

**Electronics & Telecommunication Engineering
Department**

Annual Report A.Y. 2020 – 21



It gives me immense pleasure to present the annual report of E & TC Engineering department, which includes various activities and achievements during the academic year 2020-21. It is the TEAM work that has made the difference.

In spite of lockdown, we have continued with curricular and co-curricular activities. At the starting of odd as well as even semester, orientation sessions were conducted in online mode for 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 by the students. 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 2019-20)**

BE (E&TC)

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

Rank	Student Name	% Marks
1	Uttarkar Aditi Kiran	86.95
2	Chittar Sandhya Venkatesh	81.98
3	Kulkarni Shwetambari Gajanan	81.97
4	Vernekar Shruti Nagraj	81.54
5	Sawant Pooja Shivaji	80.65

TY (E&TC)

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

Rank	Student Name	% Marks
1	Chavan Snehal Karan	87
2	Surwase Arati Sumant	86.7
3	Alla Rajeshwari	84.7
4	Hanamgaon Prasanna Rajesh	84.6
5	Yalgunde Nikita Sanjay	84.2

SY (E&TC)

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

Rank	Student Name	% Marks
1	Hiremath Shravani Krishna	87.7
2	Kalshetti Abhishek Vijaykumar	86.2
3	Birajadar Pooja Rajkumar	86.1
4	Nalla Rajesh Narendra	86
5	Burla Neharika Shrinivas	85.9

Best outgoing student:

Based on the academic performance, co-curricular activities and extracurricular activities, Miss. Ratan Shankar Chanshetti has been selected as the best outgoing student of E&TC department in the academic year 2020-21.

**2) ONLINE ACTIVITIES DURING
LOCKDOWN PERIOD**

The current situation has led to closing down of schools, colleges and universities following the spread of Covid-19. This has further affected the students and aspirants preparing for their future. But we believe that learning should not stop, hence physical education has moved to the virtual mode. Many innovative ways and online tools are used to optimize online learning. Online classes have been conducted to continue

education even when the college is closed. Also online internships and informative webinars were arranged for students. Online lectures are conducted using Google meet and all the assignment submissions and tests are carried out on Google classroom. Details of online activities are given below.

- a. During lockdown period, online internships through COURSEERA platform are completed by all S.Y. students. Online industrial training was conducted via internship by industries such as Zensar technologies Ltd., Pune and GTT for T.Y. students. Total 70 students from final year are undergoing their Sem-VIII internships at various industries with good stipend.
- b. Various online courses, workshops, FDPs, STTP and training sessions have been successfully completed by all our faculty members.
- c. Online proctor meetings are conducted by respective proctor teachers. Parents meet was conducted by HOD, class coordinators and T&P coordinator to make parents aware of placement activities and importance of PPW sessions.
- d. Students association AEXS has organized online competitions such as Android App Development Competition and Online Coding competition.
- e. Syllabus of practical subjects is covered using Virtual lab platform for all the subjects.
- f. Online presentations for Mini projects and final year projects are conducted by forming a panel of faculty members for evaluation.
- g. Video lectures are recorded for mathematical subjects by faculty members on

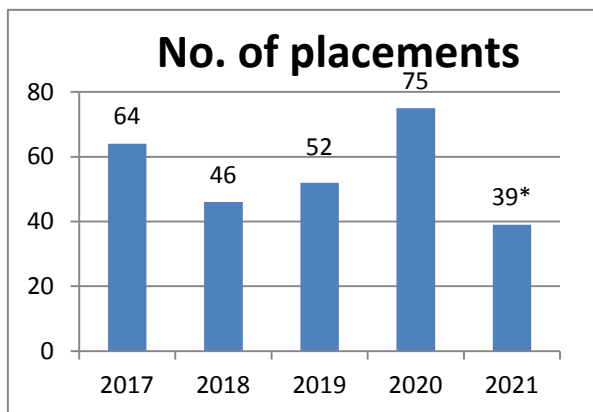
important topics and made available to the students.

h. Continuous assessment and Mid-sem exams are conducted online through various platforms such as Google classrooms and Google forms. The exams are not only restricted to multiple choice questions (MCQs) but various activities such as open book exam, presentations, design and drawing type assignments and mini projects are also conducted for different subjects. These additional activities are conducted for overall knowledge and skill assessment of students.

