

Research to
Reality



+91 80872 96157

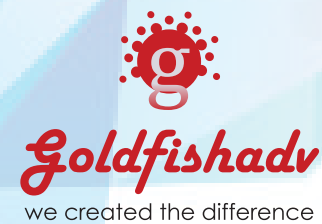


E&TC DEPARTMENT PRESENTS

Sanwvaad...2k19

A Time less contact

Sponsor



**International Centre of Excellence in
Engineering & Management Aurangabad**

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**International Centre of Excellence in
Engineering & Management Aurangabad**

From the Director's Desk



Prof. Dilip Gour
(Director)
ICEEM, A'Bad.

Technology is changing our life which is beyond our imaginations, what 100 of centuries have not seen, happened in last century due to technology. What thousands of decades have not imagined was experienced by last decade, due to information technology. Every sphere of life, whether it is agriculture, industry, medicine, entertainment etc. Experienced drastic change or one can dare to call it revolution due to technology. As engineering students we have to keep pace and respond to the changes around us or else we will be thrown out of the track. Unless you try to do something beyond what you have already mastered you can not grow. So put all the untapped energy within you to grow and to contribute to the society, and make this planet a beautiful place to live.

I want to congratulate E&TC department for all the time and efforts put. "Good Luck"

HOD's Message



Prof. H. L. Jadhav
H.O.D (E&TC)

"Sanwaad-2K19" the reflection of Electronics & Telecommunication engineering department is an open forum where students can express their views and opinions. It is an outlet for the creative talents of the Students. The student Editor, helped by staff Editorial Board, brings out the magazine at the end of the academic year.

The magazine showcases the technical activities, literary, cultural, sports activities and achievements of the students as well as staff members with the signatures of master talents.

It is a great pleasure to present a 4th edition of "Sanwaad-2K19". In this occasion, congratulating each and every people worked hard to bring this monumental for ICEEM Community.

Faculty Message

"As the Internet of Thing advances, the very notion of clear dividing line between reality and virtual reality becomes blurred, sometimes in creative ways." The Internet of Things (IoT) is the latest buzzword being talked about everywhere, yet many people don't fully understand the concept behind the phrase or where this technology is currently at. Widely believed to be years away, the Internet of Things is here, and it's rapidly expanding The Internet of Things essentially works by connecting the devices that surround us to the Internet, or one another, which then allows them to send and receive data to better meet the needs of the user. For example, imagine that when you woke up your alarm lets you know there is traffic, reports this to your car, which then navigates a less congested way to work and receives data on which parking spaces are available, all without your input. Or your printer at work gets an alert that the color cartridge is low and orders more itself. These are just a few examples of how IoT can work, but the potential this technology offers is only in the beginning stages of realization.

"Technology will not replace great teachers but technology in the hands of great teachers can be transformational." As the trend towards electrification and renewable energy increases enabling technologies such as power electronics becoming ever more important. Power electronics is an umbrella term that encompasses the system and products involved in converting and controlling the flow of electrical energy. Power electronics is an application oriented and interdisciplinary area. It uses power semiconductor devices to perform switching action in order to achieve a desired conversion strategy. Therefore, sustainable growth of wind and solar-PV powered electricity generation is expected in the years to come.



Prof. R.K. Paithane
(Editor)



Prof. V.Y. Somwanshi
(Co-editor)

Industrial Visit & Guest Lecture



"Industrial Visti at LUANS Electronics"



"Induction Program for Direct Second Year Students"



"Industrial Visit to Yashshree Press & Comp, Bajajnagar, Aurangabad."



"Guest Lecture by Ashish Gavande, Govind P. Deshmukh"

डायरी

ती सुखाचे क्षण फुलवणारी
ती दुःखाचे क्षण भुलवणारी
तीच असते काहींसाठी
मैत्रीण म्हणून सुनावणारी ,

काही आठवण थेंब असतात
शब्दांत टिपून ठेवण्यासारखे
मनातले पिंपळपान जसे
तिच्यात जपून ठेवण्यासारखे ,

त्यांच्या काही शब्दांनी अनेकदा
श्रावण बरसात असतात
तेव्हा तिच्याच पदरावर
नयन थेंब जणू पसरत असतात ,

आयुष्य

आयुष्य जणु वाट ही वेडि
आयुष्य जणु जे जगले क्शण,
आयुष्यअसे हे जगता जगता
आयुष्यात का ना भरते मन

रोजच स्वप्ने नवि कशी हि
रोज नवा हा ध्यास कसा,
अस्तित्वासाठी झुरता झुरता
मन का होते भ्याड ससा
घबाड पाठी कर्तव्याचे
तर स्वप्नान्साठी जगले कोण,
आयुष्यअसे हे जगता जगता
आयुष्यात का ना भरते मन..

