2019-2020

NEWSLETTER

Department

Of

Electronics & Telecommunication Engineering

S.V.S.M.D's

Kai.Kalyanrao (Balasaheb) Ingale Polytechnic, Akkalkot

Electronics & Telecommunication Engineering Department

Welcome to the Department of Electronics and Telecommunication Engineering, It gives me great pleasure to convey my best wishes to Newsletter of E&TC department for the academic year 2019-2020. The departments have a state of art facilities and highly qualified faculty. The department works with the objective of addressing critical challenges faced by the Industry, society and the academia perhaps even more important is our continuous commitment to our students, helping them to learn, grow, develop, and achieve their goals in their pursuit to excel in their Professional career.

I wish good luck to the entire team and look forward for your Kind patronage to newsletter.

Mr. Desai P.B.
Head of Department

Vision

To provide quality education for developing rural youth into skillful Electronics &Telecommunication Engineer to serve the needs of industry & society

Mission

1. To establish the learning environment for better understanding of Electronics & Telecommunication engineering concept

2. To develop professional & technical skills of students by arranging various activities

3. To prepare the diploma graduates who serves to fulfill the needs of industry and society

Program Educational Objectives (PEOs)

1. To develop an ability in students to apply technical skills & solve problems in Electronics & Telecommunication Engineering

2. To Apply advanced Electronics and Telecommunication Engineering technologies for resolving needs of society & industry

3. To Work individually and in team with professional attitude & societal responsibility

Program Outcomes (POs)

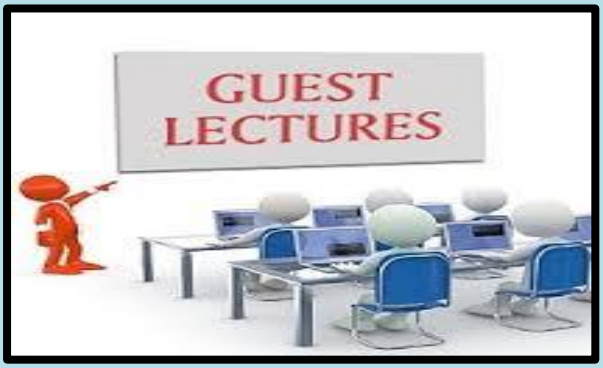
1. **Basic and Discipline specific knowledge:** Student will be able to apply knowledge of basic mathematics, science and engineering fundamental and engineering specialization to solve the Electronics & Telecommunication Engineering problems.
2. **Problem Analysis:** Student will be able to identify and analyze well-defined Electronics &Telecommunication engineering problems using codified standard methods.
3. **Design / Development of solution**: Student will be able to design solutions for Well-defined technical problems assist with the design of system components or process to meet specified needs.
4. **Engineering Tools, Experimentation and Testing:** Student will be able to apply the modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. **Engineer Practices for society, sustainability and environment**: Student will be able to apply appropriate technology in context of society, sustainability, environment and ethical practices.
6. **Project Management:** Student will be able to use Electronics & Telecommunication engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined Electronics & Telecommunication engineering activities.
7. **Life-long learning:** Student will be able to analyze individual need and engage in updating in the context of technological changes.

Program Specific Outcomes

1. **Electronics & Telecommunication Systems**: Maintain various types of Electronics & Telecommunication systems.
2. **Equipment and Instrument**: To analyze ,design and troubleshoot electronic appliance
3. **EDA Tools Usage**: Use EDA tools to develop simple Electronics & Telecommunication Engineering related circuits.