3) TRAINING & PLACEMENT

The Training & Placement cell is taking utmost care for the placements. 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 39 students of Final year (E&TC) have been placed in different multinational and core companies till date. Drives of different companies are still in progress at the time of this report writing.



*still ongoing

4) 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. Members of DAB committee are as follows

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

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

In this academic year DAB meeting was conducted in online mode through Google meet

on 31st October 2020. The main objective was to take inputs for Vision, Mission, PEOs and PSO statements of department and placements. DAB members gave valuable inputs for finalizing PSOs and PEOs.

5) PROGRAM ACADEMIC COMMITTEE (PAC)

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

Sr. No.	Module	Module Coordinator
1	Analog Electronics	Prof. I. I. Mujawar
2	Basic Communication Engineering	Prof. S. S. Dhotre (Chairman)
3	Advanced Communication Engineering	Prof. Roshan Pushpan (Secretary)
4	Embedded Systems & VLSI	Prof. S.S. Joshi
5	Signal Processing	Dr. P. D. Bahirgonde
6	Computer Programming	Prof. U. A. Bongale Prof. A. I. Nadaf
7	Mini and Major Projects	Prof P. P. Kulkarni

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:-

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

6) FACULTY ACHIEVEMENTS

- a) Prof S. S. Dhotre successfully completed Online Orientation Training Program for Mentors under National Initiative for Technical Teachers Training (NITTT) and is now certified as AICTE approved mentor for mentoring Inductee teachers of our institute for 8 basic Modules of AICTE-NITTT Faculty Induction Programs.
- b) Prof R. R. Shriram has got certification on "Introduction to Programming using Python" by Microsoft.
- c) Prof. A. I. Nadaf received first prize in "Idea Expolaration Contest" organized by Cummins College of engineering for woman".
- d) Prof. A. I. Nadaf received special prize in national level 2D animation using Synfig, at a Hackathon organized by IIT Bombay.

7) WORKSHOPS, SEMINARS, STTPs ATTENDED BY FACULTY MEMBERS

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

i) Prof. S. S. Dhotre

- Two week AICTE sponsored online FDP on “Statistical Inference and Linear Algebra (Series-I)” from 15th-27th Feb 2020 organized by DBATU, Lonere.

- Two week AICTE sponsored online FDP on “Approaches of Engineering Pedagogy to improve the quality of teaching in Engineering Education” from 27th Oct - 07th Nov 2020 organized by Ballarpur Institute of Technology, Chandrapur.
- One week ATAL online FDP on “Ethics, moral values, behavioral science and Attitude” from 12th-16th Oct 2020 organized by College of Engineering, Trivandrum.
- One week ATAL online FDP on “Leadership and Excellence” from 23rd-27th Nov 2020 organized by National Institute of Technology, Trichy.
- One week ATAL online FDP on “5G LTE Wireless Communication systems for NB-IoT” from 7th-11th Dec 2020 organized by Lendi Institute of Engineering and Technology, Jonnada (A.P.).
- One week ATAL online FDP on “5G – Green Communication Network Deployment in Smart Cities” from 18th-22nd Jan 2021 organized by Acharya Institute of Technology, Bangalore.
- One week AICTE & TEQIP III sponsored online FDP on “Digital Transformation and Pedagogies” from 10th-14th Aug 2020 organized by Government College of Engineering, Karad and Walchand College of Engineering, Sangli.
- One week online FDP on “Universal Human Values” from 2nd-6th July 2020 organized by AICTE, New Delhi.
- One week online FDP on “Smart Technology Pillars of 5G and Beyond” from 27th-31st Jan 2021 organized by Sinhgad institute of Technology and Science, Narhe, Pune.

- One week online FDP on “Future technologies for Smart Cities” from 1st-5th Feb 2021 organized by Shri Sant Gajanan Maharaj College of Engineering, Shegaon.
- One week online FDP on “Enhancing Research and Consultancy Skills” from 22nd-26th June 2021 organized by Rajarambapu Institute of Technology, Sakharale.

ii) Dr. P. D. Bahirgonde

- One week online workshop on Universal Human Values on the theme “Inculcating Universal Human Values in Technical Education” during 28th July-1st Aug 2020 as organized by All India Council for Technical Education(AICTE).
- One week National level online FDP on "Digital Transformation & Pedagogies” by Government College of Engineering, Karad & Walchand College of Engineering, Sangli from 10th -14th Oct 2020.
- 2 days workshop on National Educational Policy from 18th-19th Sept 2020 organized by DBATU.
- One week AICTE Training And Learning (ATAL) Academy Online FDP on “Artificial Intelligence” from 5th-9th Oct 2020 organized by Indian Institute of Plantation Management, Bengaluru.
- One week AICTE Training And Learning (ATAL) Academy Online FDP on “Artificial Intelligence” from 2nd-6th Nov 2020 organized by MES Institute of Management& Career Courses, Pune.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere,

and NKO CET, Solapur from 17th-19th Mar, 2021.