दर उन्हाळी विहिर कोरडी
नापिकतेचा उजाडपणा,
कर्जाचे हे डोंगर माथी

जे शब्द लागून जातात
काळजात पुन्हा दुखवायला
तेव्हा माझे प्रयत्न असतात
त्यात माझे अश्रू लपवायला ,

तिच्याच सोबत करते मी
माझ्यातल्या माझे पारख
आता वाद देते तुम्हाला
माझ्यातली तिची ओळख ,

माझ्या चढ उताराची आजवर
तीच आहे पायरी
माझंपण जाणणारी
हीच आहे ती "डायरी "
--सायली नि.पंचभाई

कसा रे मान्डु जुगार पुन्हा,
तु मुनग्यान्नाही रवा पुरवतो
भर पोटान्चि ही खळगी 2,
आयुष्यअसे हे जगता जगता
आयुष्यात का ना भरते मन..
नशिबाशी लढा देउनी
जपेन देवा खुद्दारपणा,
स्वतः जुम्पुनी मातिकरता
फुलवेल पिकान्चा बाग पुन्हा,
पाणि जपुनी , जिवनाखातर
नव्याने घडवु नन्दनवन
आयुष्यअसे हे जगता जगता
आता आयुष्यातच रमले मन..

आयुष्य जणु वाट ही वेडि
आयुष्य जणु जे जगले क्शण,
आयुष्यअसे हे जगता जगता
आयुष्यात का ना भरते मन
--सायली नि.पंचभाई



Prof. Ansar Ahmed
(Technical)



Prof. Shweta Shinde
(Arts)



Prof. Rahul Deshmukh
(Literature)



Prof. S.D. Sheldarkar
(Design Asst.)

"You are either the one that creates the automation or you are gating automated." Industrial automation is a broad topic that covers everything from digital manufacturing to simple control systems handling machines and processes, Industry 4.0 to the smart factory. It entails the use of technology and control systems to replace human mental and physical labor in the engineering and manufacturing sector. Tasks previously executed by people are automated using systems and products that combine hydraulics, mechanics, pneumatics, electronic and electrical components. Industrial automation is used in numerous sectors, like aerospace industries, automotive, oil and gas industries and the electronics sector.

"Every ones in a while a new technology, an old problem, and a big idea turn into an innovation." Electronics are helpful, at times necessary, and can improve life in general for people. I can't imagine a world without electronics. I use electronics for everything. I use my cell phone all day, for everything from checking the time, to using my GPS for directions. Also we wouldn't be able to do research for important projects. We also need them to communicate to people because people would have to send letters to people far away and that takes a long time.

Very-large-scale integration (VLSI) is the process of creating an integrated circuit (IC) by combining thousands of transistors into a single chip. VLSI began in the 1970s when complex semiconductor and communication technologies were being developed. The microprocessor is a VLSI device. Before the introduction of VLSI technology, most ICs had a limited set of functions they could perform. An electronic circuit might consist of a CPU, ROM, RAM and other glue logic. VLSI lets IC designers add all of these into one chip.

The electronics industry has achieved a phenomenal growth over the last few decades, mainly due to the rapid advances in large scale integration technologies and system design applications. With the advent of very large scale integration (VLSI) designs, the number of applications of integrated circuits (ICs) in high-performance computing, controls, telecommunications, image and video processing, and consumer electronics has been rising at a very fast pace. The current cutting-edge technologies such as high resolution and low bit-rate video and cellular communications provide the end-users a marvelous amount of applications, processing power and portability. This trend is expected to grow rapidly, with very important implications on VLSI design and systems design.

