2021-2022

NEWS LETTER

Department

of

Electronics & Telecommunication Engineering

S.V.S.M.D's

Kai. Kalayanrao (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 2021-2022. 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. Khilari V.S.
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 through workshops.

2. To develop professional & technical skills of students by internship training & expert lecture.

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

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.

Expert Talks

1. **“Interview Techniques & communication skill.”** By **Ms. Birajdar L.S.** Lecturer, Shanti Education Society’s A.G. Patil polytechnic, Solapur.

2. **“Communication skill.”** By **Ms. Birajdar L.S.** Lecturer, Shanti Education Society’s A.G. Patil polytechnic, Solapur.

3. **“Stress management”** by **Dr. Namita Wadapurkar** Government hospital, Solapur.

4. **“How to write research paper”** by **Prof. S.V. Jadhav.** SVERI Pandharpur.

5. **“Personality Development & Interview Techniques”** by **Mr. B.C. Kudal** (Alumni) Software developer, Andocs, Pune.

6. **“Opportunities in Lift & Elevators Industries”** by **Mr. Pritam Aland** (Alumni) Co-founder Shri Siddhivinayak Lift Contractors, Pune.

Interaction of Expert with students

Industrial Visits

Third year students visited the following industries.

1. Vishwa foundation, Akkalkot
2. PM Plastic industries, MIDC Akkalkot.

Glimpses of Industrial Visit organized at Vishwa Foundation, Akkalkot

Paper Published

1. Review paper on Automated Hydroponics

Abstract

The explosion in human population has left researchers scrambling for solutions on how to feed the world. Furthermore, rural-urban immigration has on the one hand left the farms in the rural areas devoid of farmers and on the other hand has left the urban areas over-populated. Hydroponics is a form of agriculture where crops are grown without soil. This technique allows the farms to follow the farmers to the urban area. In addition, the fact that no soil is needed, allows hydroponic system to be stacked vertically (also known as vertical farming) to save space. The final frontier in hydroponics is automation. It will allow one farmer to work more than one job and cultivate more than one farm simultaneously. Growing certain plants and vegetables in remote areas such as deserts and the north and South Pole can be a challenge because of the extreme outside weather. very few species of plants thrive in such situations and are often not used as a food source. In this study, we created a system that can grow common plants and vegetables and can operate without depending on outside climate. we achieved this by using a technique called automated hydroponics. Hydroponics is a method of growing plants without using soil. The system was automated using microcontrollers and sensors to keep human intervention at a minimum. An internet of Things (IOT) network was created to improve reliability and allow remote monitoring and control if needed. The user is only required to plant a seeding and set initial parameters.

Miss. Aswale L.S.
Miss. Jadhav A.F..
Lect. Konade S. B.
Lect. Khilari V.S.

2. Review paper on Weather Station For Domestic purpose

Abstract

A weather station can be described as an instrument or device, which provides us with the information of the weather in our neighboring environment. For example it can provide us with details about the surrounding

temperature, barometric pressure, humidity, etc. Hence, this device basically senses the temperature, pressure, humidity, light intensity, rain value. There are various types of sensors present in the prototype, using which all the aforementioned parameters can be measured. It can be used to monitor the temperature or humidity of a particular room/place. With the help of temperature and humidity we can calculate other data parameters, such as the dew point. In addition to the above mentioned functionalities, we can monitor the light intensity of the place as well. We have also enabled to monitor the atmospheric pressure of the room. We can also monitor the rain value. The brain of the prototype is the ESP8266 based Wi-Fi module Nodemcu (12E). Four sensors are connected to the NodeMCU namely temperature and humidity sensor (DHT11), pressure sensor (BMP180), raindrop module. Whenever these values exceed a chosen threshold limit for each an SMS, an E-mail and a Tweet post is published alerting the owner of the appliance to take necessary measures.

Mr. Patil S. S.
Mr. Mulla M. M.
Miss. Gangonda K. P. 4
Miss. Dhabbe P. I. 5
Lect. Desai P.B.

3. IOT Based Smart home Automation

Abstract

Internet of Things (IoT) conceptualizes the idea of remotely connecting and monitoring real world objects (things) through the Internet. When it comes to our house, this concept can be aptly incorporated to make it smarter, safer and automated. This IoT project focuses on building a smart wireless home security system which sends alerts to the owner by using Internet in case of any trespass and raises an alarm optionally. Besides, the same can also be utilized for home automation by making use of the same set of sensors. The leverage obtained by preferring this system over the similar kinds of existing systems is that the alerts and the status sent by the Wi-Fi connected microcontroller managed system can be received by the user on his phone from any distance irrespective of whether his mobile phone is connected to the internet. The microcontroller used in the current prototype is the TI-CC3200 Launchpad board which comes with an embedded micro-controller and an onboard Wi-Fi shield making use of which all the electrical appliances inside the home can be controlled and managed.

