Volume 4, Issue 1
Aug-Dec 2023

## DEPATMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING



# Electro Sparks

#### **INSIDE**

- Proud Moments
- Industrial Trainings
- News of Technical Activities (Industrial Visits)
- News of Technical Activities (Expert Sessions)
- Students Corner
- Other Activities
- Toppers of MSBTE Summer 2022 Examination

## Department of Electronics and Telecommunication

#### √ Vision

To develop the students technically strong enough to meet industry needs in the field of Electronics and Telecommunication

#### **✓ Mission**

M1: To provide quality technical education through innovative teaching – learning methods

M2: To develop professional skills through industry-institute interaction

M3: To promote all round development of students through a spirit of social responsibility.

#### **Editorial Committee:**

Mr.N.R.Thakre (HOD) Mr.M.A.Nalawade

#### Student Coordinators:

Mr.Nikam Yash (TYEJ)

Mr.Bhoi Unmesh(TYEJ)

## PROUD MOMENTS





## डॉ. विशाल वानखेडे यांना उत्कृष्ट प्राचार्य पुरस्कार

इंडियन सोसायटी
 फॉर टेक्निकल
 एज्युकेशनतर्फे सन्मान

चांदवड : येथील श्री ।
नेमिनाथ जैन ब्रह्मचर्याश्रम संचलित
श्री एचएचजेबी पॉलिटेक्निक
महाविद्यालयाचे प्राचार्य
डॉ. विशाल अशोक वानखेडे यांना
इंडियन सोसायटी फॉर टेक्निकल
एज्युकेशन या राष्ट्रस्तरावरील
संस्थेद्वारे उत्कृष्ट प्राचार्य पुरस्कार
जाहीर करण्यात आला आहे.

सदर निवड ही महाराष्ट्र व गोवा चॅप्टर, वार्षिक राज्यातील विविध पॉलिटेक्निक सभासदत्व देते.



महाविद्यालयातून करण्यात आली. आयएसटीई ही राष्ट्रीय स्तरावरील तंत्रशिक्षण

क्षेत्रात कार्य करणाऱ्या विविध संस्थांतील शिक्षक, विद्यार्थी यांना सभासद होण्याची संधी देते. या संस्थेच्या माध्यमातून राष्ट्रीय स्तरावरील शिक्षण प्रशिक्षण, नवनवीन तंत्रज्ञानावरील कार्यशाळा विविध उपक्रम, विद्यार्थ्यांसाठी स्टुडंट चॅप्टर, शिक्षकांसाठी स्टाफ चॅप्टर, वार्षिक व कायम स्वरूपात सभासद्वा देते.

Nashik Edition Aug 22, 2022 Page No. 7 newspaper.pudhari.co.in Our Respected Principal Dr.V.A.Wankhede received the "ISTE Best Principal Award" from Honorable Chief Minister of Goa State Dr. Pramodji Sawant and in presence of NBA Chairman Dr. K.K.Agrawal







## **TRAINING'S**

### .....For Overall Development

Third Year
Students
"PYTHON"
Training at Nasik
Engineering
Cluster











Rubicon Training Session from 6 to 9 October 2022



On 6 October 2022 Department of Electronics and Telecommunication Engineering and Mechanical Engineering has organized 3 days training session for third year students on "Employability Skills" under "Life Skills".

## **INDUSTRIAL VISITS**

### .....For Industry Interaction













On 01 October 2022 Department has organized industrial visit at Laxtronics Instruments and Controls Pvt. Ltd. Nashik under the course Applied Electronics (22329). Total 55 students get benefited by this visit. This was organized by Mr.S.T.Patil, Miss.P.V.Narale.

On 06 October 2022 Department has organized industrial visit **ESDM** at Technology Pvt. Ltd. Nashik under the Electronic course Measurements and Instrumentation(22333). Total 52 students get benefited by this visit. This was organized by Mr.S.T.Patil, Mr.L.D.Jagtap



## EXPERT LECTURE'S

### ..... For Overall Development







Mr.J.V.Shimpi

On 13 October 2022







On 14 October 2022 Expert lecture by Mr. Saurbha Mandlecha from Reliance Electronic Nasik is organized on topic "Business Strategies from Ramayana and Wellness Sutras from Yoga". Students from SYEJ and TYEJ get benefitted.

This program coordinated by Mr.N.R.Thakre and Mr. S.T Patil













## STUDENT CORNER



Nowadays drinking alcohol and driving are the most common threats to their lives and the lives of others.

