



# ELECTRONICS AND TELECOMMUNICATION DEPARTMENT



**E-TIME  
CAPSULES???**

HOW FAST  
CAN LIFI BE?

**DO ELEMENT  
ZERO EXIST!!**

**AUTOMATED WELD  
QUALITY  
CHECK SYSTEM**



**THIRD EDITION**

2019-20

# **E - M A G A Z I N E**

FOLLOW US



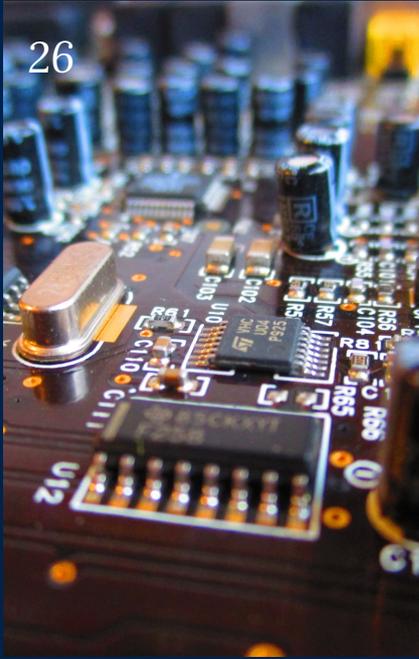
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# THIRD EDITION E-MAGAZINE

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# ABOUT DEPARTMENT

Department of E&TC had started U.G. Course B.E.(E&TC) in 1986 with sanctioned intake of 40 and enhanced to 60 in 1996. Department also runs full time Post Graduate Course M.E. (EC) and well equipped Recognized Research centre leading to Ph.D. (Electronics Engineering). Part time BE (E&TC) and part time ME (EC) are also run to give opportunity to working graduates and diploma holders. The department has well qualified and dedicated faculty with an average teaching experience of these faculty members is more than 20 years. Dept. has e-learning facility, wherein course material is uploaded on server. It is made available for students as 24x7 asynchronous activities to assign various tasks like group assignment/project. IIT Kharagpur Video Lectures are also available in the department as learning resource. NPTEL video lectures are available on e-server of the department and students have their own access to use this as independent learning.

## VISION

Excellence in Electronics Engineering Education and Research & Development

## MISSION

1. Impart learning oriented education and equip students with strong foundation enabling for continuing education in Electronics Engineering field
2. Educate students through state of art technologies to meet the growing challenges of the industry.
3. Encourage students for analytical, creative thinking and innovative research
4. Foster moral and ethical practices in the interest of human values



## HOD'S DESK

It gives me great pleasure to share some of the key achievements of the Department of Electronics and Telecommunication for the current academic year 2019-20 as follows :

Faculty research presentation (overseas)

i) Prof. Nilima Kolhare have delivered invited talk at the Second European conference on Smart Nano-material Staking in Paris, France, from 10-13 December 2019. The title of the research paper delivered by her was "Graphene based Archimedean Spiral antenna for Terahertz Frequency".

ii) Prof.S.R.Hirekhan has presented research paper in International conference on Health Sciences and Medical Education (HSME-2019) during 08-09 December, 2019 at Wuhan, China. The title of the research paper was "LRTC Analysis of Meditation EEG signals"

Training Programs/Workshops organized :

i) Workshop on NI LabVIEW

ii) Expert Talk on "Web and Information Security"

iii) Two-days STTP on MEMS (Design and Fabrication)

iv) The department has initiated for the installation of 'Satellite Earth Station'

v) An expert session on 'HAM Radio' by Shri Vilas Rabde, Chairman, HAM, Pune was organized on 27/02/20 by the AARAMBH group.

## TEESA COORDINATOR'S DESK

Electronics and communication engineering student's association (TEESA) is the student association of E&TC department. It is an association formed by the students to create a platform wherein they can plan, organise various activities for overall development of the students. TEESA has been in forefront in organising activities like: Inaugural session of the council Teesa week: In this various co curricular and technical activities are scheduled Technical workshops Virtual campus Decides the role and activities of students in institute activities i.e wings, antarang, espirito. I wish all the best to the students and appeal them to take full benefits of it. Your honest feedback is always needed and helps us to make e-magzine more fruitful



## ORGANIC TECHNOLOGY

Scientists have discovered a new method to convert dried tree leaves into a porous carbon material that can be used to produce high-tech electronics. Researchers from Qilu University of Technology in China used a multi-step, yet simple, process to convert phoenix tree leaves into a form that could be incorporated into electrodes as active materials. The dried leaves were first ground into a powder, then heated to 220 degrees Celsius for 12 hours. This produced a powder composed of tiny carbon microspheres.



These microspheres were then treated with a solution of potassium hydroxide and heated by increasing the temperature in a series of jumps from 450 to 800 degrees Celsius. The chemical treatment corrodes the surface of the carbon microspheres, making them extremely porous. The final product, a black carbon powder, has a very high surface area due to the presence of many tiny pores that have been chemically etched on the surface of the microspheres. The high surface area gives the final product its extraordinary electrical properties, said Hongfang Ma of Qilu University of Technology, who led the study published in the Journal of Renewable and Sustainable Energy. The researchers ran a series of standard electrochemical tests on the porous microspheres to quantify their potential for use in electronic devices. The current-voltage curves for these materials indicate that the substance could make an excellent capacitor.

A capacitor is a widely used electrical component that stores energy by holding a charge on two conductors, separated from each other by an insulator.