Mr. Savali S. R.
Mr. Loni S.S.
Mr. Ukrande R. N.
Mr. Kote M.A.
Lect. Salunkhe K.D.

4. Review paper on Baby Incubator

Abstract

Infants who born before 37 weeks of the gestation period are known as preterm or premature babies. Preterm baby requires surrounding exactly similar as in the womb to cope with the external environment. In fact mammals have the advantage of being homoeothermic, i.e. they have a nearly uniform body temperature, regulated independent of the environmental temperature. Babies born prematurely may need additional time to develop their lungs and other vital organs. (Their eyes and ear drums may be so sensitive that normal light and sound would cause permanent damage to these organs.) Also, babies born extremely early will not have had the time to develop fat just under the skin and will need help to keep themselves warm and toasty. Sometimes babies will have fluid or meconium in their lungs. This can lead to infections and an inability to breathe well. New-born may also have immature, not fully developed lungs that require monitoring and extra oxygen. An infant has a relatively large surface area, poor thermal insulation, and a small amount of mass to act as a heat sink. The new born has little ability to conserve heat by changing posture and no ability to adjust their own clothing in a response to thermal stress. To provide the similar environment as in the womb infants have to be kept in a device known as incubator. An infant incubator is a device consisting of a rigid box-like enclosure in which an infant may be kept in a controlled environment for medical care. An infant incubator provides stable levels of temperature, relative humidity and oxygen concentration The relative humidity should follow set values according to the number of incubation days. incubators can reduce the chance of germs and additional infection while a little one heals from an illness. Incubators also offer a protected space where it's possible to monitor vitals 24/7 when your baby also needs multiple IVs for medication, fluids, etc

Miss. Bansode T.R
Lect.Potdar M.D.

Workshops/Trainings attended

1. Mr. Khilari V.S attended two days faculty development program on "Internet Of Things" Organized by BMP Polytechnic ,Solapur.
2. Mr. Khilari V.S. attended two days faculty development program on "Application of tools & techniques in Technical Education" Organized by SVSMD'S KKI Polytechnic, Akkalkot.
3. Ms.Konade S.B. attended two days faculty development program on Green Energy Sources Organized by Brahmdevdada Mane Polytechnic,Belati, Solapur, Maharashtra.
4. Ms.Konade S.B. attended two days faculty development program on "Internet Of Things" Organized by BMP Polytechnic ,Solapur
5. Ms.Konade S.B. attended two days faculty development program on "Application of tools & techniques in Technical Education" Organized by SVSMD'S KKI Polytechnic, Akkalkot.
6. Ms.Kulkarni M.S attended two days faculty development program on Green Energy Sources Organized by Brahmdevdada Mane Polytechnic,Belati, Solapur, Maharashtra.
7. Ms.Kulkarni M.S attended two days faculty development program on "Internet Of Things" Organized by BMP Polytechnic ,Solapur
8. Ms.Kulkarni M.S. attended two days faculty development program on "Application of tools & techniques in Technical Education" Organized by SVSMD'S KKI Polytechnic, Akkalkot.
9. Mr.Desai P.B. attended two days faculty development program on "Internet Of Things" Organized by BMP Polytechnic ,Solapur.
10. Mr.Desai P.B. attended two days faculty development program on "Application of tools & techniques in Technical Education" Organized by SVSMD'S KKI Polytechnic, Akkalkot.
11. Mr. Salunkhe K.D. attended two days faculty development program on "Internet Of Things" Organized by BMP Polytechnic ,Solapur.
12. Mr. Salunkhe K.D attended two days faculty development program on "Application of tools & techniques in Technical Education" Organized by SVSMD'S KKI Polytechnic, Akkalkot.
13. Ms. Potdar M.D. attended two days faculty development program on "Green Energy Sources" Organized by Brahmdevdada Mane Polytechnic, Belati, Solapur, Maharashtra.
14. Ms. Potdar M.D. attended one day faculty development program on **"Virtual Lab" Organized ny N.K. Orchid College of Engg. Solapur.**
15. Ms. Potdar M.D. attended two days faculty development program on "Internet Of Things" Organized by BMP Polytechnic, Solapur.
16. Ms. Potdar M.D. attended two days faculty development program on "Application of tools & techniques in Technical Education" Organized by SVSMD'S KKI Polytechnic, Akkalkot.

