programming easily. The software exercise was done till Day 11.

To make the learning sessions more exciting for faculty, activities based on various Gaming Pedagogies were conducted like puzzles, crosswords, snake and ladder etc., based on topics covered. This also helped the faculty to understand how Outcome Based Education can be fostered with innovation in teaching process.

The Day 12 started with the similar gaming pedagogy activity. Some videos based on Interactive Classroom and how to create gaming pedagogy were shared with the participants. After Successful completion of Final Exam on the same day, we started with the Valedictory Ceremony which was initiated by Honourable President of Vidyavardhini, Shri Vikas Vartak with his kind words of wisdom, followed by address of Mr.Vilas chitnis (CEO ,Cietro control Pvt.Ltd.) who appealed the participates to make use of IWF free software for SCADA. Participants then shared their experience of learning process and views on usage of software through the platform of Automatus 2020.

On behalf of Vidyavardhini's College of Engineering and Technology, the organizing committee of Automatus 2020 whole hearty thank AICTE-ISTE for supporting this course. This support has definitely added to the weightage of the program. We also thank our Industry Partners Cierto Control Pvt. Ltd., Omron Automation India Pvt. Ltd., Honeywell Automation Pvt. Ltd and Allied Electronic Pvt Ltd. for their support and guidance.

Coordinators
Dr. Deepak Gawali
Mrs. Kanchan Sarmalkar

Vidyavardhini's College of Engineering & Technology

Vasai Road(W), Dist. Palghar, Maharashtra

Department of Computer Engineering

presents

ISTE Approved STTP on

Natural Language Processing & Deep Learning

JUNE 22 - 26, 2020

Course Highlights

- Data Analytics through Machine Learning
- Machine learning for Cyber Security
- Deep Learning & Applications
- Introduction to NLP
- NLP for Indian Languages

Research trends in NLP

Registration Details

- Registration is free.
- http://tiny.cc/STTP_NLPnDL
- Participants are entitled to get an e-Certificate upon successful completion of the course
- ISTE members will obtain a certificate bearing ISTE logo
- Non-ISTE members can become members by paying membership fee of Rs. 3540/- and avail a certificate bearing ISTE logo. For queries related to ISTE membership, please contact the organizers.

Patron

Dr. Harish Vankudre, Principal

Convenor

Dr. Megha Trivedi
HOD, Computer Engineering

Cordinators

Dr. Swapna Borde-9881738490
Prof. Anil Hingmire-9860173170

Organising Committee

Prof. Sangita Chaudhari
Prof. Sweety Rupani
Prof. Priya Save

Speakers: Experts in the domain from Industry and Academia

ISTE Approved One Week Online Short Term Training Program (STTP)

On

"Natural Language Processing and Deep Learning"

Duration: 22th June to 26th June 2020

Participants: Faculty from Colleges of Engineering

- Course Objectives:-

1. To get acquainted with the basic concepts and applications of Machine Learning
2. To become familiar with Deep Learning algorithms
3. To understand NLP for Indian languages and to learn how to apply basic algorithms in this field
4. To design and implement applications based on natural language processing

Faculty Involved:

1. Convener
   - Dr. Megha Trivedi
2. Coordinator
   - Dr.Swapna Borde
   - Prof.Anil Hingmire
3. Organizing Committee
   - Prof.Sangita Chaudhari
   - Prof. Sweety Rupani
   - Prof. Priya Save

Responsibilities of committees:

Sr. No.	Name of Faculty	Committee	Responsibilities
	Dr. Megha Trivedi	Overall Co-ordination	To coordinate with other committee members for smooth conduction of the program. In case of absence of any committee members, need to make alternate arrangements. Timely reporting Principal about the activities
	Dr. Megha Trivedi	STTP Form Submission	To submit STTP form
	Dr. Megha Trivedi	Registration	To prepare registration form
	Dr. Megha Trivedi	Speakers Arrangement	To contact speakers.