Supercapacitors can typically store 10-100 times as much energy as an ordinary capacitor, and can accept and deliver charges much faster than a typical rechargeable battery. For these reasons, super capacitive materials hold great promise for a wide variety of energy storage needs, particularly in computer technology and hybrid or electric vehicles. The super capacitive properties of the porous carbon microspheres made from phoenix tree leaves are higher than those reported for carbon powders derived from other bio-waste materials, researchers said. The fine scale porous structure seems to be key to this property, since it facilitates contact between electrolyte ions and the surface of the carbon spheres, as well as enhancing ion transfer and diffusion on the carbon surface.

---AMAN PARATE  
(TE ENTC)



## LIFI



Li-Fi is a VLC, visible light communication technology, developed by the team of Scientists including professor Haas at the University of Edinburg and deals with Transfer of data through illumination by taking fiber out of optics by sending data .Through a LED light bulb that varies in the intensity faster than a human eye can Follow. Dr Haas amazed people by streaming

HD video from a standard LED lamp, at TED Global in July 2011 and thereby coined the term Li-Fi. Li-Fi is now part of Visible light communication (VLC) PAN IEEE 802.15.7 standard.

It is implemented by using a light bulb at the downlink transmitter. Normally the light bulb glows at a constant current supply however fast and subtle variations in current can be made to produce the optical outputs since it just uses the light, hence can be easily applied in aircrafts or hospitals or any such area where radio frequency communication is often problematic.

### ADVANTAGES OF LI-FI OVER WI-FI

High speed connectivity of the rate of 500mbps.

- Li- Fi uses light rather than radio frequency signals so are intolerant to disturbances.
- VLC could be used safely in aircraft without affecting airlines signals.
- Integrated into medical devices and in hospitals as this technology doesn't deal with radio waves, so it can easily be used in all such places where Bluetooth, infrared, Wi-Fi and internet are broadly in use.
- Under water in sea Wi-Fi does not work at all but light can be used and hence undersea explorations are good to now with much ease.

### APPLICATIONS ON LI-FI

- Health technologies
- Airlines
- Power Plants
- Under sea working

Possibilities for future utilization are abundant. Every light bulb can be converted into li-fi signal receptor to transfer data and we could proceed toward the cleaner, safer, greener and brighter future. As we know that the airways are getting clogged day by day Li-fi can offer a genuine and very efficient alternative. Li-Fi is enabled by advanced digital transmission technologies. Optical cell networks based on Li-Fi are the link between future energy efficient illumination and cellular communications. They can also harness unregulated, unused and vast amount of electromagnetic spectrum and can even enable ever smaller cells without the need for new infrastructure. The issues of shortage of radio frequency can be tackled easily with only limitation being that it works in direct line of sight of light. There are no dead ends to technology and science. Now both light and radio waves can be used simultaneously to transfer data and signals.

---VINAY THUTE  
(TE ENTC)



## THE E-TIME CAPSULE

Have you ever wished to impart some wisdom to your younger self so that you were in a different position as of today? Haven't you ever regretted for the time you wasted in the past and cursed your younger version to have not utilized time properly? Although sending messages in the past is not possible, we can surely send messages to our future! Most of us are in a habit of writing diaries, but with the passage of time they either get lost or we forget about them. But, now with the aid of e-time capsules we can make sure that our messages are conveyed to our future selves.

So, what is an e-time capsule? It is like a time capsule but on the internet or the web. The content will be stored for the desired amount of time and then mailed to email address provided. Some sites that provide these facilities are [www.futureme.org](http://www.futureme.org), [www.whensend.com](http://www.whensend.com). The e-time capsules are mainly:

- 1) Informative
- 2) Educative
- 3) Entertaining



In 2005, Forbes conducted an experiment where as many as over

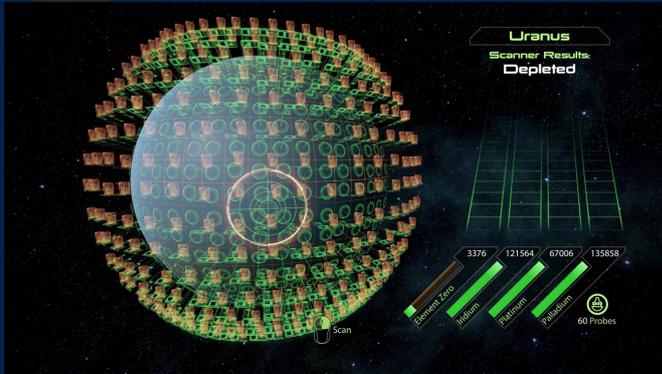
140,000 Forbes readers participated in an unusual experiment designed to test the limits of long-distance communication. Now many of them are receiving the results - a letter from their own past. After collecting messages for several months, they sealed the time capsule and stowed it away for a year. In 2006, 2008 and 2010, the time capsule re-opened, and they successfully sent over 57,000 messages back to their authors. Now they've hit the ten year mark, and have sent another 16,000 emails to their users, a decade after they were written. Some precautions that need to be taken while writing an e-time capsule are:

- 1) Provide a mail ID that you think you're going to retain for a long time.
- 2) Chose a provider which isn't likely to disappear anytime soon. E.g. Google, Yahoo! etc.

---AMAN PARATE  
(TE ENTC)



## IS THERE AN ELEMENT ZERO?



The periodic table contains a wide array of elements, numbered from 1(Hydrogen) to 118 (Oganesson), with each number representing the number of protons stored within an atom's nucleus. Scientists are constantly working to create new elements by cramming

more and more protons into nuclei, expanding the periodic table. The effort sparks curiosity and questions: Can the table be enlarged in the opposite direction? Is it possible to make an element zero? Does it already exist? "Element zero" has been a matter of conjecture for nearly a century, and no scientist searched more ardently for it than German chemist Andreas von Antropoff. It was Antropoff who placed the theoretical element atop a periodic table of his own devising, and it was also he who thought up a prescient name for it:

Neutronium.