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Students Support



B.E.2k19

Guest Feedback



S.L. Sambrey,
CEO, LUANS Electronics,
Aurangabad.

I have been associated with ICEEM E&TC Department since the establishment. The E&TC team is consistently working with the great efforts for the betterment of students in the field of Electronics engineering & the technology. The projects made by students are always innovative, socially connected & the solutions to the problems of a common man. I wish you all the best for the bright future.

Department aspires the overall growth of students through various co-curricular and extra-curricular activities. Along with regular academics, students of the department are also exposed to evolving trends in technology through guest lectures, seminars, and workshops from industry experts. To get aware of industry requirements, the Department organizes Industrial Training for students.

To provide an opportunity to apply theoretical concepts from the classroom to the realities of the field, students are encouraged to do internship in related industries.



Prof. A.S. Patel
HOD E&TC, MSS, Jalna.

The Department of E&TC Engg. of ICEEM is very energetic and all staff members including HOD take extra efforts to enhance the confidence and technical skills of all upcoming engg. Students. My best wishes with warm blessing to all team members.

Department is having well-equipped laboratories with computational facilities and latest equipments, along with software and hardware tools to cater to the needs of advanced communication technologies.

The department has a good academic culture and conducive working environment for teaching learning and student activities. The faculty is well qualified, dedicated and experienced, with strong commitment to engineering education and excellence in teaching-learning process.



Govind P. Deshmukh
SAP Functional Consultant

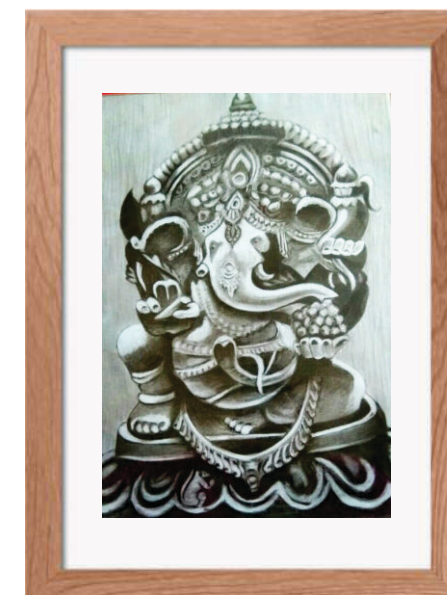
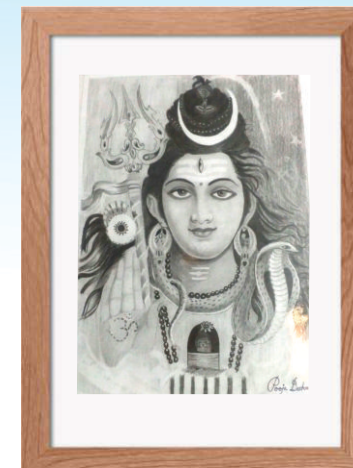
"It was my immense pleasure to get an opportunity to visit ICEEM Campus & express my thoughts on "Bridge The Gap With Emerging Technologies". Really thankful to Honorable Prof: Mr. Dilip Gour for invitation and inspiring words in the opening note. I was really amazed after observing IoT enabled lab developed by Student in campus. Overall response from the students & staff members motivated me to deliver maximum from my side. My visit proved me ICEEM as Quality Education providing Leading Educational Institute, which quickly adapts technical advancement happening internationally. Which ultimately helps to every student who get an opportunity to learn & lay down the path for future endeavors in this prestigious institute. I will be more happy to remain associated with this prestigious institute in future."

Thankful to Electronics Department for entire arrangement & kind support.
-Thanks & Regards,



"Moment of Inspiration with Hon. Dr. Mahdhavrao Chitale (Water Expert India)"

Art





Vision

To prepare Electronics Engineering Students globally recognized professionals for the quality and significance of their knowledge in research and public service.

Mission

To create an environment suitable for innovative projects.

To provide quality education with professional ethics.

To develop students with necessary entrepreneurial skills, leadership qualities and positive attitude.

Some Innovative Projects

Electrical Bicycles

An electric bicycle uses an electric motor for the purpose of moving. On this bicycle, people do not have to use their muscular force to move. It uses electrical energy for motion. They are also known as e-bikes. There are many varieties of electric bicycles. Some of these bikes have a rechargeable battery. This makes it easy to power the bike whenever you want. They make use of stored electrical energy in some or the other form. Due to this form of energy, the bikes have more power and speed. These bikes are more convenient than regular ones.