	Dr. Swapna Borde Prof.Anil Hingmire		To co-ordinate with speakers.
	Prof.Priya Save	Video Link	To create online video link
	Dr. Swapna Borde Prof.Anil Hingmire	Quiz	To prepare quiz form
	Dr. Swapna Borde Prof. Anil Hingmire	Topics to be covered in STTP	Day wise technical contents to be covered in STTP
	Prof. Sangita Chaudhari	Budget ,feedback and certificate	Tracking record of every transaction. To prepare feedback form To prepare question & answer link To prepare certificate
	Prof.Smita Jawale Prof.Sweety Rupani Prof.Priya Save	Anchoring	To start each session. To introduce each speaker. To conclude each session.
	Dr. Megha Trivedi Dr. Swapna Borde Prof. Anil Hingmire	Documentation	To prepare poster for STTP. To prepare invitation, appreciation and other letters. To prepare STTP Report. To prepare course material for STTP Report Submission.
	All Faculty Members	Publicity	To invite and contact intra and inter college faculties.

DAY 1 – 22/06/2020 (Monday)

Inauguration Function:

The One Week ISTE Approved online Short Term Training Program was organized from 22th June - 26th June 2020 on "Natural Language Processing and Deep Learning". Programme started with a welcome note by Principal, Dr. Harish Vankudre and address note by Dr. Megha Trivedi. Dr Swapna Borde, Co-ordinator of STTP, gave the overview of contents to be covered in this programme along with schedule. The function concluded with a Vote of Thanks presented by Coordinator Prof.Anil Hingmire

The Online STTP was attended by about 132 participants.

The YouTube link for the sessions is shown in the table:-

Date	Time	Title of Topic	Expert	Host/Guest Link	YouTube link
Monday, June 22, 2020	10.30 am to 12.30 pm	From Machine Learning to Deep Learning	Dr.Deepali Vora	https://streamyard.com/2eprcfa3hu	https://www.youtube.com/watch?v=DtSfJ8ZFZvg
	3.00 pm to 4.30 pm	Introduction to Natural Language Processing	Mr. Mustafafa Fakdawala	meet.google.com/aad-fxrz-ehh	
Tuesday, June 23, 2020	11.00 am to 12.30 pm	Introduction to end to end Machine learning Development	Mr. Gautam Shende Software Engineer at Google Mr. Sameer Pathan, Senior Software Developer at Shaadi.com Mr.Sampath Shetty Machine Learning Developer at RxLogix Corporation	https://streamyard.com/9b65ed6kpp	https://www.youtube.com/watch?v=2EPIGgpTV5s
	3.00 pm to 4.30 pm	Hands on NLP: Sentimental Analysis	Dr. Vinayak Bharadi Associate Professor, FAMT Ratnagiri	https://streamyard.com/z46c5b4krg	https://www.youtube.com/watch?v=xe1962wRlQ
Wednesday, June 24, 2020	11.00 am to 12.30 pm	Research trends in NLP and NLP for Indian Languages	Dr. Tatwadarshi Nagarhalli Asst. Professor , VIVA Virar	https://streamyard.com/ysi8aa4su7	https://www.youtube.com/watch?v=0_3KWdGPeJY
	3.00 pm to 4.30 pm	Hands on ML: Recommendation system using ML	Dr. Subhash Shinde Vice Principal, LTCE Mumbai	https://streamyard.com/haud789ayd	https://www.youtube.com/watch?v=eUXdvhVLKf0
Thursday, June 25, 2020	1.00 pm to 2.30 pm	Machine Learning for Cyber Security	Dr. Narendra Shekokar Professor & HOD, DJSCE Mumbai	https://streamyard.com/x7achdpekq	https://streamyard.com/view_on_platform/youtube?link=https://www.youtube.com/watch?v=O