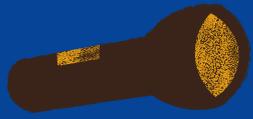
You don't widely hear Antropoff's name today, as his Nazi leanings earned the scientist international disgrace. You do, however, hear about Neutronium. Today, the term commonly refers to a gaseous substance composed almost purely of neutrons, found within the tiniest, densest stars known to exist:

Neutron stars.

Neutron stars are the collapsed cores of large stars. Just twenty kilometers wide, they hold the mass of one to three Suns. The incredible mass comes from how they are composed. The stars are made up almost entirely of neutrons dumped together by intense gravity. Neutrons normally exist only within nuclei of atoms, making their congregation an astronomical rarity, and deserving of a cool name, the forementioned "Neutronium".

But is the stuff also worthy of the title "element zero"? Neutronium is theoretically devoid of protons, so on face value it fits the bill, as no protons would mean no atomic number. With that said, such a definition would certainly require some creative thinking. Neutronium only dwells under the crushing gravity of a neutron star.

---MAYURI KOKATE  
(SE ENTIC)



## MATLAB-ARDUINO WORKSHOP

The PCB Workshop was organized by the Department of Electronics & Telecommunication under TEESA in collaboration with RAISE to increase their knowledge regarding MATLAB and using Arduino through it without use of Arduino IDE, its applications and also develop their project making skills. It was a technical event which helped the students to imbibe knowledge through an interactive session.

This event was focused and arranged to help the students with technical applications using MATLAB simulations.

### CONCLUSION:

The following points were achieved through the event

- Highlighting the importance of MATLAB in Industries .
- Promoting participation in various activities of TEESA.



## MEMS WORKSHOP



Micro Electro-Mechanical System (MEMS) Workshop was organized by Department of Electronics and Telecommunication to make students familiar with fundamentals, fabrication and application of MEMS. MEMS Workshop was organized on 2nd and 3rd January 2020.

The Workshop was facilitated by Mr. Mayuresh Kagalkar, Researcher, CMTI Bangalore and Mr. Shardul Pandit, Project Assistant, TU WIEN, Austria, event under the Guidance of Prof. Nilima Kolhare and Prof. Dipak Bore. This Workshop was open for all the students of Government College of Engineering, Aurangabad and other colleges as well. Professors and Student from GCOE Jalgaon, JNEC Aurangabad, MIT Aurangabad were present for the workshop



## PCB WORKSHOP



The PCB Workshop was organized by the Department of Electronics & Telecommunication to increase their knowledge regarding Printed Circuit Boards (PCB), its applications and also develop their project making skills. It was a technical event which helped the students to imbibe knowledge through an interactive session. This event was focused and arranged to help the students with technical applications using PCB. The event also had a session of guest lecture. The guest lecture was Mr. Sudhir Sambrey, the head of Luans Electronics, Aurangabad.



### CONCLUSION:

The following points were achieved through the event

- Highlighting the importance of PCB designing .
- Promoting Participation in various activities of TEESA.

## ADS WORKSHOP



The 'Introduction to ADS basics' workshop was conducted over a period of 5 days for students of our department. This workshop was organized with the aim to increase awareness among students regarding industry practice of electronics. The workshop also aimed at improving the basics and understanding of concepts of electronics. Semiconductor basics as well device specifications of electronics were covered during the course of this intensive 5-day program.

The tool used during the workshop was ADS – Advanced Design System. The Keysight Technologies, Inc Advanced Design System (ADS) is the world's leading electronic design automation (EDA) software for RF, microwave, and high speed digital applications. In a powerful and easy-



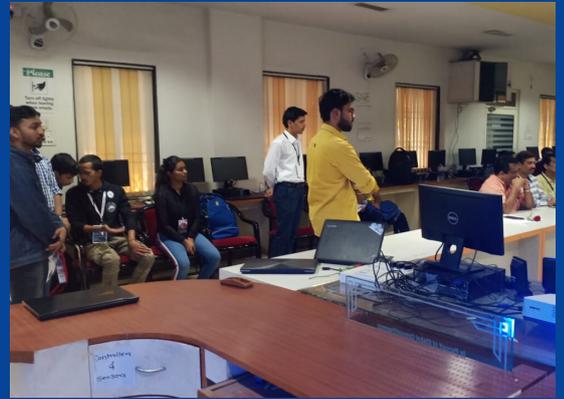
to-use interface, ADS pioneers the most innovative and commercially successful technologies, such as X-parameters\* and 3D EM simulators, used by leading companies in the wireless communication and networking and aerospace and defense industries. Only ADS offers a solution that combines schematic, layout, circuit, electro-thermal co-simulation and three full-wave 3D EM technologies for IC, package, laminate/ PCB and 3D EM component co-design in a single-vendor, integrated platform solution that can dramatically improve productivity and significantly reduce costs.



## MAKE IN GECA

The event "MAKE IN GECA" was organized by the Department of Electronics & Telecommunication under WINGS 2020. The motive of the event was to make a prototype of the participant's idea in 24 hours. This event was selected to improve their knowledge regarding implementation of an idea within a given deadline and also create awareness about self-development. It was a technical event which was focused and arranged to help the participants test their knowledge and project making skills.