- 4 week course on “Neural Network and Deep Learning” on COURSERA Platform.
- 4 week course on “Python Data Structures” on COURSERA Platform.

iii) Prof. I. I. Mujawar

- One week National level online FDP on "Digital Transformation & Pedagogies” by Government College of Engineering, Karad & Walchand College of Engineering, Sangli from 10th -14th Oct 2020.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKO CET, Solapur from 17th-19th Mar, 2021.
- 2 day workshop on National Educational Policy from 18th-19th Sept 2020 organised by DBATU.

ii) Prof. S. S. Joshi

- One week online workshop on Universal Human Values on the theme “Inculcating Universal Human Values in Technical Education” during 28th July- 1st Aug, 2020 as organized by All India Council for Technical Education(AICTE).
- One week online workshop on "VLSI Physical Design using Condence Innovus Tools" during 20th- 24th July 2020 organized by Dept. of Electronics & Communication, St. Joseph COE, Chennai.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKO CET, Solapur from 17th-19th Mar, 2021..

- Master Class on FPGA during (21 Days) 19th Apr-12th May 2020 organized by Pantech, Prolabs India Pvt. Ltd.
- Course completed on COURSERA of 4 week “Programming for Everybody (Getting started with Python)” completed on 26/6/20.
- AICTE Training And Learning (ATAL) Academy Online FDP on "VLSI design, Verification & Testing" from 7th-11th June, 2021, Government Engg. College, Rajkot.

iv) Prof. A. A. Kshirsagar

- One week National level online FDP on "Digital Transformation & Pedagogies" by Government College of Engineering, Karad & Walchand College of Engineering, Sangli from 10th -14th Oct 2020.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKOCET, Solapur from 17th-19th Mar 2021.
- One week FDP on “PCB Design using Autodesk® Fusion 360TM” by E&TC Department, N. K. Orchid College of Engineering & Technology, Solapur in association with Autodesk, India from 8th-12th Feb 2021.
- AICTE Training And Learning (ATAL) Academy Online FDP on "ROAD - Response Effectiveness, Organizing Self, Attitudinal Shift, Decision Making" from 7th-9th Sept at Indira Gandhi Delhi Technical University for Women.
- Online 12 weeks Swayam Course on "Digital Circuits" from September to December 2020.

- Online 12 weeks Swayam Course on "Introduction to Embedded System Design" from September to December 2020.

v) Prof. U. A. Bongale

- 5 days AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 23rd-27th Nov 2020 at Centre for Development of Advanced Computing, Kolkata.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKOCET, Solapur from 17th-19th Mar, 2021.
- 5 days online workshop on Universal Human Value on the theme “Inculcating Universal Human Values in Technical Education” during 5th– 9th Aug, 2020 as organized by AICTE.

vi) Prof. P. P. Kulkarni

- One Week AICTE-ISTE Sponsored orientation/refresher online program on Scope of IOT & its Application in Automotive & Agricultural Industry from 3rd -8th May,2021 organized by Govt. COE & Research, Awasari, Pune
- One week FDP on “PCB Design using Autodesk® Fusion 360” organized by E&TC Department, N. K. Orchid College of Engineering & Technology, Solapur in association with Autodesk, India from 8th-12th Feb 2021.
- TEQIP III sponsored STTP on “Microwave Passive Circuits and Antennas: Design, Simulation and Measurements” from 25th-

27th Mar, 2021" organized by DBATU and RC Patel Institute of Technology, Shirpur

- TEQIP III sponsored Three day Online FDP On "Modern Trends in Healthcare Technologies" organized by DBATU, Lonere, and NKOCET, Solapur from 17th-19th Mar, 2021.
- AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 25th-29th May 2020 organized by Govt. Engg. College, Rajkot.
- AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 1st-5th Oct 2020 organized by Motilal Nehru NIT, Allahabad.
- AICTE-ISTE sponsored one week online refresher/induction program on "Internet of Things" from 7th-12th Apr 2021 organized by A.G. Patil Institute of Technology, Solapur.

