Electronics & Telecommunication Engineering Department
Annual Report A.Y. 2022 – 23

It gives me immense pleasure to present the annual report of E&TC Engineering department, which includes various activities and achievements duringthe academic year 2022-23. It is the TEAM work that has made the difference.

At the starting of odd as well as even semester, orientation sessions were conductedfor each class by the Head of Department, Class Coordinators, Training & Placement Coordinator, GATE & Career Counseling Coordinator and Industrial Training coordinator. These orientation sessions have helped the students to understand the academic, co-curricular and extra-curricular requirements and the activities to be performed. This ensures that students are well prepared for placements and other career opportunities by the time they enter the final year.

1) ACADEMIC PERFORMANCE (ACADEMIC YEAR 2021-22)

B.Tech. (E&TC)

- **Class result: 100%**
- The first five rankers of B.Tech. are as follows.

Rank	Student Name	%
1	Putale Arpita Aravind	85
2	Burla Neharika Shrinivas	84.67
3	Hiremath Shravani Krishna	82
4	Nalla Rajesh Narendra	81.33
5	Patil Nikita Mahesh	80.67

TY (E&TC)

- **Class result: 100%**
- The first five rankers of TY are as follows.

Rank	Student Name	%
1	Chavan Abhinay Umesh	95
2	Korbu Saniya Salim	94.6
3	Rangrez Uzma Naaz Mehboob	94.6
4	Aishwarya Gurunath Awatade	94.6
5	Vijapure Meghana Rajshekhar	92.2

SY (E&TC) A Div

- **Class result: 100%**
- The first five rankers of SY are as follows.

Rank	Student Name	%
1	Parmali Mangesh Machindranath	81.29
2	Shaikh Farheensaba Nisar Ahmed	76.14
3	Mudgundi Laxmi Venugopal	73.43
4	Mergu Yogita Rajesh	73.14
5	Galpalli Bhagyashri Balkrushna	72.86

SY (E&TC) B Div

- **Class result: 100%**
- The first five rankers of SY are as follows.

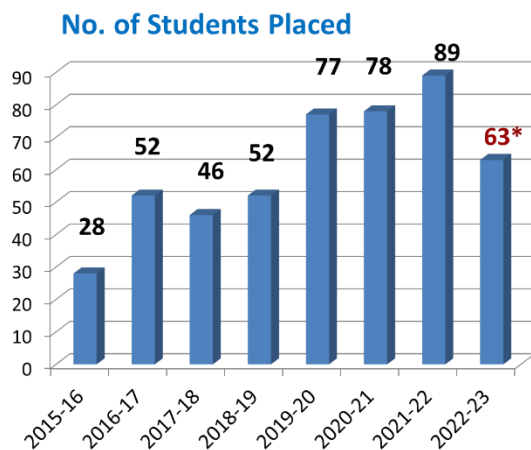| Rank	Student Name	%
1	Pathan Farheen Khanam Arif Khan	88.00
2	Boga Laxmi Shriniwas	87.57
3	Biradar Mallikarjun Muttanna	83.43
4	Kalaburgi Vaishnavi Santosh	83.00
5	Kondubhairi Trupti Dattatray	77.43

Best outgoing student:

Based on the academic performance, co-curricular activities and extracurricular activities, **Mr. Abhinay Chavan** has been selected as the best outgoing student of E&TC department for the academic year 2022-23.

2) TRAINING & PLACEMENT

The Training & Placement cell is taking utmost care for the placements and providing ample opportunities to the students. Softskill and Aptitude sessions are added in daily timetable for

all the classes. Various activities were conducted in a planned manner, which are as follows.

- Pre-Placement Workshop was conducted for Final Year students on General Aptitude and Interview Techniques by inhouse aptitude trainer and soft skill trainers.

- Special classes were conducted for TY students on general aptitude and soft skills by external agencies.

- For overall personality development of students, additional lectures on soft skills and aptitude were included in regular class time-table.

- Well planned company specific trainings were conducted before every Placement drive. As a result, total 63 students of Final year (E&TC) have been placed in different multinational and core companies till date.

No. of Students Placed

*still ongoing

Drives of different companies are still inprogress at the time of this report writing.

3) DEPARTMENT ADVISORY BOARD(DAB)

The aim of DAB is to review and enhance the quality of Curricular, Co-curricular, Extra-Curricular Activities, Student Internships and Placements.

DAB meetings are conducted in online as well as offline mode to take valuable suggestions from DAB members.