This year under 'WINGS 2020', the event was organized 21st and 22nd January. The event was open for all the students. 6 teams were finalized for this event. The winners were awarded with cash prize worth Rs.70,000.



## TEESA WEEK 2019-20



## LIST OF EVENTS HELD IN TEESA WEEK 2019-20

- Chess tournament
- Art mela
- Treasure hunt
- Virtual campus
- bollyblaster
- Technobuzz
- Swachha bharat abhiyan



# ENGINEERING EXPO

Every year , electronics and telecommunication departments holds engineering exploration exhibition for first year btech students from year 2018. Every students doing undergraduation course in college has to take this course and perform an real life problem solution making task and demonstrate in exhibition in front of whole college. Every year different projects come up and innovating solution keep on increasing which catches everybody's attraction. The exhibition is popular and gets special attraction not only in college but also gets its article published in newspaper too.



## Smart bin for manufacturing tool-room department.

Presented by Gayatri Uttarwar, Swapnil Pimple, (BE 2018-19) at LNT techgium.



Concept of the project: To develop SMART BIN's for manufacturing TOOL ROOM department. The Bin must raise the alarm and also automatically send mail to the associated internal departments who further can place the request to Tool Manufacturers. The system should be easy to use by any common production team. The system must report the status to the Senior management team through mobile application.

The Scope of the Project: The production must not stop because of shortage of tools. Every company must have such cost effective product for smooth functioning on shop floor. Since the data is monitored online so no physical inspection is needed.



## Domestic Food waste cycler:

Presented by: Ilyasqadri, Pankaj Sidhaye, Gurudutta Tiwari, Abhayadav



Concept : To overcome the issues of management of food waste, efficient method of disposing waste was developed. The project aims to develop a domestic food waste cycler which converts household food waste into dry biomass which is as good as homemade fertilizer that can be used in lawn or garden. The cycler removes major part of moisture content and converts food scraps into usable dry biomass volume which is about 10% and that too in 5-6 hours.





## SMART HELMET

### Problem Statement:

- 1). To clear water droplets or moisture on face shield of Motorbike Helmet.
- 2). To comfort driver with appropriate cooling mechanism.

### PRESENTED BY

Pradhyumna Jakate, Renukadas Bharswadkar, Shantanu Sonavne, Pratiksha Udgirkar.

As helmet is compulsory for safety of driver while riding bike, but during rainy or winter season the vision of driver disturbs due to water droplets on the face shield of helmet. While riding bike it is not always possible for a driver to clear the face shield as it increases the chances of accident.

Riding a two wheeler in hot day with helmet is so tiresome for driver. The driver sweats in helmet while riding in hot climate, this makes driver uncomfortable.

### Methodology:

The SPST switches are on the right side of the helmet. Each of the servo motors are on the left and right side of the helmet. Viper will be horizontally placed on the face shield, connected to both the servo motors.

Initially viper will be on the upper side of face shield. Servo motors are connected to the arduinonano and battery. As driver will switch on the motors will rotate the viper till a particular angle and the viper will clear the vision of the driver.

The viper will go down and come back to its original position within a second. Again after 3 seconds the viper will repeat the same process till the driver will not switch off the motors.

### Cooling mechanism:

During hot days the air outside is very hot so air circulation mechanism will not work properly and will make driver more uncomfortable so we will use water cooling mechanism.

In hot day driver feels tired while riding bike with helmet. So the plastic Tubes containing water will make the driver comfortable and cool inside the helmet. The plastic container and water pump is at the back side of helmet to store the water. The blue plastic tubes will be inside the helmet, through which the water will flow continuously.

As driver will start to sweat and feels uncomfortable then he/she will just switch on the pump and the water will start flowing through the tubes. This will keep driver comfortable and cool during hot days. We are taking blue plastic tubes because blue color keeps the water cool. If we painted only upper portion of helmet with white color then it will also contribute to keep the driver's head cool.

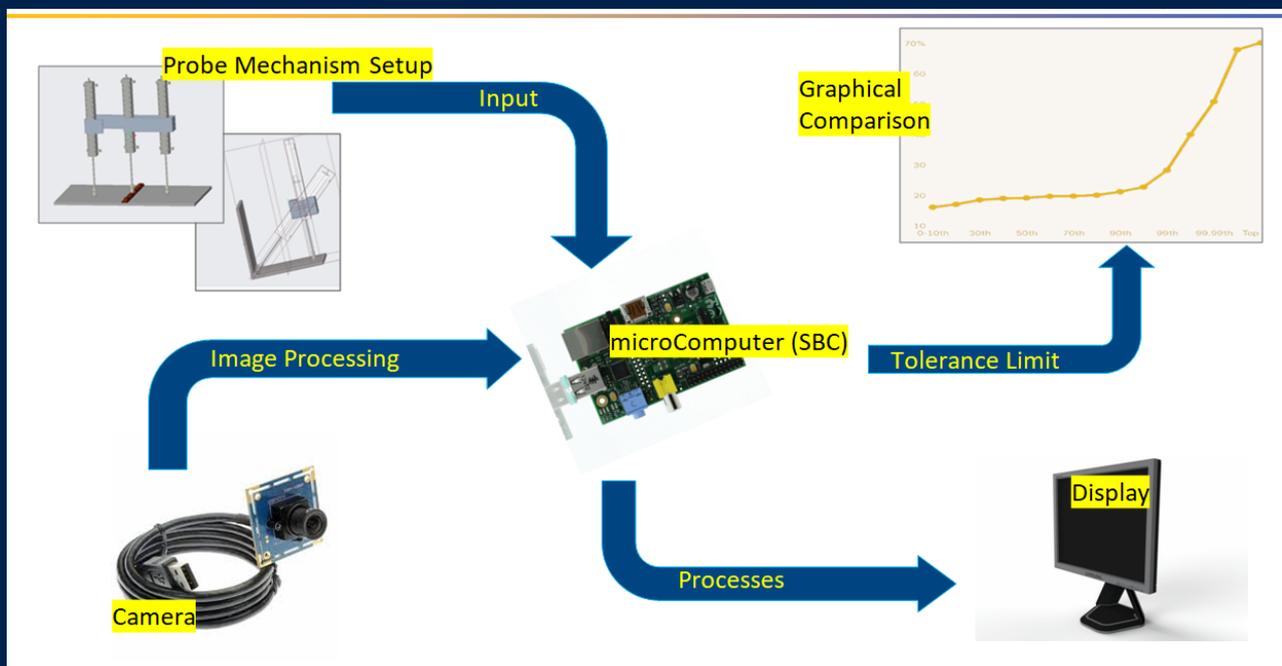
Result:

The driver's vision will get clear while raining and during hot days the driver will feel cool and comfortable.

## Automated Weld Quality Check System

Presented By:

Aniket Murtadak, Vaibhav Jadhav, Renukadas Bharwadkar, Angha Deo

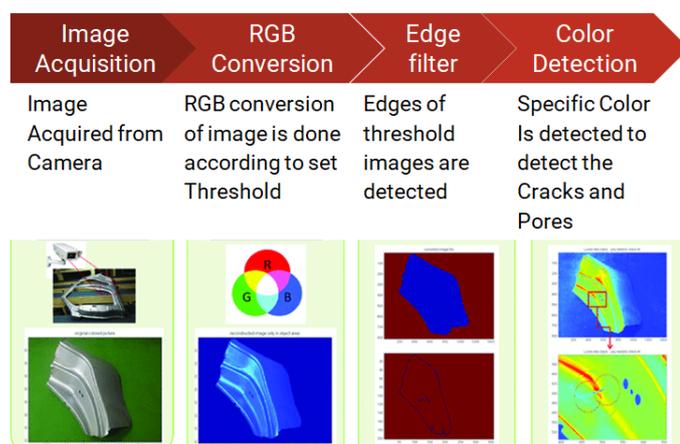
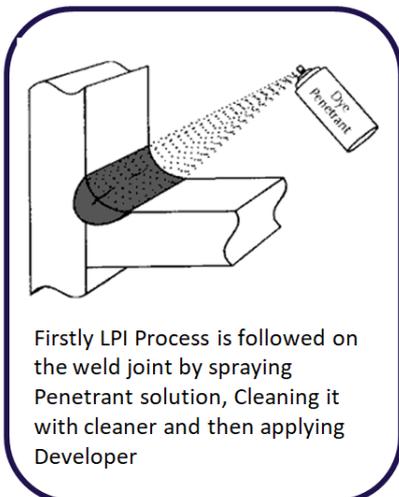


- Probe Mechanism :  
Linear Motion Potentiometers are used for accuracy and reliability.
- SBC (Single Board Computer) :  
SBC is used to process and run the whole system.
- Camera :  
A USB camera or on-board camera is used for Image processing during LPI Test.
- Software and GUI :  
MATLAB standalone customized application is used to go through graphical inspection for both probe test and LPI test.
- LCD screen :  
A Display screen is used to show the ongoing process live.
- Future Additional Features :  
As we are using SBC for processing we can add more features in the future like Cloud- based services,IR depth camera for more detailed and accurate 3D imaging, etc.

## Validation/ Testing / Analysis

TECHgium®  
Engineering innovators for Tomorrow

### Computer Vision integrated with LPI



## CNC PLOTTER

### Team Members

Sudip Wadte(TE E&TC)

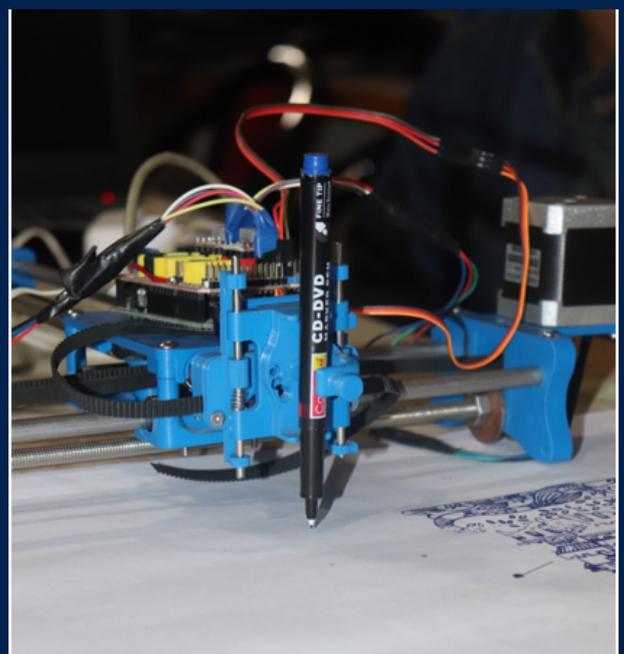
Mahendra Waghchaure(TE E&TC)

Saurabh Katare(TE E&TC)

Vinay Thute(TE E&TC)



Most of the Startups and small scale industries cannot afford to purchase the large scale Plotters at their initial stages .They have to do their task of plotting,cutting, engraving and all design related works at rental basis or vendorship at a very high cost.We found a need of machine which is multipurpose,low cost and easy to use.Our solution basically comprise on flow cost integration of different designing techniques like Plotting,Engraving,Cutting,Printing in a single device.This plotter basically works on concept of Computer Numeric Control(CNC) X-Y plotter will be build with manufactured parts which will form the support of the plotter. Interfacing of the mechanism with the Controller.The future additions we aim to implement are PCB printing, Laser engraving,2 D Laser Cutting





## TEAM CYBROTICS

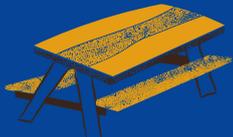
ABUROBOCON is an international Robotics event, started in 2002 and organized under the aegis of Asia Pacific Broadcasting Union. In India, National level round is organized by Doordarshan and MIT Academy of Engineering (Alandi).