					3ZDVmQbeo4
	4.30 pm to 6.30 pm	Data Analytics through ML	Dr. Tatwadarshi Nagarhalli Asst. Professor , VIVA Virar	https://streamyard.com/66f69gskt8	https://www.youtube.com/watch?v=obiYtI2B41c
Friday, June 26, 2020	10.30 to 12.00	Deep Learning Algorithms	Mr. Abhishek Potnis	https://streamyard.com/q5jwntqnti	https://www.youtube.com/watch?v=xHFuCqJeyPE
	2 pm to 3.30 pm	Hand on: NLP for text Classification	Mr. Shahbaz Khan Research Associate Computer Vision, IIT Kanpur	https://streamyard.com/qcb5tyr88g	https://www.youtube.com/watch?v=d2xX60oAVkQ

Session details are as follows:-

- **Day 1 Report (22 June 2020)**

- **Session 1 (10:30 am –12.30 pm) :**
  Speaker:- Dr.Deepali Vora

  Topic:-From Machine Learning to Deep Learning

  Dr.Deepali Vora has described following points

- Basics of machine learning
- Basics of deep learning
- From machine learning to deep learning
- Deep learning vs machine learning

- **Session 2(3 pm –4.30 pm) :**
  Speaker:- Mr. Mustafafa Fakdawala ,TCS,Mumbai

  Topic:-Introduction to Natural Language Processing
  Mr. Mustafafa Fakdawala has given brief description about basic steps of natural language processing . He has described following points

  - Tokenization
  - Normalization
  - Stemming
  - Lemmatization
  - Corpus
  - Stop Words
  - Parts-of-speech (POS) Tagging.

➢ **Day 2 Report (23 June 2020)**

❖ **Session 1 (11 am –12.30 pm) :**
Speakers:- Mr. Gautam Shende , Mr. Sameer Pathan, Mr.Sampath Shetty

Topic: Introduction to end to end Machine learning Development –

They have described following points

- Applications of machine learning
- Applications of deep learning
- Applications of data science

❖ **Session 2 (3pm –4.30 pm) :**
Speaker:- Dr. Vinayak Bharadi, Associate Professor, FAMT Ratnagiri

Topic:-Hands on NLP: Sentimental Analysis

Dr. Vinayak Bharadi has described following points

- Semantic Analysis
- Programming implementations of semantic analysis
- Case studies on semantic analysis

➢ **Day 3 Report (24 June 2020)**

❖ **Session 1 (11 am -12.30 pm) :**
Speaker - Dr. Tatwadarshi Nagarhalli, Asst. Professor , VIVA Virar
Topic: Research trends in NLP and NLP for Indian Languages

Dr. Tatwadarshi Nagarhalli has described following points

- Natural language processing steps
- NLP applications
- Demonstration of programming implementations of NLP stages such as Morphological, POS, and Named Entity Recognition by using NLTK for Indian Languages.

❖ **Session 2 (3 pm -4.30 pm) :**
Speaker - Dr. Subhash Shinde

Topic:- Hands on ML: Recommendation system using ML

Dr. Subhash Shinde has given brief description about recommendation system. He has described following points

- Recommendation system using machine learning
- Demonstration of programming implementation of recommendation system.

➢ **Day 4 Report (25 June 2020)**

❖ **Session 1 (1.00 pm - 2.30 pm) :**
Speaker - Dr. Narendra Shekokar, Professor & HOD, DJSCE Mumbai

Topic - Machine Learning for Cyber Security

Dr. Narendra Shekokar gave a presentation of Machine Learning for Cyber Security. He has described following points

- cyber security
- Implementation through machine learning algorithms with real world examples.
- Research perspective.

❖ **Session 2 (4.30 pm -6.30 pm) :**
Speaker - Dr. Tatwadarshi Nagarhalli, Asst. Professor , VIVA Virar
Topic: Data Analytics through ML

Dr. Tatwadarshi Nagarhalli has described following points

- Machine Learning algorithms
- Machine learning applications
- Demonstration of programming implementation of data analytics techniques using ML

➢ **Day 5 Report (26 June 2020)**

❖ **Session 1(10.30 am -12.00 pm) :**
Speaker - Mr. Abhishek Potnis. PhD. Research Scholar GeoComputational Systems Lab, IIT Bombay