College & Departmental Activities

❖ Guest Lectures



1. **"Recent Trends in Electronic Engineering."** by **Mr. Sutar K.K** Service Engineer Protos Engineering Pvt. Ltd, Pune for second year and third year students.
2. **"Skill Development& Interview Skills" by Prof. Chipade A.V,** HOD (Mechanical) BMIT Solapur, for second year and third year students**.**

3. **"Solar Product concept"** by **Ms. Pathan Nasima,** Managing director**,** Solar Electronics Solapur, for second year and third year students.
4. **"Opportunities In Communication"** by **Mr. Kore P.P.** Bangalore for second and third year students.
5. **"Application of communication & Broadcasting"** by **Ms**. **Shraddha Kamat** RJ at MY FM, Solapur, for second and third year Students.
6. **"Application of Electronic system Design"** by **Mr.V.V. Kale** Phinix Electronics, Mumbai, for second and third year students.
7. **"Application of Electronic sensors"**by **Mr. Kamble** Manager of Srujan food Pvt. Ltd solapur , for second and third year students.
7. **"Interview Skills"** by **Ms. Baba B.S.** Akkalkot**,** for second and third year students.

❖ Industrial Visits

I) Industrial visit of class EJ3I & EJ5I held at Aftek Limited, Solapur on 7th Sep 2019.

II) Industrial visit of class EJ3I & EJ5I held at Srujan Foods Limited, Solapur on 7th Sep 2019.

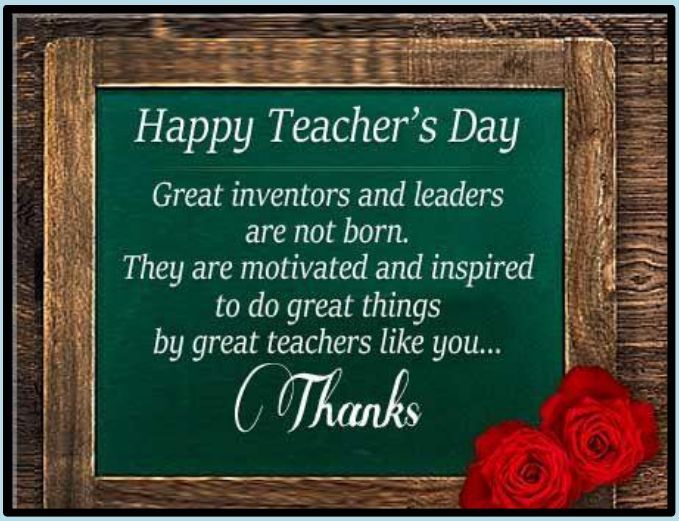
III) Industrial visit of class EJ3I & EJ5I held at MY FM, Solapur on 4th Feb 2020.

IV) Industrial visit of class EJ3I & EJ5I held at Daily Tarun Bharat Press, Solapur on 4th Feb 2020.

❖ Independence day

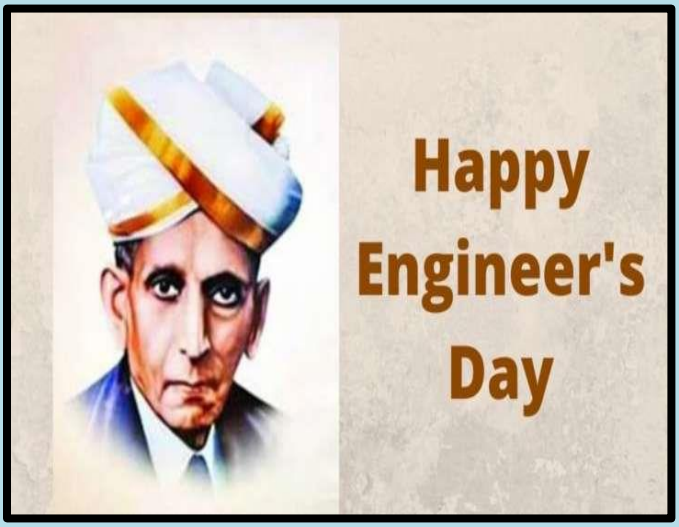
❖ Teacher's Day 2019

The students of E&TC department had celebrated teacher's day on 5th Sep 2019 in the memory of Late Sh. Sarvepalli Radhakrishnan to appreciate the contribution of teachers to the society by hosting a small function.