Team ROBOCON of institute has been participating in the event since 2010. There are 30 students in a team; students of E&TC, Mechanical, Electrical and few CSE participants.

In first year itself, the team won the 'Best Rookie Award' for best debut. Since then, the team has made steady progress, winning 'Best Innovative Design Award' and bagging 8th rank year 2015.

In 2019: They came AIR 7.

**ENTC MEMBERS: Vaibhav jadhav(vicecaptain) , Malhar Garje , Anshul pandey , Venkatesh Mahamuni , Anupama , Pranav Dudane, Eshwari.**



## TEAM ARYANS



Team Aryans of Govt. College of Engineering Aurangabad has a good legacy in making ATV's. Vehicle includes different systems as rollcage, suspension, steering, transmission, drivetrain, brakes, data acquisition, etc. Static structural analysis and topology optimization of components is performed on different

CAE software's as Hyperworks, ansys, etc. Industry standards are employed in every aspect to maintain the quality and standardize the records. Special Efforts was made on developing a vehicle with superior ergonomics and high-ranking performance.

In 2017-18 ,Team Aryans were 1st Runner ups at BAJA-SAE India (Ropar) and winner of Suspension Traction and Acceleration event, winning cash prize of Rs. 2 lakhs, also participated in International events held at Oregon, USA.

In 2020: They came AIR 2.

**ENTC MEMBERS:Shantanu Kingaonkar,Atharva Bagad, Aishwariya Sakhare, Tilutamma Kodam.**



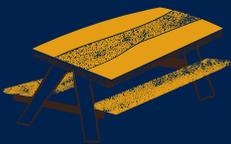
## TEAM AARAMBH

Team Arambhis an active group in space and astronomy related activities of Government College of Engineering, Aurangabad. The team aims to build and launch a student satellite, SHUNYA. The team has young enthusiasts, who want to explore the space and indeed help the mankind.

Team AARAMBH aims to build a cubesat satellite and launching it with collaboration of ISRO for ocean monitoring.



**ENTC MEMBERS: Aman Parate, Roopam Pardhi, Saurabh Katare, Vinay , Gopal , Hariprasad, Nimesh, Vaidehi, Payal ,Satyajit.**



## FORMULA GECA



Formula Bharat is an engineering design competition in which students from colleges and universities all over the country, compete with a life-size Formula-style vehicle in areas of engineering design, overall cost, marketability and dynamic performance.

Formula GECA is a formula student team of Government college of engineering Aurangabad.They participated in Formula Bharat 2020 competition which was held in Coimbatore, Tamil Nadu from 22 to 26 january.

**ENTC MEMBER: Roopam Pardhi.**



## TEAM CATALYST

Catalyst is an annual magazine from our college. It is a team of students from various disciplines who come together to create an amalgamation of various activities, events, achievements, student articles, guest interviews, etc. The magazine acts as a mouth-piece for the college and all the work undertaken throughout the year. With themes like 'Make in India', '#WHY?', 'I to We', we take socially relevant ideas as our backdrop and produce something which makes a lasting difference among the students.



This year's 2020 theme, 'You-Waah!', also aims to do the same. This year's theme resonates the maximum with our youth and carries a very strong message in various forms.

**ENTC MEMBERS: Tanay Bhatt, Koyna Sengupta**



## E-CELL (ANKUR)



The Entrepreneurship Development Cell of Government College of Engineering, Aurangabad is a non-profit students organization that aims to help individuals to realize their full potentials and manifest the latest entrepreneurial spirit. World requires innovators and thinkers which doesn't opt for job but want a change in the society by breakthrough ideas leading our millennial generation with more employment. With a vision to promote entrepreneurship and create a platform which enhances the entrepreneurial culture in the region.

**ENTC MEMBERS: Saurabh katare, Koyna Sengupta**



## 2018-19

- Anand Parande :  
winner in Tantrotsav :-D. Y. Patil college of engineering, akurdi, pune .  
Event : The burning cars
- Rajdeep Diwedi :  
Paper presented at IJSER 2019  
Title: Solution for gauss circle problem for integer value of R and it's application  
Title: Paper Reduction in OFDM By Addition.
- Rajdeep Diwedi ,Tejas Deshpande, SangameshPatil : Paper presented at IJIRT 2019  
Title: Portable Real Time Water Quality Monitoring System
- Tejas Deshpande : Participation in DST & Texas Instrument India Innovation'
- VarunKulkarni : Runner up : Circuit Fixer, Agnitio JNEC Aurangabad.