vii) Prof. Roshan Pushpan

- AICTE Training And Learning (ATAL) Academy Online FDP on "Smart Cities" from 12th-16th Oct 2020 at Indian Institute of Information Technology Dharwad.
- TEQIP III sponsored Three day Online FDP On "Modern Trends in Healthcare Technologies" organized by DBATU, Lonere, and NKOCET, Solapur from 17th-19th March, 2021.
- 2 day workshop on National Educational Policy from 18th-19th Sept 2020 organized by DBATU, Lonere.
- One week online workshop on Universal Human Values on the theme "Inculcating Universal Human Values in Technical Education" during 28th July- 1st August, 2020

as organized by All India Council for Technical Education (AICTE).

- One week FDP on "PCB Design using Autodesk® Fusion 360" organized by E&TC Department, N. K. Orchid College of Engineering & Technology, Solapur in association with Autodesk, India from 8th-12th Feb 2021
- One week National level online FDP on "Digital Transformation & Pedagogies" by Government College of Engineering, Karad & Walchand College of Engineering, Sangli from 10th-14th Oct 2020.

viii) Prof. R. S. Bakare

- TEQIP III sponsored Three day Online FDP On "Modern Trends in Healthcare Technologies" organized by DBATU, Lonere, and NKOCET, Solapur from 17th-19th Mar, 2021.
- One week FDP on "PCB Design using Autodesk® Fusion 360" organized by E&TC Department, N. K. Orchid College of Engineering & Technology, Solapur in association with Autodesk, India from 8th-12th Feb 2021.

ix) Prof. A. I. Nadaf

- AICTE sponsored one week online STTP on "Advances in Biomedical Signal processing with hands-on from 7th-12th Sept 2020 organized by Cummins college of Engg. for Women, Pune
- AICTE sponsored 6 days STTP on "Augmented Reality & Virtual Reality A Future Tech" from 19th-24th Oct 2020 organized by Sai Krishna COE & Technology, Coimbatore.

- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKO CET, Solapur from 17th-19th Mar, 2021.
- 3 days FDP on AI ML conducted by Zensar Technologies from 27th-29th Mar 2021.

x) Prof. A. A. Chandanshive

- Five week COURSERA Course by Vanderbilt University on "Introduction to Data, Signal, and Image Analysis with MATLAB" from 4th May - 15th June 2021.
- Twelve week NPTEL AICTE sponsored FDP on "Computer Vision and Image Processing" from 18th Jan – 09th Apr 2021.
- One week AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 23rd-27th Nov 2020.
- One week AICTE Training And Learning (ATAL) Academy Online FDP on "Medical Image Processing and Deep Learning Technologies" from 21st-25th Sept 2020.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKO CET, Solapur from 17th-19th Mar, 2021.
- One week AICTE sponsored STTP on "Trends and Challenges in Medical Image Analysis using Deep Learning Algorithms" by V.R.Sidhartha Engineering college, Vijayvada from 26th-31st Oct 2020.
- One week National level online FDP on "Digital Transformation & Pedagogies” by Government College of Engineering, Karad & Walchand College of Engineering, Sangli from 10th-14th Oct 2020.

- One week FDP on “PCB Design using Autodesk® Fusion 360” organized by E&TC Department, N. K. Orchid College of Engineering & Technology, Solapur in association with Autodesk, India from 8th-12th Feb 2021.

xi) Prof. R. R. Shriram

- One week online FDP on "Full stack development using Bootstrap and Python Django Framework" from 22nd-27th Mar 2021.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKO CET, Solapur from 17th - 19th March, 2021
- One week AICTE Training And Learning (ATAL) Academy Online FDP on "Data Science using Python" from 23rd-27th Nov 2020 organized by GP, Gandhi Nagar.
- One week AICTE Training And Learning (ATAL) Academy Online FDP on "Wearable Devices" from 21st-25th Sept 2020 organized by COE, Pune.
- Six days Online FDP "GuruCool" and One month "Project build-a-thon" by IBM from Sept-Oct 2020 organized by IBM, India.
- One week National level online FDP on "Digital Transformation & Pedagogies” by Government College of Engineering, Karad & Walchand College of Engineering, Sangli from 10th-14th Oct 2020.
- Ten days Online workshop on "Introduction to Programming using Python" by Code IT Solutions from 10th-20th August 2020.
- Five days National level Online Industrial Training on "Future Scope of Engineering in