❖ Engineer's Day & Technical Competition

ETSA & ACES Association had organized "**Paper Presentation Competition"** on the occasion of Engineer's Day. This year Engineer's day was celebrated on 14th Sep 2019.



We have conducted an technical event **Aptitude Test** under the **"ETSA"**on **15/02/2020**

❖ **Traditional Day:** Celebrated Traditional Day in the Department.

Paper Published

1.Review Paper on Electronic Toll collection system

Abstract

The main theme of this paper is to avoid human existence at the toll gates and it plays an automatic role in permitting the vehicle to go/stop by taking the payment. This paper plays a vital role now a day because we use RFID technology with GSM to develop the Application. The role of RFID is to identify the vehicle. When the Vehicle is entered then RFID will be active and the reader reads the tag and microcontroller checks with the database for the balance for the balance enquiry. If sufficient amount exits in the card then the gate will be opened and whenever the vehicle crosses then with in 2min automatically gate will be closed. If the balance is not available in the card then gate will not be opened. We also have GPS in this Paper to locate the vehicle. We use GSM to know that where the vehicle is located exactly by sending a message. The controller receives it and responds back with values of latitude and longitude given by GPS.

Ms. Sutar S.M
Ms. Masuti G.B
Lect. Konade S.B.

2.Study paper on Silicon Memory.

Abstract

The limits of pushing storage density to the atomic scale are explored with a memory that stores a bit by the presence or absence of one silicon atom. These atoms are positioned at lattice sites along self-assembled tracks with a pitch of five atom rows.

The memory can be initialized and reformatted by controlled deposition of silicon. The writing process involves the transfer of Si atoms to the tip of a scanning tunneling microscope. The constraints on speed and reliability are compared with data storage in magnetic hard disks and DNA.

In 1959 physics icon Richard Feynman estimated that “all of the information that man has carefully accumulated in all the books in the world, can be written in a cube of material one two-hundredth of an inch wide”. Thereby, he uses a cube of 5×5×5 = 125 atoms to store one bit, which is comparable to the 32 atoms that store one bit in DNA. Such a simple, back-of-the-envelope calculation gave a first glimpse into how much room there is for improving the density of stored data when going down to the atomic level.

In the meantime, there has been great progress towards miniaturizing electronic devices all the way down to single molecules or nanotube as active elements. Memory structures have been devised that consist of crossed arrays of nanowires linked by switchable organic molecules or crossed arrays of carbon nanotubes with electro statically switchable intersections.

Mr. Jujagar A.D.
Mr. NandiwaleT.A.
Lect. Salunkhe K.D.

3. Review paper on Satellite T.V.

Abstract

In the context of a worldwide communications network, satellite communications systems are very important. Satellite communications links add capacity to existing communications capabilities and provide additional alternate routings for communications traffic. Satellite links, as one of several kinds of long-distance links, interconnect switching centers located strategically around the world. They are part of the defense communication systems (DCS) network. One important aspect of the satellite communications network is that it continues in operation under conditions that sometimes render other methods of communications inoperable. Because of this, satellites make a significant contribution to improved reliability of Navy communications .When satellite television first hit the market in the early 1990s, home dishes were expensive metal units that took up a huge chunk of yard space. In these early years, only the most die-hard TV fans would go through all the hassle and expense of putting in their own dish. Satellite TV was a lot harder to get than broadcast and CABLE AND TV. Today, you see compact satellite dishes perched on rooftops all over the United States. Drive through rural areas beyond the reach of the cable companies, and you'll find dishes on just about every house. Satellite TV offers many solutions to broadcast and cable TV problems. Though satellite TV technology is still evolving, it has already become a popular choice for many TV viewers.

Mr. Hulmani A.N.
Ms. Koli B. N.
Lect.Desai P.B.

4.Study paper on Digital Pen.

