Department: E&TC Engineering

Research and Development

FDP/Workshop/Webinar/Organized

1. One day **Faculty Development Program** on "E-content Preparation via OBS software with YouTube live streaming" was conducted on 25 July 2020. Ms. Deepthi Kulkarni successfully coordinated the event.

The objective of the program was to educate all teaching faculty members about online content creation.

The faculty members got to know how to create E-contents.

2. One day **Faculty Development Program** on "White Boards in Teams" was conducted on 21 July 2020. Ms. Supriya Saste successfully coordinated the event.

The objective of the program was to educate all teaching faculty members about the usefulness of microsoft teams.

The faculty members got ideas about how to use white boards for online teaching learning.

3. One day **Faculty Development Program** on "Google Classroom for Teachers" was conducted on 25 June 2020. Mrs. Trupti Thite successfully coordinated the event.

The objective of the program was to educate all teaching faculty members about the usefulness of Google Classroom for the online teaching learning process.

Faculty members understood how to use google classroom for effective teaching learning.

4. The two days national level **workshop** on "Exploring the world of Arduino" was organised on 15th to 16th April 2021. All the faculty members of E&TC Engineering department successfully coordinated the event.

The event was conducted for diploma holders with the objective of making them familiar with Arduino and it's programming.

The students got knowledge about Arduino, it's programming and how to use it for real world application.

5. The **national level webinar series** on "Covid-19 Pandemic Impact: Challenges and Opportunities in E&TC Engineering Career" was organized on 1st and 2nd August 2020 in association with Indian Institute of Information Technology Pune. All the faculty members of the E & TC Engineering department successfully coordinated the

event.

The objective of the event was to make students aware about the technologies in Electronics and Telecommunication Engineering.

All attendees of this event got to know about scope in nanotechnology and various career opportunities in E&TC Engineering field.





Webinar series on "Covid-19 Pandemis Impact: Challenges & Opportunities in E&TC Engineering Field"





Faculty Development Programs organized on "E-content preparation via OBS software" and "Google Classroom"

FDP/Workshop/etc Attended

- 1. Ms. Supriya Saste attended a 5 days state level online Faculty Development Program on Social, Media, Analytics from 26/04/2021 to 30/04/2021.
- 2. Ms. Supriya Saste attended Workshop on Project Based Learning on 23/01/2021.
- 3. Ms. Supriya Saste attended Orientation workshop on , "Control Systems", from 18/01/2021 to 20/01/2021
- 4. Ms. Supriya Saste attended a one day FDP on MATLAB for engineering applications on 10/09/2020.
- 5. Mrs. Trupti Thite attended "Wearable Devices" " (ATAL FDP) from 21-09-2020 to 25-09-2020.
- 6. Mrs. Trupti Thite attended Faculty Orientation Workshop on, "Data Analytics Lab" from 21-01-2021 to 22-01-2021.
- 7. Mrs. Trupti Thite attended Faculty Orientation Workshop on Electronic Circuits (EC) from 22-06-2020 to 26-06-2020.
- 8. Mr. Mayuresh Gulame attended Faculty Orientation Workshop on Signals and Systems(SS) from 17/01/2021 to 22/01/2021.
- 9. Mr. Mayuresh Gulame attended Faculty Orientation Workshop on Digital electronics and logic devices from 25/02/2021 to 28/02/2021.
- 10. Mrs. Kranti Patil attended NPTEL course on Antenna Theory from 15 Jan 2021- 8 April 2021.
- 11. Mrs. Trupti Thite attended NPTEL course on Biomedical Signal Processing from 15 Jan 2021- 8 April 2021.
- 12. Deepthi kulkarni, participated in one day Online Faculty Orientation Workshop on SE(E&TC/Electronics) Revised Syllabus 2019 Course for the Subject Employability Skills Development Organized by Department of E&TC, Hope Foundation's International Institute of Information Technology (I2IT), Pune, on 21st January 2021.
- 13. Ms.Deepthi D Kulkarni participated in Three Days Online Faculty Orientation Workshop on SE(E&TC/Electronics) Revised Syllabus 2019 Course for the Subject Principles of Communication Systems Organized by Department of E&TC Engg., Dr. D. Y. Patil Institute of Technology, Pimpri, Pune from 18 to 20 January 2021.