Global Development" by Velelar College of Engineering and Technology, Erode, Tamilnadu and PANTECH Solutions, from 27th -31st July 2020.

xii) Prof. S. R. Mulmane

- One week online workshop on Universal Human Values on the theme “Inculcating Universal Human Values in Technical Education”, organized by All India Council for Technical Education(AICTE) from 31st May– 4th June, 2020.
- AICTE ISTE sponsored Induction/refresher (2nd phase) program on “Active Teaching Learning Process”, organized by Mauli Group of Institution’s College of engineering and technology, Shegaon from 22nd -27th Mar 2021.
- TEQIP III sponsored Three day Online FDP On “Modern Trends in Healthcare Technologies” organized by DBATU, Lonere, and NKOCET, Solapur from 17th-19th Mar, 2021.
- One week FDP on “PCB Design using Autodesk® Fusion 360” organized by E&TC Department, N. K. Orchid College of Engineering & Technology, Solapur in association with Autodesk, India from 8th-12th Feb 2021.
- One week online ATAL FDP on “Control Systems & Sensor Technology”, organized by Madan Mohan Malaviya University of Technology Gorakhpur from 17th-21st Oct 2021.
- One week online ATAL FDP on “Control Systems & Sensor Technology”, organized by Bhilai Institute of technology, Durg from 2nd -06th Nov 2021.

8) FACULTY DEVELOPMENT PROGRAMS & WORKSHOPS CONDUCTED

- a) “FDP on PCB Design using Autodesk Fusion 360” was organized by the Department in association with Autodesk, India. The FDP was conducted from 8th-12th February 2021 in online mode through ZOOM Platform. Resource person for the FDP was Mr. Belal Kumar (freelancer & expert in PCB Design). The FDP was coordinated by Prof S. S. Dhotre. 95 participants attended and successfully completed the FDP.
- b) A TEQIP III sponsored FDP on "Modern Trends in Healthcare Technologies" was conducted from 17th - 19th March 2021 by the department in association with Dr. Babasaheb Ambedkar Technological University, Lonere in online mode. The FDP was coordinated by Prof. S. S. Dhotre. 53 faculty members and research scholars successfully completed the FDP.
- c) One day workshop on "Introduction to Virtual lab" was organized by the department for diploma faculties. The workshop was coordinated by Prof. Akhtar Nadaf.
- d) One day workshop on "Introduction to Virtual lab" was organized by the department for Shri Shivaji Mahavidlaya Barshi. The workshop was coordinated by Prof. Akhtar Nadaf,
- e) One day workshop on "Introduction to Virtual lab" was organized by the department for DBF Dayanand college of Arts and science Solapur. The workshop was coordinated by Prof. Akhtar Nadaf.

9) 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 6 months in various industries listed below:

Sr. No	Name of Industry	No. of Students	Stipend (Rs.)
1	Varroc Engineering Pvt Ltd , Chakan, Pune	18	14500/-
2	Sedmac Mechatronics Pvt. Ltd., Pune	1	13160/-
3	Chedda Electrical & Electronics, Palshi, Satara	5	8000/-
4	Finolexzone Technology, Solapur	2	---
5	Orbital House, Pune	1	---
6	NGX Technologies, Bangalore	2	---
7	Sciencetech Technologies, Indore(MP)	1	8000/-
8	Dassaults Systems Pune (Through Mechanical Dept.)	3	---
9	Precision Camshafts, Solapur (Through Mechanical Dept.)	3	---
10	Micromax Technologies, Pune	1	4000/-
11	Iconsys Tech Vision Pvt. Ltd, Pune	9	4000/-
12	Bodhi Technology, Solapur	3	---
13	Vighnaharta Technologies Pvt. Ltd., Pune	1	---

14	Sampanna Bharat Software Solutions, Solapur	2	3000/-
15	M. I. T. World Peace University TBI, Pune	4	2000/-
16	R. K. Info systems, Hyderabad	2	8000/-
17	Shidore Microsys Electronics Pvt. Ltd, Pune	6	2000/-
18	O/E/N India Ltd.	2	---
19	Ultratech Cement, Solapur	3	---
20	Ingenio Technology, Pune	1	---
Total students		70	

For third year students, online industrial training was conducted as given below.