Abstract

Evaluation of the technical feasibility of tight integration of the digital pen and paper technology in an existing computerized patient record. Technology: The digital pen is a normal pen able to record all actions of the user and to analyze a micro pattern printed on the paper. The digital paper is a normal paper printed with an almost invisible micro pattern of small dots encoding information such as position and identifiers. We report our experience in the implementation and the use of this technology in an existing large clinical information system for acquiring clinical information. Discussion: It is possible to print uniquely identified forms using the digital paper technology. These forms can be pre-filled with clinical readable information about the patient. When care providers complete these forms using the digital pen, it is possible to acquire the data in a structured computerized patient record. The technology is easy to integrate in a component-based architecture based on Web Services. Conclusion: The digital pen and paper is a cost-effective technology that can be integrated in an existing clinical information system and allows fast and easy bedside clinical information acquisition without the need for an expensive infrastructure based on traditional portable devices or wireless devices.

Ms. Jamadar C.Y.
Ms. Handralmath D.D.
Lect .Potdar M.D.

5. Smart Agriculture system using THINGS speak application.

Abstract

Agriculture plays vital role in the development of agricultural country. In India about 70% of population depends upon farming and one third of the nation's capital comes from farming. 33% of the country's capital originates from cultivating. Issues concerning agribusiness have been continually preventing the advancement of the nation. The main answer for this issue is keen horticulture by modernizing the current customary strategies for agribusiness. Henceforth the task targets making farming savvy utilizing mechanization and IoT advances.

The featuring highlights of this venture incorporates keen GPS based remote controlled robot to perform assignments like weeding, showering, dampness detecting, winged creature and creature frightening, keeping watchfulness, and so on. Besides it incorporates brilliant water system with savvy control and astute basic leadership dependent on exact on-going field information. Thirdly, brilliant distribution center administration which incorporates temperature support, mugginess upkeep and burglary identification in the stockroom. Controlling of every one of these activities will be through any remote brilliant gadget or PC associated with Internet and the tasks will be performed by interfacing sensors, Wi-Fi or Zig-Bee modules, camera and actuators with smaller scale controller and raspberry pi. Agriculture is the broadest monetary area and assumes a significant job in the general financial advancement of a country. Innovative headways in the field of agribusiness will discover to build the capability of certain cultivating exercises.

In this paper, we have proposed a novel procedure for brilliant cultivating by connecting a savvy detecting framework and shrewd irrigator framework through remote correspondence innovation. Our framework centers around the estimation of physical parameters, for example, soil dampness content, supplement substance, and pH of the dirt that assumes an imperative job in cultivating exercises. In view of the fundamental physical and compound parameters of the dirt estimated, the necessary amount of green excrement, fertilizer, and water is sprinkled on the harvests utilizing a savvy irrigator, which is mounted on a versatile overhead crane framework.

Mr.Warad Y.S.
Ms. Khilari V.I.
Lect. Kulkarni M.S.

6. Smart Car parking using Wi-Fi and blynk app.

Abstract

This paper describes a design of effective information system that can monitor the vehicle condition in traveling, detect the accident of the vehicle and accidents due to excessive alcohol consumption, collision of two vehicles due to negligence or a sleepy driver and theft detection system. A prototype of smart parking that allows drivers to effectively find the vacant parking spaces is also been designed and implemented in this paper. By periodically learning the

parking status from the sensor networks deployed in parking lots, the drivers are allowed to access this information with their personal communication devices and exactly know which parking slots are vacant. This particular application uses internet of things for accessing the information with their mobile phones. This system has the potential to simplify the operations of parking systems, as well as alleviate traffic congestion caused by parking searching and would definitely make people follow the traffic rules and ensure safety. The developed system is reliable, low cost and user friendly.

Mr. Hulmani A. N.
Mr. Korachgaon. A.S.
Lect.Khilari V.S.