Topic: Deep Learning

Mr. Abhishek Potnis has given brief description about deep learning. He has described following points

- Convolution neural network (CNN)
- Recurrent Neural network (RNN)
- Gated recurrent units (GRU)

❖ **Session 2(2 pm to 3.30 pm) :**

Speaker:- Mr. Shahbaz Khan

Topic:- Hand on: NLP for text Classification

Mr. **Shahbaz Khan** has described following points

- Text Classification using NLP.
- Demonstration of programming implementations of text classification

Course Outcomes:- Learner will be able to

1. Develop applications of machine learning
2. Apply deep learning algorithms on a given dataset
3. Identify Challenges of NLP and ambiguities in natural language.
4. Design real world applications of Natural Language Processing.

Click here for summary page

2018-19

Dates (From-to) (DD-MM-YYYY)	Title of the FDP/ Professional Development/ Administrative Training Program	Page No.
2018-19		
From 21-6-2019 to 30-6-2019	STTP on Scope of IOT for Social Upliftment	1
From 24-6-2019 to 29-6-2019	STTP on Emerging Trends in Operations Research	9

COURSE OBJECTIVES

There are many devices used in home, agriculture, factories, oil wells, hospitals, cars, natural disasters management, weather forecasting and thousands of other places. Here IoT plays a vital role for betterment of society. With the developing new devices, you need solutions to connect them, collect, store, and analyze device data for social upliftment. IoT provides broad and deep functionalities, with wide usage of the cloud, so you can build IoT solutions for almost many applications.

Topics Coverd:

1. Home automation
2. IoT in agriculture
3. Robotics in IoT
4. Introduction to IoT, Its elements & system design of IoT,
5. Hands on Training: Basics of python/ IoT Kits
   - 5.1 Python programming with Jupiter and other python pacakges
   - 5.2 Introduction to Arduino UNO Board and Raspberry PI
   - 5.3 Arduino IDE and Basic Program Structure
   - 5.4 Interfacing different sensors with Arduino UNO and Raspberry PI.
   - 5.5 WIFI Connectivity (ThingSpeak Cloud)

Patrons:

- Shri. Vikas Vartak, President, Vidyavardhini
- Shri Arun Vartak, Chairman, Vidyavardhini
- Shri Uddhav Gharat, Secretary, Vidyavardhini .
- Shri. Bhausaheb Mohol, Secretary, Vidyavardhini
- Shri Hasmukhbhai Shah, Treasurer, Vidyavardhini
- Dr. Harish V. Vankudre, Principal, VCET

Conveners:

- Dr. Ashish Vanmali,Associate Professor,HOD, IT
- Prof. Chandan Kolvankar, Assistant Professor

Co-ordinators:

1. Prof. Madhavi Waghmare , Assistant Professor
   Mobile -9822779327
2. Mr. Yogesh Pingle, Assistant Professor,
   Life Member of CSI
   Mobile-9422492389 / 9665009742

Organizing Committee:

1. Ms. Archana Ekbote
2. Ms.Vaishali Shrisath
3. Mr. Sainath Patil
4. Ms. Anagha Patil
5. Ms. Bharati Gondhalekar
6. Ms. Maryam Jawadwala
7. Ms. Swati Varma

VIDYAVARDHINI'S COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO UNIVERSITY OF MUMBAI

AICTE-ISTE APPROVED TWO WEEK

Short Term Training Program
on

SCOPE OF IoT FOR SOCIAL UPLIFTMENT

21st June to 30th June,2019

Organised by

Department of Information Technology

Vidyavardhini's College Of Engineering And Technology

K.T. Marg,Vasai Road(West),Palghar-401202

Contact:0250-2338234(Ext-222)
Visit:www.vcet.edu.in
E-mail:vcet_iot19@vcet.edu.in

ABOUT VCET

Vidyavardhini means a body committed to enhancement of knowledge. Vidyavardhini was established as a registered society in 1970 by Late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the Degree of Bachelor of Engineering.