We can't stop people from drinking alcohol but we can avoid such accidents by checking the person drinking and we can also keep such small devices in the vehicle to make sure there is no drink and drive.

Mr. Yash .N. Nikam Today we are creating a simple Alcohol detector. We can use it in various application fields. So this is a small demonstration of a simple Alcohol detector using Arduino and MQ3 sensor. Many advanced alcohol sensors are available

in the market for a reasonable price, but we are here to make this project using some basic microcontroller like Arduino, LED, Buzzer and MQ3 alcohol sensors. This is a very simple project and you can just follow the instructions given below for this project. The police need to catch and check people who

drive after taking alcohol. Driving after taking alcohol can result in serious accidents. People who drive after consuming alcohol not only risk their own life but also of others. That is why police need to remain alerted and verify any person who they found suspicious of driving after drinking.

Mr.Yash Nandkishor Nikam (TYEJ)



We aims to create a framework to keep the car safe and secure through critical activity. When we run in ignorance we cannot take care of our own. If we make all vehicles with an automatic safety system that gives the driver a high level of protection, an alarm will also be issued.

The device has an installed a eye blink Mr.Manoj .S. Pawar sensor. Once the driver has started the en-

gine, the sensors automatically detect the blink of eye. On this device the output of the sensor is provided for comparison with ARDUINO. When the value reaches the set level, the buzzer automatically vibrates, the LED glows, and the car stops automatically when eye blink sensor receives a signal from the transmission module.

Mr.Manoj Sanjay Pawar (TYEJ)



As the population increases, there is also an increase in the number of chronic and heart diseases. The current hospital centric healthcare system is becoming inefficient to treat conditions that demand immediate treatment such as heart strokes. So, the focus is now tilting from hospital centric treatment to patient centric treatment. This

Mr. Satyam .J. More project proposes a health monitoring system which monitors vital parameters of the patient such as temperature and heart rate using sensors as well as a fit bit which are connected to a raspberry pi board. The project involves alerting the doctor through SMS if any vital parameter of the patient deviates from the normal value. Apart from helping the doctor monitor the patient's basic health parameters this health monitoring system also ensures that the patient takes the prescribed medication at the right times. The raspberry pi acts as a personal server which logs the details of the patient's medication. The patient is sent reminders to take medicines through SMS according to his prescription.

#### Mr.Satyam Jagdish More (TYEJ)



The main objective of this project is to design a coal mining safety robot to detect toxic gases emitted in coal mines. It is used to detect the level of temperature and humidity inside a coal mine and to detect any fire inside the coal mine and extinguish it. Coal mines are prone to fires due to the fact that coal itself is combustible. Coal fires can be

Mr. Unmesh . A. Bhoi so severe that mining operations may have to be stopped. Some severe consequences of fires may be coal dust explosions and the burning of coal seams. The need for designing and implementing safety measures and systems to prevent and mitigate the impact of fires is of utmost importance. The proposed intelligent security system monitors environment hazardous conditions such as temperature, gas, smoke, and humidity. The robot enters and moves inside a coal-mine and detects any hazardous gas present there and provides safety against fire explosion, poisoned gases like CO, CO2, and CH4, and alerts people inside the tunnel. This robot provides the ambient temperature and detects any flame in the coal mine and extinouishes it.

Mr.Unmesh Avinash Bhoi (TYEJ)



This system can be turned on by a woman in case she even thinks she would be in trouble. It is useful because once an incident occurs with a woman she may or may not get the chance to press the emergency button. In a button press alerting system, in case a woman is hit on the head from behind, she may never get the chance to press panic button and no one

Ms. Pranali .B. More will know she is in trouble. Our system solves this problem. This device is to be turned on in advance by a woman in case she is walking on a lonely road or some dark alley or any remote area. Only the woman authenticated to the devices can start the system by fingerprint scan. Once started the devices requires the woman to constantly scan her finger on the system every 1 minute, else the system now sends her location to the authorized personnel number through SMS message as a security measure and also sounds a buzzer continuously so that nearby people may realize the situation. In this case even if someone hits the woman or the woman falls down and get unconscious, she does not need to do anything, the system does not get her

finger scan in 1 minute and it automatically starts the dual security feature. This device will prove to be very useful in saving lives as well as preventing atrocities against women. The device uses GPS sensor along with a GSM modem, LCD display, leads and microcontroller based circuit to achieve this system.

