DEPARTMENT OF
ELECTRONICS AND TELECOMMUNICATION ENGINEERING
ANNUAL REPORT (2019-20)

- ## INTRODUCTION:

Department of Electronics and Telecommunication Engineering has been established in year 2009. The Department offers a Four Year Bachelor of Engineering Degree Program in Electronics and Telecommunication Engineering. It has well experienced and qualified faculty members as well as technical assistants. Total student strength of the department is 83.Department has well equipped classrooms with smart boards, audio/Video Facility, LCD Projector, OHP's, Multimedia PC, Internet facility.

- ## LIST OF TOPPERS:
  ## SEM III : NOV-DEC 2019-20 EXAMINATION

SR/NO.	NAME OF SUDENT	CGPA
1.	Vadke Riya Samadhan	8.15
2.	Patne Aniket Anil	8.12
3.	Jangam Siddhant Sandip	8.08
4.	Gurav Parag Vishnu	7.62
5.	Ilake Tanvi Tanaji	7.54

SEM V : NOV-DEC 2019-20 EXAMINATION

SR/NO.	NAME OF SUDENT	CGPA
1.	Paldhe Harshada Shriram	8.63
2.	Lahane Manjula Tanaji	8.37
3.	Aswekar Mayuri Sandeep	8.30
4.	Magdum Aishwarya Ashok	8.07
5.	Burate Rutuja Pandurang	7.81

SEM VII : NOV-DEC 2019-20 EXAMINATION

SR/NO.	NAME OF SUDENT	CGPA
1.	Chavan siddhi Vilas	8.19
2.	Raval Vaishnavi Shivaji	8.00
3.	Dandekar Omkar Mahesh	7.85
4.	Bait Vishal Rambhau	7.50
5.	Gandhi Vipul Vivek	7.38

• STUDENTS ACHIEVEMENTS:

1) Our BE student Mast.Viraj Mohite guided to SSC and HSC Students, Poladpur for their project in the month of Nov 2019.

2) Mr. Avdhoot Pandharkame & Group presented a paper in "UTOPIA" at FAMT, Ratnagiri on 29th Feb 2020 and got Third prize.

3) Mr. Saurabh Mali & Group participated in Project Competition in "UTOPIA" at FAMT, Ratnagiri on 29th Feb 2020.

4) Mr. Viraj Mohite & Group participated in Project Competition in "UTOPIA" at FAMT, Ratnagiri on 29th Feb 2020.

• SOME APPRECEABLE THINGS OF EXTC:

1) EXTC Placements- With the great and continuous efforts of our TPO Mr. Magdum sir, and EXTC departmental TPO co-coordinator, Prof. Pankaj Waraktotal 7 companies have visited and 10 students are placed in various companies.

2) Prof. Iltapawar T.L. Attended workshop on "**CAP Admission process and MHCET 2020**" organized by DTE, Mumbai on 11 Jan 2020.

3) Prof. Mohite.M.AAttended workshop on **"ON-LINE paper Assessment"**organized by Mumbai University at Ratnagiri, on 24 Jan 2020.

4) Prof. S.K.Muchande, Prof.. P.L.Warak,and two students from TE EXTC Yatin Tambade, and Swapnil Shigwan Attended workshop on "**Analysis of Infrastructure for Energized Irrigation**" at MIT, Aurangabad on 27 and 28 Jan 2020.

- ## <u>SOME IMPMEMENTED PROJECTS IN EXTC:</u>

1) **BILINGUAL SPEECHNOTE MAKER**

   (BE EXTC Miss. Kajal P. Ghorpade, Miss. Siddhi V. Chavan, Miss. Samprit J. Gowd)

   The need for real time captioning made speech recognition an area of great interest over the decades. But the lack of converted text into editable format paves a way for future research. Commonly used SR-mediated lecture acquisition (SR-mLA) methods, Real time captioning (RTC) and post lecture transcription (PLT) lacked edit ability. The availability of the context translated in regional language (Marathi) can provide better understanding for non-English reader. The objective of the proposed system is to make student's and writer's life relevant. It focuses on enhancement of speech recognition and raising the accuracy level of speech to text conversion. This proposed system will give us a good text editor format to be used through voice. Speech recognition is concerned with converting the speech waveform, an acoustic signal, into a sequence of words.