Sr. No.	Name of Industry/ Platform	No. of Student	Topic	Duration
1	Zensar Technologies Ltd. Pune	37	Python , C,C++, Data Structure , DBMS	10 days (19 th - 30 th Nov 20)
2	GTT	73	C, C++, Communication Skills	1 week (15 th - 20 th Feb 21)
3	Udemy (Ongoing Course)	64	Data structure & Algorithm in Python	2 Weeks

As a part of industrial training, following skill development courses were conducted for S.Y. students.

Sr. no.	Course name	Online Platform	No. of students
1	C Programming	COURSERA	1
2	Programming Fundamentals	COURSERA	3
3	C++ Tutorials for complete Beginners	Udemy	1
4	MongoDB for Java Developer	Udemy	1

5	C++ for Beginners	Great Learning Academy	1
6	Learn The basics of C Programming	Eduonix	1
7	Global Navigation Satellite system	Solo Learn	1
8	English Language for Beginners	Udemy	1
9	C Course	Solo Learn	10
10	C for Beginners	Great Learning Academy	3
11	C Programming Basics	European Open University	7
12	C Programming for the Beginners - Master the C Language	Udemy	7
13	C++ Programming step by step From Beginners to Ultimate Level	Udemy	1
14	Deep learning C Programming Workshop	AVIS Computers	1
15	Easy Learning C ++ for beginners	Udemy	1
16	Java Programming	Great Learning Academy	1
17	Mastering Data Structures & Algorithms using C and C++	Udemy	1
18	Microsoft AI Classroom Series	Microsoft	1
19	Writing, Running, and Fixing code in C	COURSERA	1
Total students			43

B) SPONSORED PROJECTS

The department is active in solving societal problems through industry sponsored projects. Following final year projects were

implemented and executed in association with different industries.

Sr. No.	Project Title	Industry Sponsor	Project Guide
1	Android Based Retail Point of Sale System	Kazen Barcodes Pvt Ltd, Mumbai	Prof. S. S. Dhotre
2	Industrial Temperature Control System using PID	N-sys Technologies, Pune	Prof. A. A. Kshirsagar
3	Version Management System	Yamazaki Mazak India Pvt. Ltd.	Prof. Roshan Pushpan
4	Solar tracking system	Shams Energy, Solapur	Prof. S. R. Mulmane

C) EXPERT LECTURES BY EMINENT PERSONALITIES FROM VARIOUS FIELDS

Students were 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. Santosh Sai, AEM Lead Developer, HBSC, Poland	03/06/21	AEM Web Development & Career Opportunities in E&TC Engineering
Class:- T.Y.			
Sr. No	Resource Person	Date	Topic
1	Mr. Santosh Sai, AEM Lead Developer, HBSC, Poland	03/06/21	AEM Web Development & Career Opportunities in E&TC Engineering
2	Mr. Shirish Patki, Embedded Developer, TCS, Pune	05/12/20	Antenna Applications

3	Mr. Unmesh Sagare, Software Engineer, Vedam labs, Solapur	03/12/20	PIC Programming using Embedded C
Class:- Final Year			
Sr. No.	Resource Person / Institute	Date	Topic
1	Mr. Santosh Sai, AEM Lead Developer, HBSC, Poland	03/06/21	AEM Web Development & Career Opportunities in E&TC Engineering
2	Mr. Arvind Mane, SDE WTR Executive, BSNL, Solapur	24/11/20	Application of fiber optics in Telecommunication systems
3	Mr. Onkar Ranade, Boyce	20/11/20	Artificial Intelligence and Deep Learning
4	Mr. Venkatesh Bandewar Ericsson India Pvt. Ltd.	07/11/20	Career Opportunities in Communication field
5	Mr. Balaji Shrichippa Qualcomm India Pvt. Ltd.	07/11/20	Career Opportunities in Embedded System Design

10) ASSOCIATION OF ELECTRONICS & TELECOMMUNICATION ENGINEERING STUDENTS (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	Online webinar on “How to prepare Effectively for GATE Exam” by Prof. Adesh Chandanshive	03/06/21
2	Guest Lecture of Eminent personality on "Collaborative Robots" by Mr. Pushpashil Salunkhe, Managing Director, PMS Robotics Pune.	26/05/21
3	Android App Development Competition	16/05/21