Ms. Pranali Balu More (TYEJ)



Patients are facing a problematic Situation of unforeseen demise due to the specific reason of Heart problems and attack which is because of nonexistence of Good medical maintenance to patients at the needed time. This Is for specially monitoring the old age patients and informing Doctors and loved ones. So we are proposing a innovative Project to dodge such sudden death rates

Ms. Priyanka .A. More by using Patient Health Monitoring that uses sensor technology and uses Internet to communicate to the loved ones in case of problems . This system uses Temperature and heartbeat sensor for Tracking patients health. Both the sensors are connected to the Arduinn-unn .

Ms. Priyanka Ashok More (TYEJ)



Ms. Payal .B. Aher

This concept which is of Fingerprint door locker is related to the security issues in the day today life, the physical key can be made as duplicate in very cheap cost and the key can lost somewhere or the key can steal, to overcome these issues we can use biometric security gadgets and try improvise the security much more because it can never be stolen it cannot be lost and the stealing chance of duplica-

tion are very low to break the security. From the old times the security is the big issue for the company's houses and other places and every person is worried about the security now a days. So, a solution to such problems can be by combining door lock with biometrics. Biometric verification is any means by which a person can be uniquely identified by evaluating one or more distinguishing biological traits. Unique identifiers include fingerprints, hand geometry, earlobe geometry, retina and iris patterns, voice waves. DNA, and signatures. The fingerprint sensor will take the fingerprint of the user and forward it to the microcontroller to match with its records. If the print matches with one of the fingerprints of the microcontroller's memory, the microcontroller will lock or unlock the latch, based on its current state. If the fingerprint do not match then nothing happen. The door lock is unlocked and the user have to retried. The system will be reset once a known print will be entered [15]. Here we will use fingerprint for biometric verification as it is one such thing which is unique to every individual and the use of fingerprint as the key to door locks can overcome the security problem of unauthorized people trespassing to our homes, shops, offices, etc. to a great extent as duplicate in such key is not possible. Also, this system will not lead to problems like losing keys because we do not require carrying keys if this system is used instead of traditional locks. So, using Arduing we will try to implement the system with features which will increase the security level.

> Ms. Payal Balasaheb Aher (TYEJ)



"Dream is not that which you see while sleeping it is something that does not let you sleep."



## OTHER ACTIVITIES

#### **QUIZ COMPETITION**

On the occasion of Engineers Day 2022 department has organized state level Quiz Competition under IEI students chapter. This was organized by Mr.M.A.Nalawade and Student coordinator Mr.Satyam More (TYEJ) and Mr.Manoj Pawar (TYEJ)

#### PARENTS MEET

On 05/11/2022 Department has organized Parent's Meet. This Parent's Meet coordinated by Mrs. Neera-ja Prasad Madam and Ms.P.V.Narale





#### **TEACHERS DAY**

On 5/9/2022 students from TYEJ & SYEJ has organized Teacher's day in respect of all Teachers and supporting staff. This event is Co-ordinated by Mr.Manoj Pawar and Mr.Satyam More from TYEJ, Miss. Shruti Pandit and Miss. Priyanka Pawar from SYEJ





## OTHER ACTIVITIES

## Fresher's party 2k22



On 10/10/2022 students from TYEJ & SYEJ has organized Fresher's Party for first Year students. This event is Co-ordinated by Mr. Manoj Pawar and Mr. Satyam More from TYEJ, Mr. Omkar Salade and Mr. Prem Wagh from SYEJ

"It Is Very Easy To Defeat Someone, But It Is Very Hard To Win Someone"



# Toppers

MSBTE EXAMINATION

SUMMER 2022



### SNJB'S SHRI H.H.J.B. POLYTECHNIC, CHANDWAD



Department of Electronics & Telecommunication Engineering

Heartiest Congratulations to All Toppers Of FY, SY, TY

**MSBTE EXAM SUMMER - 2022** 

### **First Year Toppers**



GHOLAP SWETA S 80.85%



PANDIT SHRUTI D 79.63%



KOLHE SHITAL S 77.38%

### **Second Year Toppers**



UNMESH A BHOI 82.89%



NIKAM YASH N 73.78%



PAWAR MANOJ S 68.11%

### Third Year Toppers



DESALE SAVITA V 85.76%



RAJGIRE AKASH D 81,35%



GANGURDE RUPALI W 80.71%