MOUs

- Signed MoU with Supo Labs for Training and Internship on 24/8/2020
- Signed MoU with My Future Town for Training and Internship on 24/8/2020
- Signed MoU with RajRajeshwara PCB Manufacturing and Designing on

13/01/2020 (Continued for next 4 Year)

Signed MoU with Brainiac IP Solutions on 3/1/2016(Continued for next 5 Year)

Faculty publications:

- 1. D.D. Kulkarni, Dr.V.V. Dixit, Dr. Nilesh Uke "Recent Artifacts Handling Algorithms in Electroencephalogram" International Journal of Advanced Science and Technology, Vol. 29, No. 5s, (2020), pp. 1862 1869
- 2. Deepthi D. Kulkarni, Dr. Vaibhav. V. Dixit Preprocessing Of EEG Signals for Estimating State Of Mind,IT in Industry, vol. 9, no.3, 2021
- 3. Mayuresh B. Gulame, Dr. Vaibhav V. Dixit "Thyroid nodules segmentation methods in clinical ultrasound images: A Review", Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2020.10.259 2214-7853/ 2020 Elsevier.
- 4. Mrs. K.D.Patil, "Review on RF MEMS for Wireless application". Virtual National Conference on Recent Advances in Communicative Electronics (NCRACE 2021)"
- 5. Mrs.K.D.Patil, "A Compact Microstrip Patch for Detection of Breast Cancer", Journal of VLSI Design and Signal Processing, MAT Journal-2020.
- 6. Mrs.K.D.Patil, "Design of Advanced Micro Strip Patch Antennafor Wearable Application", Journal of Signal Processing, Vol 7, No 1 (2021)
- 7. Mrs.K.D.Patil, "Review on Microstrip patch for detection of breast cancer", STM National Journal- 2020, ISSN: 2349-9001 volume 7 (1), 34-37 p
- 8. Trupti G. Thite, Nilesh J. Uke, "Securing Internet of Things (IoT) Using Machine Learning Methods." Recent Trends in Sensor Research & Technology. 2020; 7(2): 23–27p
- 9. Trupti G. Thite, Dr. Daulappa G. Bhalke. "Real-time Electrocardiogram monitoring for heart diseases with secured IoT Protocol", Int. J. Medical Engineering and Informatics.Inderscience publications
- 10. Uke, Nilesh, Thite, Trupti and Saste, Supriya. "4 Recent advancements and challenges of artificial intelligence and IoT in agriculture". Internet of Things and Machine Learning in Agriculture: Technological Impacts and Challenges, edited by Jyotir Moy Chatterjee, Abhishek Kumar, Pramod Singh Rathore and Vishal Jain, Berlin, Boston: De Gruyter, 2021, pp. 65-82.
- 11. Mr. D.A. Jakkan, Dr. Prof. Chandrasekhar Sakode, Dr. Prof. Pradnya H. Ghare, "MID-INFRARED SPECTROSCOPY FOR THE ANALYSIS OF POTASSIUM SOIL PROPERTIES", International Journal of Researchers in Biosciences, Agriculture and Technology (IJEBAT) Issue (IX) Volume I Jan 2021: 78-83

Interaction with outside world:

- Deepthi Kulkarni as Paper setter for Mobile Communication for BE 2015 pattern Insem and END sem 19/2/21
- Mrs. K.D.Patil as paper setter for Antenna wave Propagation for TE 2019 pattern End sem Exam.
- Mrs. K.D.Patil as paper setter for Microwave Engineering ME 2015 pattern End sem Exam.
- Mr..D.A.Jakkan as paper setter for Embedded System and RTOS (404184C) ,(sem-I) BE 2015 (End sem) (Theory) for E & TC Engineering.dated 09/06/2021
- Mr..D.A.Jakkan as paper setter for Embedded System and RTOS (404184C) ,(sem-I) BE 2015 (End sem) (Theory) for Electronics Engineering. dated 17/09/2020

PhD Registration:

- Ms.Deepthi D.Kulkarni has registered for Ph. D in Biomedical Signal Processing at the research centre "G.H.Raisoni College of Engineering and Management research", in the area of Emotion Detection from EEG Signal.
- Mr. Mayuresh Gulame has registered for Ph. D in Biomedical Signal Processing at the research centre "G.H.Raisoni College of Engineering and Management research", in the area of Thyroid Nodule Detection
- Mr. Trupti Thite has registered for Ph. D in Biomedical Signal Processing at the research centre "G.H.Raisoni College of Engineering and Management research", in the area of Arrhythmia detection from 2 Dimensional ECG Signals.
- Mrs. K.D.Patil has registered for Ph.D in Microwave Engineering at research center "G.H.Raisoni College of Engineering & Management research in area of RF MEMS for Reconfigurable Antenna.

Faculties Remarkable Achievements:

Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

Name of theFaculty, activity	Name of the Award/ recognition	Name of the Awarding government/ government recognised bodies	Year of award
Ms.Deepthi Kulkarni	Elite	Swayam, NPTEL	Dec 2020

Mr. Gulame M.B.	Elite	Swayam, NPTEL	Dec 2020
Mrs.Trupti G.Thite	Elite	Swayam, NPTEL	April 2021
Mrs. K.D.Patil	Best Young Faculty	Novel Research Academy	May 2021

Industrial visits / Tours:

Online Industrial Visit to Rajrajeshwara PCB Manufacturing and designing Pvt LTD, Pune for SE and TE students was arranged on 6th September 2020 for showing students process of PCB Manufacturing and Design

Objectives: To make students aware about steps of PCB manufacturing.

Outcome:Students Understood different tools and steps for designing any electronic circuit on PCB Hardware.



"Simulation & Design using Proteus"

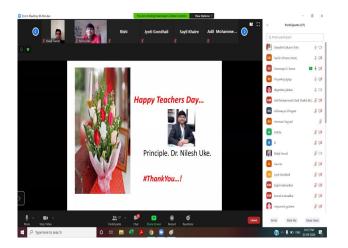


Virtual Industrial Visit to Rajrajeshwara PCB Manufacturing and designing Pvt LTD

Student Development and Welfare:

Students Association:

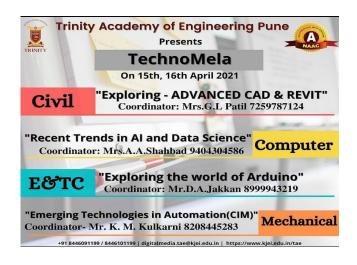
The E&TC Engineering Students Association Cell (ENCORE) has successfully celebrated Teacher's Day on 5th September 2020.

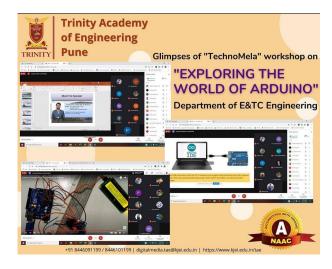




Workshops:

1. The "TECHNOMELA -2021 Exploring the world of Arduino" workshop was organized on 15th and 16th April,2021. Two eminent speaker Mr. Mayuresh Gulame and Mrs. Trupti Thite inhouse faculty from E&TC department successfully conducted two days workshop. In day 1 session Mr. Mayuresh Gulame emphasized on advantages, commands, tools and overviewed on arduino whereas Mrs. Trupti Thite explained industrial use of arduino.





2. The **national level webinar series** on "Covid-19 Pandemic Impact: Challenges and Opportunities in E&TC Engineering Career" was organized on 1st and 2nd August 2020 in association with Indian Institute of Information Technology Pune. All the faculty members of the E & TC Engineering department successfully coordinated the event.

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• Higher studies in various universities :

1. Sanket Jagtap Doing MBA(Operation & Supply Chain Management) from PDEA's Mahatma Phule Institute Of Management & Computer Studies, Hadapsar, Pune University.

Student Achievements:

- 1. Prajakta Takale, the student of SE-E&TC has received following awards
 - Fitness Enthusiast
 - International Model
 - Sakal Beauty of Maharashtra top 9 finalist and also miss Talented award holder.
 - Femina Miss India Aspirant
 - Currently playing in the Indian women's League (under Asian Football Confederation)
 This is the Premier women's club tournament of Asia.