ABOUT INFORMATION AND TECHNOLOGY

Department of Information Technology was established in the year 1999. The department has an in-take of 60 students. The department boasts of a qualified, dynamic and technologically sound faculty with a good teaching and industrial experience. The department consists of 9 well-equipped, state-of-the-art labs with facilities conducive for growth of the students. The sincere efforts by the staff and graduating students each year bring laurels to the department by their academic and placement records.

Key Resouce Persons:

1. Mr. Pinakin Ajmera
   Director ,NCC Teleconn Pvt Ltd.
2. Mr Ballal Pathare
   Propritor ,Farmvary Pvt Ltd.
3. Dr. Vinayak D. Shinde,
   Head & Associate professor,CS,SLRTCE
4. Prof. Yogesh Pingle,
   A.P., Dept. of IT, VCET
5. Prof. Madhvai Waghmare,
   A.P.,Dept of IT,VCET

How to apply:

The applicants should send copy of the completed application form either by mail or courier to the coordinators on or before 15 MAY 2019 along with fees.
Payment mode1:-Candidates can send DemandDraft of the course registration fees drawn in favour of VCET Payable at Mumbai.
Send scaned copy of DD along with registration form to vcet_iot19@vcet.edu.in
Payment mode 2:- Candidates can transfer money via online banking.
Bank name: Kotak Mahindra Bank Ltd. Branch: Vasai
RTGS/NEFT/IFSC code: VYSA005480
MICR code:400064010 A/C No. 548010133055

Registration Fees:

Faculty: ISTE member 4000/-
Non ISTE member 4500/-
Industry: 4500/-

Mailing address:

To,
The Co-ordinator,
Vidyavardhini's College Of
Engineering & Technology
K.T. Marg,Vasai Road(West).Palghar-401202

VIDYAVARDHANI'S COLLEGE OF ENGINEERING AND TECHNOLOGY

AICTE-ISTE approved
Two Week
Short Term Training Program
On

Scope of IoT For Social Upliftment

21st June to 30th June,2019

Registration Form :-
Name:_____
Qualification:_____
Designation:_____
Institute/Company name:_____
Address:_____
_____
Email:_____
Mobile No.:_____
Details of Registration fees:_____
DD N0./Online Transition id :-
_____
Amount:_____
Bank:_____

Date:-

Signature of Applicant

Date: 13/08/2019

To

Indian Society for Technical Education
Shaheed Jeet Singh Marg,
Near Katwaria Sarai,
Opp. Sanskrit Vidyapeeth
New Delhi - 110 016
Phone : 011-26513542, 26963431

Subject: Submission of Final Document of Two Week AICTE-ISTE Approved STTP on "Scope of IoT for Social Upliftment" from 21st June 2019 to 30th June 2019

Respected Sir,

The Department of Information Technology, Vidyavardhini's College of Engineering & Technology, Vasai has successfully conducted Two Week AICTE-ISTE Approved STTP on "**Scope of IoT for Social Upliftment**" from 21st June 2019 to 30th June 2019.

We are hereby submitting following list of final copy of documents:

1. Course Approval Letter
2. List of participants along with LM numbers and their test marks.
3. Detailed Schedule of Program with dates
4. Daily report of program
5. Copy of Course Notes
6. Copy of Question Paper
7. List of resource persons invited with full address and contact details and topics
8. CD of Course Material and photograph
9. DD (Number - 314311 and Date - 24/07/2019, Amount - Rs. 9558/-)
   (List of participants = 27 * 354 = Rs. 9558/-)
10. Copies of Application form and DD for ISTE Life Membership of 2 participants
11. Photographs

Please issue the certificates of the successful participants as per the list enclosed.

Thanking you.