Workshops/Trainings Attended

1. Ms. Konade S.B. attended five days short term training Program on **"Teaching Learning Pedagogies"** organized by A.G. Patil Polytechnic Institute, Solapur
2. Ms.Konade S.B. attended five days faculty development program on**"ICT Tools in Education Using MOODLE"** organized by PACE Institute of Technology & sciences, ongole.
3. Ms. Kulkarni M.S. attended five days faculty development program on **"Introduction to Computers"** organized by Shriram Institute of Engineering &Technology center Paniv, Solapur
4. Ms. Kulkarni M.S. attended five days faculty development program on **"Recent Trends & Innovations in Digital Forensic"**organized by AISSMS Institute of Information Technology, Pune.
5.Mr. Khilari V.S. attended two days workshop on **"Conducting effective online classes through software"** Organized by N. B. Navale Sinhgad College of Engineering, Solapur
6. Mr. Khilari V.S. attended five days faculty development program on **"Introduction to Computers"** conducted by Shriram Institute of Engineering &Technology center Paniv, Solapur.
7. Mr. Desai P.B. attended two days workshop on **"Startup Life Cycle &Patent Registration"** organized by Aatharv College of Engineering ,Pune
8. Mr. Salunkhe K.D. attended five days faculty development program on **"NBA Norms &Preparation of SAR – Criteria 1-9"** organized by Rajarambapu Institute of Technology, Rajaramnagar and Sponsored by Maharashtra State Board of Technical Education, Mumbai.
9. Mr. Salunkhe K.D. attended six days faculty developmentProgram on **"Arduino"**organized by JaiHind college of Engineering ,Junnar.
10. Ms.Potdar M.D.attended five days faculty development program on **"Recent Trends & Innovations in Digital Forensic"** organized byAISSMS Institute of Information Technology, Pune.
11. Ms.Potdar M.D attended five days faculty development program on**"ICT Tools in Education Using MOODLE"** organized by PACE Institute of Technology & sciences, ongole.

Academic Performance

Winter-2019

COURSE	NAME OF STUDENT	PERCENTAGE	RANK
EJ1I	Ms. Dhabbe Prajakta Iresh	85%	1st
EJ3I	Mr. Harwalkar Samarth Manojkumar	84.74%	1st
EJ5I	Ms.Shaikh Sakeena MdAqueel	89.89%	1st

Summer-2020

COURSE	NAME OF STUDENT	PERCENTAGE	RANK
EJ2I	Mr. Savali Samarth Ravikant	91.75%	1st
EJ4I	Ms.Gadekar Shailaja Bhutali	93.56%	1st
EJ6I	Ms. Kamble Prajakta Shivanand	99.47%	1st

Placements 2020

Our students are selected by following industries.

Sr. No	Name of Students Selected	Name of Industry Approached for Campus Interview
1	Handralmath Dhanamma Dhundayya	East Sun India Pvt Ltd.Pune
2	Koli Bhagyashri Ningappa	East Sun India Pvt Ltd.Pune
3	Khilari Vijayalaxmi Iranna	East Sun India Pvt Ltd.Pune
4	Nandiwale Tamanna Ambaji	Sigma Ltd.Pune
5	Jamadar Chanamma Yalappa	East Sun India Pvt Ltd.Pune

S.V.S.M.D's

Kai.Kalyanrao (Balasaheb) Ingale Polytechnic, Akkalkot

604/2, near Bhakta Niwas, Gangapur road, Akkalkot Dist: Solapur, State: Maharashtra-413216. Phone: 02181 221321, Web: www.swamipoytechnic.org.in

Approved by: All India Council for Technical Education (AICTE), New Delhi
Recognized by: Government of Maharashtra
Approved by: Directorate of Technical Education (DTE), Mumbai
Affiliated to: Maharashtra State Board of Technical Education (MSBTE), Mumbai

COURSES OFFERED IN DIPLOMA ENGINEERING

Discipline	Intake Capacity	Duration of Course
Mechanical Engineering	60	3 Years
Electronics and Telecom. Engineering	30	3 Years
Civil Engineering	60	3 Years
Computer Engineering	30	3 Years
Total Intake	180