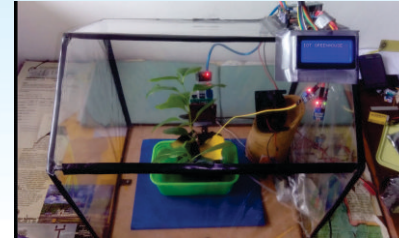
Technology behind Electrical Bicycles

Brushed and brushless are the two important types of motors used in these bikes. An electric power assist system is also added to these bikes to make them more functional. E-bikes use rechargeable batteries and the lighter varieties can travel up to 25 to 32 km/h (16 to 20 mph), depending on the laws of the country in which they are sold, while the more high-powered varieties can often do in excess of 45 km/h (28 mph). Batteries used in this vehicle are lithium-ion batteries, nickel-cadmium batteries or any other.



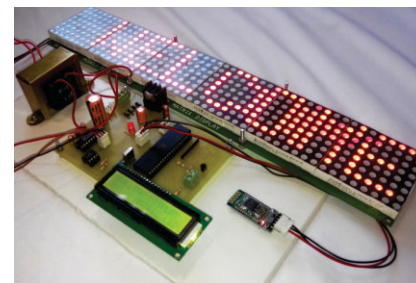
GREEN HOUSE MONITORING & AUTOMATION

The development of such a system which will combine Agriculture and technology, providing a Low Cost and Efficient solution to a specific set of problems. Here we are suggesting an IoT Based System which will help in the maintenance of Greenhouse with its plantations, the aim is to develop a novel system using electronic sensor networks, concepts of cloud computing and computer networks which will automate the plantation management and climate control processes in Greenhouse This will improve the quality and quantity of the plantations generating higher revenues and resulting in the economic development of the agricultural professionals, also the data generated by this system will help in doing advanced research in agriculture.



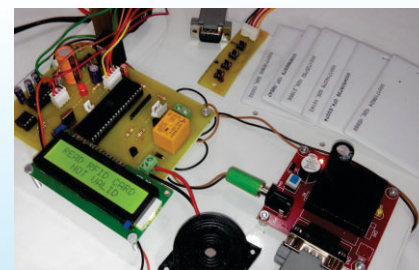
IOT BASED NOTICE BOARD

IOT is the network of physical “things” or object that contain embedded technology to interface and sense to move with their internal states or the external setting. Automation is the most often spelled term within the field of electronics. The hunger for automation brought several revolutions within the existing technologies. Notice board could be a primary factor in any establishment or public places like bus stations, railway stations, colleges, malls etc. Sticking out numerous notices day to day could be a tough method. A separate person is needed to take care of this notice display. This project is regarding advanced wireless notice board. In IOT based Web Controlled Notice Board, Internet is employed to wirelessly send the message from Browser to the liquid crystal display. A local web server is created, this could be a global server over net. At the Raspberry Pi, LCD is used to display message and flask for receiving the message over network. Whenever Raspberry receives any wireless message from Web browser, it displays on the liquid crystal display. Key Words: Raspberry Pi 3, HDMI Interface, Web Server, Graphics LCD, Internet of Things.



RFID and IOT for Attendance Monitoring System

In recent years, RFID technology has been widely used in various sectors, such as in-education, transportation, agriculture, animal husbandry, store sales and other sectors. RFID utilization in education is student attendance monitoring system, by using Internet of Things (IoT) and Cloud technology, it will produce a real time attendance monitoring system that can be accessed by various parties, such as lecturer, campus administration and parents. With this monitoring system if there are students who are not present can be immediately discovered and can be taken immediate action and the learning process can run smoothly.



Glims of Achievements



E&TC students under the guidance of Prof. Rohit Paithane received acknowledgement for SMART STICK Project at “TED X – 2018” held at JNEC



Prof. Rohit Paithane representing ICEEM received Gold award in QC/QI Kaizen segment



Received appreciation of one of the best projects in GIZ & MASSIA project competition and received cheque of Rs. 20,000/-