Prof. Madhavi Waghmare

Prof. Yogesh Pingle


PHYSICS LABORATORY
ROOM NO
219
Vidyavardhini's College of Engineering & Technology
TO MUMBAI UNIVERSITY
AICTE ISTE APPROVED TWO WEEK
SHORT TERM TRAINING PROGRAM
ON
Scope of IoT For Social Uplift
21ST JUNE 2019 TO 30TH JUNE 2019
ORGANIZED BY
Department of Information Tech


accurate
HELICAL SPRINGS PVT. LTD.
NO SPRING'S
COMPRESSION SPRINGS
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Patrons

- Shri. Vikas Vartak, President, Vidyavardhini
- Shri. Arun Vartak, Chairman
- Shri. Uddhav Gharat, Secretary
- Shri. Hasmukhbhai Shah, Treasurer
- Shri. Bhausaheb Mohol, Secretary
- Dr. H.V.Vankudre, Principal, VCET

Convener

Dr. Megha Trivedi, HOD, Computer

Advisory Committee

- Dr. Suresh K. Ukarande, Dean Faculty of Science & Technology, University of Mumbai
- Dr. Subhash Shinde, BOS Chairman, Computer, University of Mumbai.
- Dr. Narayan Rangraj, Professor & Head, IEOR, IITB
- Dr. Javendran V. Associate Professor, IEOR, IITB & Hon. Sec. , Mumbai Chapter, ORSI
- Dr. Vikas Gupta, Professor and Dean, VCET
- Dr. Uday Aswalekar, Professor, VCET

Co-ordinator

- Dr.Swapna Borde Mobile: 9881738490

Co-coordinators

- Mr. Vikrant Agaskar, Mobile: 9822836508
- Ms. Sangita Chaudhari, Mobile: 9730199702

Organizing Committee

Mr.Anil Hingmire
Ms. Smita Jawale
Mr. Sunil Katkar
Ms. Sweety Rupani
Mr. Sanket Patil

Registration Form

AICTE-ISTE approved
One week
Short Term Training Program
on
"Emerging Trends in Operations Research"'
24th June. to 29th June 2019

Name: _____

Qualification: _____

Designation: _____

Address: _____

Email: _____

Mobile No.: _____

Member of ISTE: Yes / No
ISTE membership number: _____

Registration Category: Faculty/Industry/ Student
Details of registration fees: DD No. / Online Transaction ID:
_____

Bank Name: _____

Amount: _____

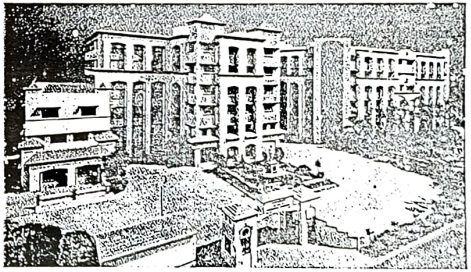
Date: _____

Signature of Participant: _____

Signature of Authority: _____

VIDYAVARDHINI'S COLLEGE OF ENGINEERING & TECHNOLOGY
(Affiliated to the University of Mumbai)
NAAC Accreditied - 2019

AICTE-ISTE approved
One week
Short Term Training Program
on
"Emerging Trends in Operations Research"'
24th June. to 29th June 2019



Organized by

Department of Computer Engineering
Vidyavardhini's College of Engineering & Technology,
K. T. Marg, Vasai Road (W),
Palghar – 401 202.
Contact – 0250 -2338234 Ext – 214,121.
Visit: www.vcet.edu.in

About VCET

Vidyavardhini means a body committed to enhancement of knowledge. Vidyavardhini was established as a registered society in 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas. Vidyavardhini's College of Engineering & Technology (VCET) was started in the year 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering.

About Department

Department of Computer Engineering was established in the year 1999 with the objective of imparting knowledge and developing practical skills in various areas of computer engineering. The department was accredited by NBA and has an intake of 60 students. The department motivates its students to participate in co-curricular and extra-curricular activities essential for development and nurturing of team spirit and developing organizational skills. Department envisages to become a center of excellence in the varied domain of computer engineering. The department has expert and well trained human resources and well equipped laboratories to impart domain specific knowledge.

Course Objectives

1. Formulate a real-world problem as a mathematical programming model.
2. Understand the mathematical tools that are needed to solve optimization problems.
3. Use mathematical software to solve the proposed models.