Academic Performance:

Winter-21

COURSE	NAME OF STUDENT	Photo	PERCENTAGE	RANK
EJ1I	Ms. Halkude Diksha Basavraj		86.57%	1st
	Ms. Samane Tanvi Sanjaykumar		86.00%	2nd
	Ms.Wadikar Simran Mahibub		84.43%	3rd
EJ3I	Mr. Belle Vaibhav Bhutali		90.47%	1st
	Mr. Helave Ravichandra Dhareppa		89.76%	2nd

	Mr. Kumbhar Prakash Parmanand		**87.18%**	**3rd**
EJ5I	**Mr.Savali Samarth Ravikant**		**94.42%**	**1st**
	Mr. Loni Suprit Satish		**89.79%**	**2nd**
	Mr.Potdar Monesh Prakash		**89.26%**	**3rd**

Summer-22

COURSE	NAME OF STUDENT	PHOTO	PERCENTAGE	RANK
EJ2I	Ms. Samane Tanvi Sanjaykumar		84.38%	1st
	Mr.Desai Vinayak Ramesh		83.00%	2nd
	Ms.Jamadar Sakshi Suryakant		79.50%	3rd
EJ4G	Mr. Kumbhar Praksah Parmanand		83.89%	1st
	Mr.Helave Ravichandra Dhareppa.		80.44%	2nd
	Ms.Kusekar Anjali Prakash		77.56%	3rd

EJ6I	**Mr. Savali Samarth Ravikant**		**84.80%**	**1st**
	Mr.Shinde Samarth Abhay		**82.13%**	**2nd**
	Ms.Jadhav Ashwini Fulsing		**81.73%**	**3rd**

Placements

Our students are selected by following industries

Sr. No	Name of Students Selected	Name of Industry Approached for Campus Interview
1	Aswale Lata Shivlingappa	Bajaj Auto Ltd. Pune
2.	Dhabbe Prajakta Iresh	Bajaj Auto Ltd.Pune
3.	Swami Sonali Bamayya	Bajaj Auto Ltd.Pune
4.	Savali Samarth Ravikant	Bajaj Auto Ltd. Pune
5.	Patil Prajakta Pradip	Bajaj Auto Ltd. Pune
6.	Gaikwad Sunanda Babu	Bajaj Auto Ltd.Pune
7.	Swami Vaishnavi	Bajaj Auto Ltd. Pune
8.	Patil Siddhaling Subhash	Bajaj Auto Ltd. Pune
9.	Loni Suprit Satish	Bajaj Auto Ltd. Pune
10.	Anagale Prabhakar Rajshekhar	Bajaj Auto Ltd. Pune

In plant Training

In Plant training will provide an industrial exposure to the students as well as to develop their career in the high-tech industrial requirements. Reputed companies are providing in plant training to students. Here students are initially get counseled in order to emerge out their interest in various streams and what are the basic concepts they know on that domain.

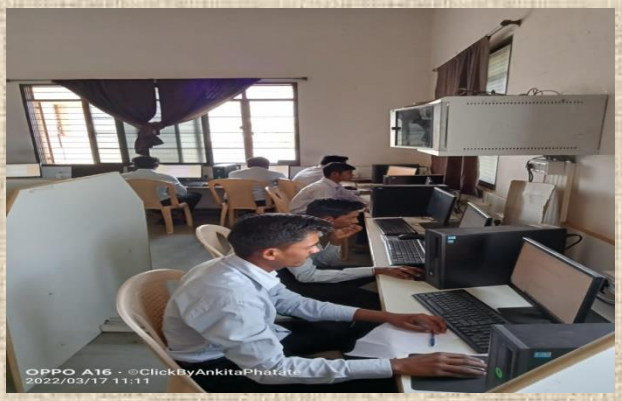
Our final year students have completed their in-plant training in Shams Energy Pvt Ltd, Sumago Infotech, Solapur

Our MOU's

Sr. No.	Name of Industry	MOU Date	Period of MOU
1.	Saksham Medicare Equipments & Services, Solapur	01/01/2022	3yrs from effective date
2.	Accutek Circuits Pvt. Ltd., Pune	07/03/2022	3yrs from effective date
3.	Aftek Pvt. Ltd. Solapur Chincholi Midc, Solapur	03/03/2021	3yrs from effective date

Co-curricular & Extra-curricular activities

Conducted a technical event **Quiz Competition** as a part of Co-curricular activities.



Celebrated various festivals and days under the **"ETSA Student Association"** as a part of Extra- curricular activities.

Fresher's Party

Women's Day

Traditional Day

Rangoli Competition

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

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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
Civil Engineering	60	3 Years
Computer Engineering	30	3 Years
Electronics and Telecom. Engineering	30	3 Years
Mechanical Engineering	60	3 Years
Total Intake	180