Members of DAB committee are as follows:

Sr. No	Name	Designation & Company/ Institute
1	Mr. P. Chandrasekar	Director, Technique Design Group, Secunderabad
2	Mr. Pradip Dhage	COO, STPI NEXT INITIATIVES, Bengaluru
3	Mr. R. M. Deshmukh	Head – IT Dept., Volkswagen, Pune
4	Mr. Amar Pol (Alumni 2012)	Senior Embedded Engineer, John Deere, Pune
5	Mr. Ravi Shidore	Director, Shidore Microsys, Pune
6	Dr. Satish Ket	Professor (CSE), R. G. I. T., Andheri(W), Mumbai
7	Mr. Raj Salunkhe	Director, PMS Robotics, Pune
8	Dr. M. M. Sardeshmukh	HOD (E & TC Engg), J. S. P.M., Narhe,Pune
9	Prof. S. S. Dhotre	NKOCET, Solapur
10	Prof. Roshan Pushpan	NKOCET, Solapur

All faculty members of the department are also members of DAB.

4) PROGRAM ACADEMIC COMMITTEE (PAC)

The main objective of PAC is to improve and monitor the quality of teaching-learningprocess. The Program Academic Committee is formed with the following members:

Sr. No.	Module	Module Coordinator
1	Analog Electronics	Prof. A. A. Chandanshive
2	Basic Communication Engineering	Prof. S. S. Dhotre
3	Advanced Communication	Prof. Roshan Pushpan
4	Embedded Systems	Prof S. V. Bag
5	VLSI	Dr. P. D. Bahirgonde

6	Signal Processing	Prof. A. I. Nadaf
7	Computer Programming	Prof. U. A. Bongale
8	Mini and Major Projects	Prof. R. S. Bakare

Scope of PAC: The program academic committee plays an important role in ensuring the quality of course delivery and assessment. The PAC members have worked actively to ensure:

a) The teaching plans are in place before commencement of class work.

b) Mapping of lecture outcomes drafted by course coordinator are inline with course outcomes.

c) Course outcomes drafted by the course coordinators are inline with the program outcomes.

d) Mapping of course outcomes and program outcomes.

5) FACULTY PUBLICATIONS

a) **Dr. V. S. Shirwal** "IoT based smart traffic control and ambulance clearance system" This paper is presented and published in 40th GISFI STANDARDIZATION SERIES MEETING Jointly with International Conference on 6G And Wireless Network Technologies organized by Kolhapur Institute of Technology's College of Engineering (Autonomous), Kolhapur on 3-5 April 2023.

b) **Prof. R. S. Bakare** "User Interface Testinh using Selenium WebDriver tool in Java" Published paper in UGC care journal on 8th Jan23 ISBN-13-979-8372932128.

c) **Prof. A. I. Nadaf** published a research paper in International Conference on communication, devices and networking 2021 entitled as "Decision tree based classification of SEMG and accelerometer data of sign language".

d) **Prof. U. A. Bongale** published "Design And Implementation of Real-Time Web-Based Vehicle Tracking System Using Sim." Journal of Pharmaceutical Negative Results (2022): 2822-2828.

e) **Prof. S. R. Mulmane** published paper "Cloud based Smart Digital Water Billing Meter" Journal of Pharmaceutical Negative Results Volume 13 Special issue 10 (2022).

f) **Prof. S. A. Kashid** published Performance comparison of feature extraction method for Facial Expression Recognition" International Conference on 6G and wireless network technology, organised by KIT Kolhapur on 03-05, March 2023.

g) **Prof. S. A. Kashid** published "Performance Comparison of DNN and SVM classifier for face expression recognition" International Conference ICIEECE-2023 organised by Si. ANN's College of Engineering and Technology Chirala on 08-09 January 2023.

h) **Prof. S. A. Kashid** published "Development of Android Application for Doctor's Appointment" International Conference ICIEECE-2023 organised by Si. ANN's College of Engineering and Technology Chirala on 08-09 January 2023.

i) **Prof. S. A. Kashid** published "A Review of human facial expression recognition systems applied for wild dataset in last decade" at AIP Conference Proceedings on 31 Oct 2022.

j) **Prof. A. G. Dhanshetti** published paper "Microcontroller Based Material Shifting Robotic Arm" Journal of Pharmaceutical Negative Results Volume 13 Special issue 10 (2022).

6) SHORT TERM COURSES / CONFERNCES / FDP / STTP / NPTEL COURSES BY FACULTY MEMBERS S

Faculty members have enthusiastically attended different workshops, STTPs and FDPs in online as well as offline mode, details are given below.