2) **IRBased UnderwaterCommunication**

   (Mr. Nikhil S. Shinde, Mr. Saurabh N. Mali, Mr. Prashant I. Suryawanshi)

   Underwater wirelesscommunication plays an important role in marine activitiessuchas environmental monitoring. Underwater explorationand scientific data collection.Herewe proposean IR based underwater communication system thatcanbe used for wireless communicationofmessages even through water.The system can prove tobe verycheap alternative to long heavy physical wires that runs throughseas required largecost for lying these wiresand their maintenance.Our system consistsof two microcontrollerbased circuit that have IR transmitter–receiver pairsas wellasLCD display for displayingmessages. This allows for efficient communication between two circuits efficiently.

3) **Event Branding Application project**

(Mr. Vishal R. Bait, Mr. Onkar A. Mohite, Mr. Suraj R. Mohite)

Event Branding Application project is a mobile based application and website that supports User registration, Event registration, Event payment and checkouts, Event Certificate generation, Event certificate verification and Administrator panel for events such as technical festival. It helps program attendees, organizers, the authors and the reviewers in their respective activities.

Development of Event Branding Application is an attempt to address the problems of managing registration forms. The main goal of this Website & Application is to give working solution to store, manage and consolidate the registration data.

Event Branding Application is mobile Application with Website for collecting registration forms automatically.

4) IOT Based Water Management System

(Mr. Omakr M. Dandekar, Miss. Dhanashree T. Kale, Miss. Samruddhi S. Indulkar.)

Water plays a vital role for living beings in their day to day life. It is the responsibility of every citizen to use water properly. It is observed that, due to mismanagement there is a substantial wastage of water.Water makes about 70% of the earth's crust. Most of the water is in the seas and oceans as salt water. This water is too salty to be used for drinking and for household work. Thus, only 3% is available to us as

fresh water. So, about only 0.003% of the freshwater is easily available to use in the form of groundwater, river, lake, soil moisture, and water vapour for our need of water consumption.

On an average one person wastes about 0-45 litersof water per day. To understand it better, it is 30% of water requirement per person per day. 125 million litres of water wasted daily. Traditional way of distribution of water is tends to waste water in large volume. In several housing complexes, the overhead water reservoirs often overflow as there is only one pump operator who has to manage filling up several water tanks in many blocks all by himself and often the pumps are switched off after much delay. This delay time waste lots of water.Somewhere an automatic pumping system is also used to distribute but lack of separate sensors for sump and overhead pump it leads to damage to the water pump when the sump is empty . So in this way both the methods lead to waste water and it requires continuous monitoring. Small amount of human error can do the same.

The solution for this problem is an IOT based water management system. This project is designed to overcome theabove issues and avoid the water wastage of overhead tanks. SR-04 sensor is used to calculate the actual level of the water tank and sends data to the microcontroller. Micro-controller ON/ OFF the water pump according to sensed value. As the project having separate sump sensor for detecting lower tank water level. If the level is low then it will automatically off the pump for dry run protection unless and until it will fry the motor. As the system is IOT based so no need to go on field for monitoring. This system also contains ESP Wi-Fi for connecting cloud platforms with active internet facility. All required status of the system is continuously updated on the android app. Using this system secure and continuous monitoring is possible. So manual work has reduced it makes more efficient, reliable and accurate work.
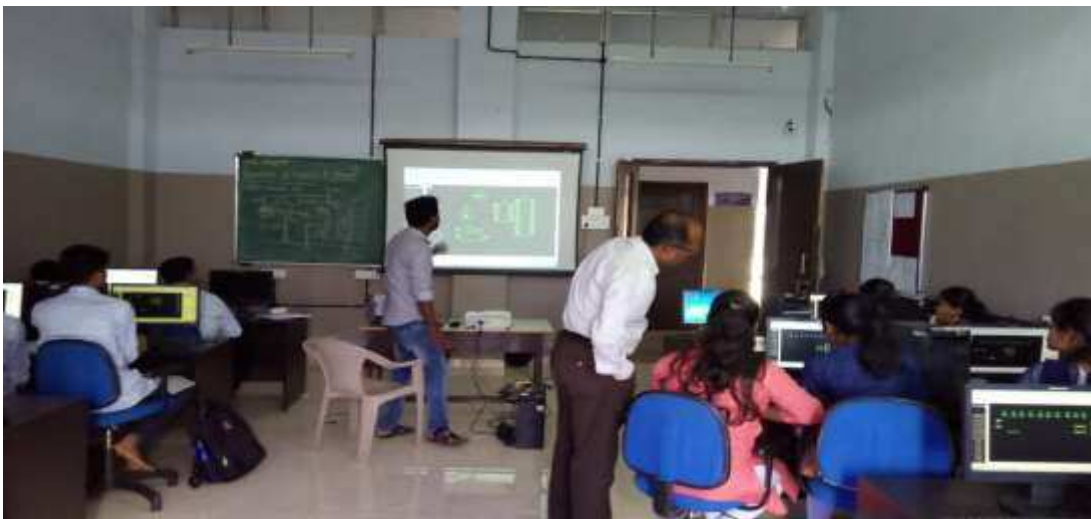
- # **PULSE ACTIVITIES**