• Student Publications:

- Sushant Gurme, Sanket Kelkar, Shubham Shrivastav, Deepti D. Kulkarni,IOT based Paralytic Patient Observation System, Journal of Signal Processing, Vol 7, No 1 (2021)
- Swaroopa Kanse, Sayali Khaire, Tushar Gadade, Mayuresh B. Gulame, Identification of Drowsiness by Using Eye Blink to Prevent Accidents, Journal of VLSI Design and Signal Processing, e-ISSN: 2581-8449 Volume-6, Issue-3 (September-December, 2020)
- Ms. Neha Jagdale, Mr, Ravindra Vasave, Mr. Sachin Dhane, Mr D.A.Jakkan "Smart Indoor Gardening System Using IOT with BLYNK APP" "Journal of Analog and Digital Devices", in Volume 5, Issue 3.
- Dhanshe Miran, Khan Shoaiba, Kazi Taherim, Thite Trupti, Multi-Language Real Time Home Appliances Controlling System, Journal of Signal Processing, Vol 7, No 1 (2021)
- Adil Shaikh, Priyanka Ananta Jagtap, S. S. Saste, "Advance Vehicle Tracking and Monitoring System", International Research Journal of Modernization in Engineering Technology and Science, Volume:03/Issue:05/May2021

- Adil Shaikh, Priyanka Ananta Jagtap, "Advance Vehicle Tracking and Monitoring System", Virtual National Conference on "Recent Advances in Communicative Electronics (NCRACE 2021)"
- Swapnil Bandal, Sujit Desai, Jakkan D. A."AN IOT-BASED WEATHER MONITORING SYSTEM". Journal of Electronics and Communication Systems, Volume-6, Issue-2 (May-August, 2021)

• Social Concern/ activities:

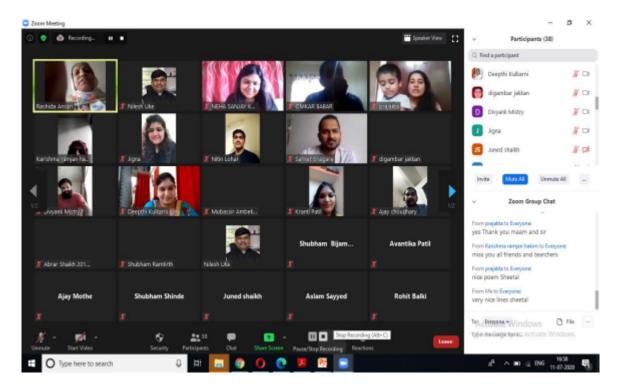
Sakshi Kadam Participated in Malhar 2K20 In Bharatanatyam, Dance Activity
Guest Lecture on Data Structure for Second Year E&TC Students was conducted on 22
April 2021 from 9.30am to 12.00 noon on Google meet Platform by Prof.Rupali R.
Kawade PCCOER Rayet 25 students attended the lecture

Alumni Webinar Series:

- 1. Webinar on "Role of Networking in IT Industry" was conducted by our alumni Mr. Shubham Ramtirth on 27/06/2020 via Zoom meeting Application. More than 38 students attended.
- 2. Webinar on "Campus to corporate" was conducted by our alumni Ms. Zeenat S. Khan on 13/06/2020 via Zoom meeting Application. More than 35 students attended.
- 3. Webinar on "Career Path After Engineering" was conducted by our alumni (18-19 Batch)Mr.Ajay Mothe, Research scholar, Indian Institute of Space and science Technology, Trivandrum Ramtirth on 4/07/2020 via Zoom meeting Application. More than 95 students attended.
- 4. Webinar on "Scope in Nano-Materials" was conducted by our alumni (2014-15 Batch) Mr. Kaustubh Kulkarni,PhD Candidate, Department of Materials Science and Engineering,McMaster University, Ontario, Canada; on 01/08/2020 via Zoom meeting Application. More than 25 students attended.

Alumni Meet:

Under the Guidance of respected principal sir and HOD Ms. Deepthi Kulkarni, E&TC Department successfully conducted Virtual Alumni meet of all batches on 11th July 2020, Saturday at 4 pm. All alumni students of earlier batches attended the meet.



Virtual Alumni Meet