## 2019-2020

- Apurwa Chaudhari, Komal Jogdande, Komal Bhale, Yash Katariya,Dhiraj Kundhare, Mayur Patil: Qualified for 2nd round in Smart India Hackathon ((Ministry Of KPIT)  
Title: Automatic Pothole Detection While Driving
- Amruta Solanke , Pratiksha Udgirkar,Komal Yerme, Swati Shinde , Piyusha Jawanjal , ashwini neel : Qualified for 2nd round in Smart India Hackathon (Ministry of Ayush)  
Title: Automatic Decoction Vending for Making AyurvedicKadhaOr Medicine
- Apurwa Chaudhari ,komal jogdande : paper presented. Student Innovation, Start-Up and Ecosystem Conference  
Title: 1. Digital Fuel Level Indicator for Power Cars  
2. Automatic Glaucoma Detection Using Fuzzy Logic.
- Apurwa Chaudhari, Komal Jogdande, Mayuri Johare, Amruta Solanke, Ashwini Neel, Arti Dahitule : Qualified for 2nd round : Smart India Hackathon (Ministry of Railways)  
Title: Digital Fuel Level Indicator for Power Cars
- Aman Parate,Tanay Bhatt,Roopam Pardhi,Sanjana,Atharva Bagad,Shreyas Chele:Qualified for final round of Smart India Hackathon.  
Title:Healthcare and Biomedical



- Pratiksha Udgirkar ,Pradyumn Jakate, Akanksha Pawar : 1st prize in Paper presentation in wings.
- Gayatri Pawar,Puspak Walunj, Rahul Padol : 2nd prize in Paper presentation in wings.
- Aman Parate,Tanay Bhatt,Roopam Pardhi,Atharva Bagad,Shreyas Chele: DST & TEXAS INSTRUMENTS India innovation challenge-QUATERFINALS.
- Tanay Bhatt,Shreyas Chele ,Sanidhya ,Falugni : 2nd round VIGNITE hackathon 2019
- Team CYBROTICS came AIR7 in ROBOCON 2019.

## ACHIEVEMENTS OF THE YEAR

- Priti songade ( be entc) has been awarded with “The Namrata Bhagat Award for Innovative Youth Engineer-2019” award for the Year 2019-2020.
- Team ARYANS of college came AIR2 in BAJA SAE2020.
- Team CYBROTICS came AIR1 in stage 1 of ROBOCON 2020.

## CULTURAL ACHIEVEMENTS

- ishwari Mankar , Asawari Gund Patil won Street Play Competition on IMPRESSIONS held at COEP.
- Aman Parate ranked third in group dance competition on IMPRESSIONS held at COEP.
- Team Kalarpan ranked first among the regional drama team at PURUSHOTTAM2019.



1)Shashank Gaud : Represented GECA in

- ICT 2018 for Basketball,ZEST 2019 for Basketball,ICT 2019 for Basketball
- ICT 2019 for Kabbadi
- Runner up in WEST basketball competition WALCHAN Sangli in2019
- Second runnerup in Zenith 2020 at SGGGS ,Nanded

2)Rachit Ladhe :Represented GECA in ICT 2019 for kabbadi

3)Dhiraj Ahire :Represented GECA in ICT 2019 for kabbadi

4)Nimesh Lande :Represented GECA in ICT 2019 for Volleyball

5)Prathamesh Sable :Represented GECA in

- University Matches 2019 for Volleyball
- University Matches 2019 for Cricket
- ZEST COEP 2019 for Cricket
- Zonal trial for university team 2019

6)Advait Kulkarni :Represented GECA in

- LAKSHAY 2020 runner up in Badminton
- ICT 2019 semifinal in Badminton

7)Mayuri Kokate :Represented GECA in

- ICT 2018 for Basketball
- Winner inZenith 2020 for Basketball

8)Sonal Patle:Represented GECA in Zenith 2020 for Basketball

9)Sudip Wadte: Represented GECA in

- ZEST (Pune) 2020
- ZENITH (Nanded)2020
- ICT (BAMU) 2019

10)E&TC department holds interdepartmental sport sheild consecutive 2 times



## TEAM KALARPAN

Our's college's Cultural Drama Team has been participating in Firodiya Karandak since last 4 years and every year has been like a milestone in a journey to perfection.

The most remarkable attribute of the students that they made set completely made by iron , with each frame weighing 300 kg.It was huge challenge for the teams to abide the rules ,which clearly states that each teams can take maximum 15 minutesto arrange the set and even this was achieved by the team through sheer determination and top-notch teamwork.



**ENTC MEMBERS: Shrikant Mandlik,Roshni ,Pallav and Pratik.**

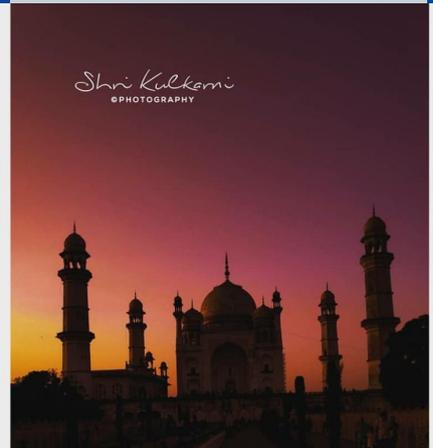
## CREATIVE ZONE

तारेवरची कसरत करुन जी आम्हाला शिकवते  
स्वतःचे दोन घास देऊन जी आम्हाला वाढवते  
तिचे दुःख बाजूला ठेऊन जी आम्हाला हसवते  
दुःखाचा संसार असून देखील जी सुखी संसार मिरवते  
हे सगळं करून जी चेहऱ्यावर गोड हास्य आणते तिचे  
नाव माय असते

-श्री कुलकर्णी(TE ENTC)



- pallavi ner  
(te entc)