Expected Outcomes

1. Understand different types of models in operations research
2. Use optimization theory to solve linear programming problems.
3. Solve network flow models including transportation and assignment problems.
4. Understand the applications of interger programming and a queuing model, game theory, inventory model and dynamic programming.

Topics

1. Introduction to different types of models in operations research.
2. Optimization theory and linear program ming
3. Network flow models
4. Integer programming problems: Formula tion and Solution methods
5. Queuing models
6. Game theory
7. Dynamic programming
8. Inventory Models

Resource Person

Eminent speakers from reputed institutions.

Accomodation: Accomodation will be charged separately. The tariff and other information shall be communicated to the participants applying for accommodation.

How to apply:

The candidates should send copy of the completed application form either by email or courier to the coordinators on or before 18th June 2019

Payment Mode 1: Candidates can send DD (demand draft) of the STTP registration fees drawn in the favor of **'VCET' PAYABLE AT MUMBAI.** Send scanned copy of DD along with registration form to vcet_comp@vcet.edu.in

Payment Mode 2:
Bank Name: Kotak Mahindra Bank Ltd.
Branch: VASAI RD (W)
For RTGS/NEFT IFSC Code: KKBK0001420
MICR Code: 400485135
A/C No.:548010133055

Fees:
ISTE Members: 3000/-
Non - ISTE Members & Industry Participants: 3200/-
Students: 1000/-

Seminar on
Report of Orientation Program on Operations Research

Title	Orientation Program on Operations Research
Working date	24th June 2019 to 29th June 2019
Duration	6 days
Mode of Conduction	Offline on campus
Description	This course was designed to learn essential methodologies and techniques in Operations Research, enabling participants to effectively analyze and optimize decision-making processes across various domains. **1. Introduction to Operations Research (OR):** • Overview and applications in decision-making. • Problem-solving methodologies in OR. **2. Linear Programming (LP):** • Definition and significance. • LP components and formulation. • Solution methods: Graphical, Simplex, etc. • Duality concept and sensitivity analysis. **3. Transportation Problem:** • Formulation and solution techniques. • Handling unbalanced scenarios. • Optimality testing methods. **4. Assignment Problem:** • Introduction and solution approach. **5. Integer Programming (IP):** • Types and solution techniques. **6. Decomposition Algorithms:** • Overview and significance. **7. Routing and Travelling Salesman Problem (TSP):** • Brief introduction and applications.
Objectives	1. Formulate a real-world problem as a mathematical programming model. 2. Understand the mathematical tools that are needed to solve optimization problems. 3. Use mathematical software to solve the proposed models
Learning Outcomes	Learner will be able to… 1. Understand the theoretical workings of the simplex method, the

	relationship between a linear program and its dual, including strong duality and complementary slackness. 2. Perform sensitivity analysis to determine the direction and magnitude of change of a model's optimal solution as the data change. 3. Solve specialized linear programming problems like the transportation and assignment problems, solve network models like the shortest path, minimum spanning tree, and maximum flow problems. 4. Understand the applications of integer programming and a queuing model and compute important performance measures
Participants	Faculties from various Engineering Colleges
No. of attendees	37
Registration Fees	ISTE members: Rs. 3000 Non ISTE members: Rs. 3200 Students: Rs. 1000
Speaker	Dr. Arun Kumar, Viva Institute of Technology, Virar Dr. Satish Taklikar, D.J. Sanghavi, Vile Parle Dr. V.S.Bilolikar, Fr. Conceicao Rodrigues College of Engineering, Virar
Convenor(s)	Dr. Megha Trivedi
Coordinator(s)	Dr. Swapna Borde Mr. Vikrant Agaskar

Dr. Swapna Borde
(Coordinator)
AP, Dept of Comp. Engg.

Mr. Vikrant Agaskar
(Coordinator)
AP, Dept of Comp. Engg

Dr. Megha Trivedi
(Convenor)
HOD, Dept. of Comp.Engg.

Vankudre Harish Vasant

Digitally signed by Vankudre Harish Vasant
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