Name	Title of the FDP / professional development / administrative training program	Dates
Mr. Dhotre S. S.	One week online STTP on "Machine Learning",organized by Dept of IT, Sinhgad Institute of Technology, Lonavala.	7th to 11th Dec 2022
Mrs. S.V.Bag	One week FDP on Artificial Intelligence/Machine Learning/Deep Learning	20/02/23 to 24/02/23
Mr. Bakare R. S.	NPTEL Course on Speaking Effectively	Jan-Mar 2023
Mr. A.A. Chandanshive	NPTEL courses on "Computer Vision and Image Processing-Fundamental and Applications "	Jan-Mar 2023
Ms.Bongale U.A.	One Week Faculty Development Program on "Internet of Things-Industry 5.0" Organized by SINHGAD INSTITUTE OF TECHNOLOGY, LONAVALA	20 TO 24 FEB 2023
Mrs. Kashid S. A.	NPTEL course on "Accreditation and Outcome based Learning"	Aug-Oct 2022
Ms. S.S. More	NPTEL course on "Accreditation and Outcome based Learning"	Aug-Oct 2022

7) WORKSHOPS CONDUCTED FOR STUDENTS

- **"Arduino workshop" for S.Y. students**
- Date: 1st October 2022.
- Workshop Coordinator :
  - Prof.   R.S.Bakare
  - Resource Persons:
  - o Prof. Roshan Pushpan
  - o Prof. S. R. Mulmane
- Prof. Vaibhav Nema
- No. of participants: 68
- **Workshop on "C Programming" for students**

- Date: 14th October 2022
- Workshop Coordinator: Prof. R. S. Bakare
- Resource Person: Mr. Pataskar
- Class : SY
- No. of participants: 68

8) INDUSTRY CONNECT

A) Students Industrial Training and Internships

Industrial training helps to make students industry-ready by exposing them to newer technologies and engineering methodologies. Also it provides great platform to students for exposure of industrial atmosphere & ethics.

Final year students are undergoing their internships of one semester in various industries listed below:

Sr. No	Name of Industry	No. of Students	Stipend (Rs.)
1	Vector India Pvt Ltd, Hyerabad	1	Nil
2	GAO Tek Inc, USA	1	Nil
3	Fourfront Pvt.Ltd, Pune	1	10000/-
4	OEN India Ltd, Pune	22	10000/-
5	Maxgen Technology Pvt	1	Nil
6	Vigyan Ashram, DIC, Pune	1	15000/-
7	The Kiran Academy, Pune	3	Nil
8	KATARE INFORMATICS, Solapur	1	Nil
9	PENTAGON SPACE PVT.LTD Bangalore	1	Nil
10	CYBER SUCCESS,Pune	4	Nil
11	GREENNGOLD, Jaysingpur	1	Nil
12	Javaby Kiran, Pune	1	Nil
13	Mind Born Software Solutions Solapur	10	Nil
14	TCS, Pune	3	Nil

Sr. No	Name of Industry	No. of Students	Stipend (Rs.)
15	Globus Thenken, Pune.	1	15000/-
16	iNeuron Intelligence Pvt. Ltd, Bangalore	1	Nil
17	L&D INFOTECH PVT. LTD, Pune	2	Nil
18	Kwick Coder, Pune	1	Nil
19	Code World , Solapur	1	Nil
20	Sampanna Bharat Software Solution, Solapur	1	Nil
21	Codefeast, Pune	4	Nil
22	MAVEN Silicon, Bangalore	2	Nil
23	Salgem Infoigy Tech Pvt. Ltd.,Solapur	1	Nil
24	Naresh itechnologies, Hyderabad	2	Nil
Total students		**67**	

B) Industry Visit

A study tour for TY students was undertaken to Dudh Pandhari & Srujan Food Pvt. Ltd. , on 02/04/2023. This visit was mainly focussed on to understand the advanced technology used in manufacturing, Processing & Packing of products.

Outcome of Industrial visit

The advanced technology and the equipment used for manufacturing, Processing & Packing of products.

• The various sensors used at milk processing Industry were explained.

• Discussion on the difficulties faced and possible solutions to overcome these difficulties was held.

C) EXPERT LECTURES BY EMINENT PERSONALITIES FROM VARIOUS FIELDS

Students are exposed to the most recent developments in technology through expert talks by different experts from industry. The details are as follows:

Class:- S.Y.			
Sr. No	Resource Person	Date	Topic
1	Mr. Akshay Phadke	02/11/22	Need of Cyber Security and Domains in Cyber Security
2	Dr. Ajay Deshmukh (Bhaskaracharya Prathishthan, Pune)	26/05/23	Importance and Applications of different Distribution Functions
Class:- T.Y.			
Sr. No	Resource Person	Date	Topic
1	Mr. Santosh Bhandarkavathe (Founder IoTY, Solapur)	13/10/22	How to choose project title, Literature Review, Product Design Life Cycle
2	Mr. Akshay Phadke	02/11/22	Need of Cyber Security and Domains in Cyber Security
3	Mr. Suhas Swami (J.T.O BSNL, Solapur)	09/05/23	Mobile & Digital Communication

9) ASSOCIATION OF ELECTRONICS & TELECOMMUNICATION STUDNETS (AEXS)