**SHOT BY:- SHRINIDHHI KULKARNI  
(TE ENTC)**

**LOCATION: BIBI KA MAQBARA**



## Government College Of Engineering Aurangabad TEESA



### SOCIAL ACTIVITIES



**Swachh Bharat Abhiyan**



**Tree Plantation**



**Samvedna**



**Department of Electronics & Telecommunication Engineering  
2019-2020**

<u>Sr.No</u>	<u>Name of the student Placed</u>	<u>Enrollment no.</u>	<u>Name of the Employer</u>
1	<u>Harshal Deshpande</u>	BE16F04F007	TCS
2	<u>Mayur Patil</u>	BE16F04F037	TCS
3	<u>Pratiksha Udgirkar</u>	BE17S04F017	TCS/ Wipro
4	<u>Gayatri Pawar</u>	BE16F04F062	TCS
5	<u>Naresh Marlapalle</u>	BE16F04F029	TCS
6	<u>Pratiksha Tiwarkhede</u>	BE16F04F050	TCS/ Capgemini
7	<u>Renukadas Bharaswadkar</u>	BE16F04F054	TCS/ Capgemini/ Infosys/Wipro
8	<u>Pradhyumna Jakate</u>	BE16F04F014	TCS/ Wipro
9	<u>Vaibhav Jadhav</u>	BE16F04F013	TCS/ Capgemini
10	<u>Anuja Memane</u>	BE16F04F030	TCS
11	<u>Pratik Chede</u>	BE16F04F005	TCS
12	<u>Rahul Padol</u>	BE16F04F061	TCS
13	<u>Amruta Solanke</u>	BE17S04F014	Capgemini
14	<u>Sidheshwar Kabade</u>	BE17S04F007	Capgemini/ Softlink international
15	<u>Yash katariya</u>	BE16F04F019	Capgemini
16	<u>Ishwari Mankar</u>	BE16F04F057	Capgemini
17	<u>Komal Yerne</u>	BE17S04F018	Capgemini
18	<u>Shantanu Sonvane</u>	BE16F04F045	Capgemini/ Infosys
19	<u>Komal Jogdande</u>	BE17S04F005	Softlink international
20	<u>Prajakta Tarale</u>	BE16F04F048	Softlink international
21	<u>Sakshi kumthekar</u>	BE16F04F052	Infosys
22	<u>Sakshi Chandak</u>	BE16F04F055	Infosys/ Wipro
23	<u>Ganesh Shinde</u>	BE16F04F043	Wipro



## FROM GENERAL SECRETARY

Government College of Engineering Aurangabad is a reputed institute determined to provide a rich platform to aspiring engineers. The institute considers the fact that overall development of an individual is the necessity of present. Our college has various talent clubs that provide the required exposure to the students and helps them to gain a broadened perspective.

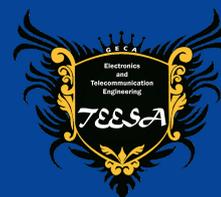
In my opinion, telecommunication is a very dynamic branch of engineering deriving its base from electronics. Our department follows along the objectives laid by the college and makes sure to implement them in the best way possible. We make sure every individual is inculcated with all round development in the fields of technology, sports, arts and culture. I hope this give and take remains fruitful as it is.

- SHANTANU SONVANE  
GENERAL SECRETARY  
ELECTRONICS AND TELECOMMUNICATION

## FROM EDITOR'S DESK

We acknowledge the efforts and are grateful to all the contributors who have provided us with all the delightful articles, poems, artworks and photograph. We would like to take this opportunity to thank the Head of Department **Prof.Hirekhan** and faculty coordinator **Prof.S.S.Agrawal** who have been a constant source of motivation and guidance. We extend our heartfelt gratitude towards entire TEESA council without whom the magazine would have been impossible. We hope you have enjoy this collective endeavour of teachers, students and management of electronics and telecommunication department, Government college of engineering Aurangabad.

-AMAN PARATE  
(JOINT TECHNICAL SECRETARY)  
-SAKSHI CHANDAK  
(LADIES REPRESENTATIVE)



## TEESA COUNCIL 2019-20

<b>Sr.No.</b>	<b>COUNCIL MEMBERS</b>	<b>POSITION</b>
1.	SHANTANU SONAVANE	GENERAL SECRETARY
2.	AKANSHA BHARGAVA	VICE PRESIDENT
3.	VAIBHAV JADHAV	TECHNICAL SECRETARY
4.	SAKSHI CHANDAK	LADIES REPRESENTATIVE
5.	PRATIKSHA UDGIRKAR	CULTURAL SECRETARY
6.	HARIDAS BHUJANG	SPORT SECRETARY
7.	AKANKSHA PAWAR	TREASURER
8.	SANJANA ELUVANGAL	JOINT GENERAL SECRETARY
9.	AMAN PARATE	JOINT TECHNICAL SECRETARY
10.	VINAY THUTE	
11.	SAURABH KATARE	
12.	MALHAR GARJE	
13.	GOPAL TIDKE	
14.	PALLAVI NER	JOINT CULTURAL SECRETARY
15.	ANKITA JALGAR	JOINT SPORT SECRETARY
16.	SHRUTIK PATIL	JOINT TREASURER
17.	SHASHANK GAUD	CO-GENERAL SECRETARY
18.	MAHESH KALE	CO-TECHNICAL SECRETARY
19.	SAURABH PAWAR	CO-TECHNICAL SECRETARY
20.	MAYURI KOKATE	CO-TECHNICAL SECRETARY
21.	RUSHIKESH NARSALE	CO-TREASURER