    The Department Of EXTC is having student's association 'PULSE' stands for 'Pioneer Union for lighting the science of Engineering'. Prof. T. L. Iltapawar is working as PULSE coordinator for the academic year 2019-20. All the activities regarding workshops, fresher's party, Farewell, FDPs are taken by PULSEcommittee. For the successful conduction of all the following events, PULSE team worked very hard under the guidance of PULSE coordinator **Prof. T.L. Iltapawar**and HOD EXTC **Prof.S.R.Khedekar**.

	Post	Name of Student
1.	President	Mr. Vedant Babaram Mahadik
2.	Co-President	Miss. Aishawarya Ashok Magdum
3.	Secretary	Miss. MrunalDasharath katkar
4.	Treasurer	Miss. Tejal Sunil Niwate
5.	Decoration Head	Miss. Asmita Anil Bhilare
6.	Technical Head	Mr. Omkar Balkrishna Kadam
7.	Event Organizer	Miss. Raksha Suhas Sakapal
8.	Sports Head	Mr. Vinayak Vikram Shinde

PCB Design Workshop

The Department Of Electronics and telecommunication students association, 'PULSE' successfully organized workshop on **PCB Designing on**21th August 2019for SE EXTC students. The resource persons**, Mr.P.A.Patil** and **Mr. K.Y.Deolkar** are from ourDepartment with good experience in conducting such technical events. They took software and practical sessions for one day.

PLC-SCADA WORKSHOP

The Department Of Electronics and telecommunication students association, 'PULSE'successfully organized four days workshop on **PLC-SCADA**from 14th February**to** 17thFebruary 2020for SE and TE EXTC students. The resource persons**, Mr.Vikas Gadr Sir**and **Mr. RakeshChaudhari Sir**both are from "**Prolific Training Company, Pune"** with good experience in conducting such technical events. They took software sessions for four days. This is a workshop **"Arrange by students for students"**.

SEMINARS

1) With the major initiative of PULSE co-ordinator Prof. Iltapawar Tirupati,the department of EXTC has successfully organized one seminar on the interested topic, 'Industrial Automation' for SE and TE by Mr. Vivek Sardal on -28th January 2020.

2) With the major initiative of PULSE co-ordinator Prof. Iltapawar Tirupati,the department of EXTC has successfully organized one webinar on VLSI, Maven Silicon for TE on 4th October 2019.

3) In Coordination with PULSE COMMITTEE one of the faculty member form EXTC Dept. Prof. S.C. Munghate conducted a seminar on **"Online Learning and Certification"** for SE and TE studentsand motivated them and made aware about online courses through different platforms like NPTEL, Udemy.com, Coursera etc.

4) One of the faculty member and class teacher of TE EXTC Prof. S. D. Latakar conducted online session on Hon, Prime Minister'svideo **"Pariksha Pe Charcha"**& discussion on 21/1/2020 and 30/1/2020.

5) One of the faculty member from our department Prof. P. V. Oak conducted seminar on **"Literature survey on any Project"**for TE students of EXTC and Computer department jointly and guided all students for their last year project selection.

QUADCOPTER WORKSHOP

The department of EXTC has conducted one day workshop on 'Quadcopter & its Applications' in different colleges. This is quit helpful and great attraction for the students from surrounding diploma as well as B.Sc colleges. Some of them are as follows,

1) Under the guidance of Mr. K. Y. Deolkar students from EXTC Dept. Mr. Omkar Dandekar (T.E. EXTC), Mr. Vedant Mahadik (S.E. EXTC), Mr. Shashank Surve (S.E. EXTC) successfully arranged one day workshop at Institute of Petrochemical Engineering, Lonere, on 30th March 2019.

2) Under the guidance of Mr. K. Y. Deolkar and students from EXTC Dept. Mr. Omkar Dandekar (T.E. EXTC), successfully arranged one day workshop at Institute of Government Polytechnic, Malvan on 18th January2020.

3) Under the guidance of Prof. Pankaj Warak, Mr. K. Y. Deolkar and students from EXTC Dept. Mr. Omkar Dandekar (T.E. EXTC), successfully arranged one day workshop at Government Polytechnic, Ratnagiri on 7th March 2020.