The department has an active student association – AEXS, which provides a platform for students' overall development. Through AEXS, various extra-curricular activities were organized. The details of the activities organized are as follows:

Sr. No.	Activities conducted	Date
1	Guru Pornima	13/07/22
2	Teacher's Day	06/09/22
3	Engineer's Day	19/09/22
4	Guest lecture on "Cyber security"	02/11/22
5	Department's Technical event "Espark 2022"	29/11/22
6	Fresher's Welcome	06/12/22
7	Farewell to Final year students	27/05/23

Office Bearers of AEXS are as follows:

• President

  Mr. Pritam Hinge

- Vice- President
    1) Mr. Shashank Bugadi
    2) Mr. Mayur Zaveri
- Secretary & Co Secretary
    1) Mr. Amarnath Patil
    2) Ms. Priyanka Uttarkar
- Technical committee Head
    1) Mr. Raj Mhamane
    2) Ms. Nandini Modi
- Info gallery committee Head
    1) Mr. Abhishek Mane
    2) Ms. Madiha Shaikh
- Cultural committee Head
    1) Mr. Yash Talikoti
    2) Mr. Mayur Kamgonde
- Treasurer
    Mr. Pramod Umbarje
    Mr. Shashank Bugadi
    Mr. Mayur Zaveri
    Mr. Deepak Rathod
- Social Media &Photography Committee
    Mr. Raj Mhamane

10) NPTEL COURSES

A lot of enthusiasm was observed in the students for online courses from NPTEL. Students registered for different courses for credit transfer and minor degree.

A) Credit Transfer from SWAYAM Platform Courses

As the All India Council for Technical Education (AICTE) has urged all universities and colleges to allow up to 20 percent credit transfer in every semester through the central government's SWAYAM, Students of final year are enrolled in following NPTEL courses on SWAYAM platform. Details of student enrolment is as given below.

Sr. No.	Class	NPTEL online course	No. Of students registered
1	Final Year B.Tech	Introduction to internet of things	39
2	Final Year B.Tech	Computer vision and Image processing	7

B) Honors and Minor Engineering Degree

Dr. Babasaheb Ambedkar Technology University (DBATU) has announced Honors & Minor degree programs for students pursuing Bachelor of Technology as a major reformfrom the academic year 2020-21. DBATU, hasbecome first of its kind in the State to havesuch a facility. Under this, students get to study two degrees with the program. While they can continue securing a degree in B.Tech, they can also opt for any minor program. While astudent can opt for ENTC engineering as amain degree, the same student can go forComputer Science engineering as minordegree. This will be a major boost to enhance student's employability.

11) CONTRIBUTION OF FACULTY MEMBERS AT DEPARTMENT AND INSTITUTE LEVEL ACTIVITIES

There has been active participation of our faculty members in various department level and institution level activities, which is evident from the following table.

Sr. No.	Name of Faculty	Department and Institute responsibilities
1	Prof. S. S. Dhotre	- Head of Department, - Chairman - Dept. Advisory Board - IQAC member - Member of Institute Innovation Cell - Member of Anti-Ragging Committee

2	Prof. I. I. Mujawar	• Dean (Student Counseling & Welfare) • PTA coordinator
3	Dr. P. D. Bahirgonde	• Dean (Academics) • NPTEL coordinator • R&D coordinator • Internal Complaint Committee Head
4	Prof. S. V. Bag	• POE & Test coordinator
5	Prof. Roshan Pushpan	• Training & Placement coordinator • Alumni coordinator • DAB Secretary • Suggestion Box Incharge*
6	Prof. R. S. Bakare	• CII coordinator* • AEXS coordinator • MOU coordinator
7	Prof. A. I. Nadaf	• Roboclub coordinator* • Cultural coordinator* • Virtual lab coordinator* • Student competitions and Hackathon coordinator
8	Prof. A. A. Chandanshive	• Project & Seminar coordinator • Accreditation & AMC coordinator • Innovation Cell coordinator • Equal opportunity coordinator
9	Prof. R. R. Shriram	• Sports coordinator* • Time table coordinator Programming practice main coordinator
10	Prof. S. R. Mulmane	• Website coordinator • Activity Register & Annual Magazine Report coordinator • Student welfare coordinator
11	Prof. U. A. Bongale	• Co-curricular courses coordinator • Internship & training coordinator • Spoken Tutorial coordinator
12	Prof. S. A. Kashid	• Newsletter Coordinator • Diploma Connect Coordinator
13	Prof. Vaibhav Nema	• Career Counseling & GATE coordinator • Central Library coordinator • Department Library coordinator
14	Prof. A.G. Dhanshetti	• Department Archives Coordinator • NPTEL coordinator

On behalf of E&TC Engineering Department , I express my deep gratitude towards all the individuals who are directly or indirectly involved in the department development.

(Prof. S. S. Dhotre)

Head of Department