4	Online Coding competition	16/05/21
5	GATE Expert Lecture - "How you could get AIR 01 in GATE2021" by Mr. Nadim Shaikh (AIR 172 – GATE2020), B.Tech SGGGS Nanded, M.Tech* IISC , Bangalore.	23/11/20
6	"Alumni Talk (Alumni Guest Lecture) Mr. Nandan Aurangabadkar, Associate Director, Digitas, India	10/10/20
7	"Alumni Talk (Alumni Guest Lecture) Miss. Priyanka Hatte, Associate consultant, Capgemini, Bangalore.	10/10/20
8	Engineers Day Celebration Address by Chief Guests 1. Mr. Ravindra Shidore, Managing Director Shidore Microsys Electronics Private Ltd., Pune 2. Mr. Manoj Naigaonkar, Chief Operation officer, Rishabh Instruments Pvt. Ltd., Nashik.	15/09/20
9	“Teachers Day Celebration” Chief Guest - Dr. S.D.Gothe, Vice Principal, Sangmeshwar College, Solapur	05/09/20
10	AEXS Inauguration and Talk with great personality Chief Guest – “Uchyakar” Mr.Laxman Gaikwad (National Award winning Writer)	02/09/20
11	Guest Lecture on "Opportunities for E & TC Students” by Mr. Chittaranjan Mahajan, Director - Dolphine Labs , Pune President - Dolphin Education & Research Society Writer - Abhiyantriki Shikshan Dasha ani Disha"	11/08/20

Office Bearers of AEXS are as follows

- President
Mr. Nandargi Sangmesh
- Vice- President
1) Mr. Kalshetty Abhishek
2) Ms. Quazi Kahef
- Secretary & Co Secretary
1) Ms. Kancherla Sawjanya
2) Ms. Nagmoti Akan
- Technical committee Head
1) Mr. Lature Swapnil
2) Ms. Choudhari Prachiti

- Technical committee Member
 - 1) Mr. Chavan Abhinay
 - 2) Mr. Maidergi Pradeep
 - 3) Ms. Katewal Ruchira
 - 4) Mr. Patil Amarnath
 - 5) Ms. Khune Tanuja
- Info gallery committee Head
 - 1) Ms. Habde Dhanashri
 - 2) Ms. Vaishnavi Gade
- Info gallery committee Member
 - 1) Ms. Sutar Shruti
 - 2) Ms. Battul Vijeta
 - 3) Ms. Nargunde Vishakha
 - 4) Ms. Bansode Sandhya
 - 5) Ms. Telekoni Pooja
- Cultural committee Head
 - 1) Ms. Rao Meghana
 - 2) Mr. Raut Prathamesh
- Cultural committee Member
 - 1) Ms. Vijapure Megha
 - 2) Ms. Chavan Snehal
 - 3) Ms. Waghmare Annapurna
 - 4) Ms. Chitkul Ankita
 - 5) Ms. Sagar Kiran
- Treasurer
 - 1) Mr. Solapure Rohit
 - 2) Ms. Amane Shweta
- Advisory committee
 - 1) Mr. Swapnil Bhavarthi
 - 2) Ms. Shraddha Todkari
 - 3) Mr. Prathamesh Kale

11) 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 specialization.

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	104
2	Final Year B.Tech	Computer vision and Image processing	104

List of NPTEL Courses for credit transfer for SY & TY is as given below:

Sr. No.	Class	NPTEL online course
1	TY-I	Control Systems Engineering
2	SY-I	Digital Techniques

B) MAJOR AND MINOR ENGINEERING DEGREE

Dr. Babasaheb Ambedkar Technology University (DBATU) has announced Major & Minor degree programs for students pursuing Bachelor of Technology as a major reform from the academic year 2020-21. DBATU, has become first of its kind in the State to have such a facility. Under this students get to study two degrees with the program. While they can continue securing a Major degree in B.Tech, they can also opt for any minor program. Students who could not opt for their desired degree subject can also opt for the same as a minor program. While a student can opt for ENTC engineering as a major degree, the same

student can go for computer engineering as minor. This will be a major boost when it comes to employability. It is expected that all courses declared under Majors and Minors should be completed by the students through online platform.

Following is the list of NPTEL courses for which ENTC students have registered for minor degree in Computer Science Engineering.

Sr. No.	Class	NPTEL online course	Minor/ Major	No. of students registered
1	T.Y.	Problem solving through programming in C	Minor	08
2	T.Y.	Introduction to database systems	Minor	08

12) STUDENTS' AWARDS AND ACHIEVEMENTS

Following students have participated and won awards in different events.

Sr. No	Student name	Event/ Competition	Organized by
1	Prathamesh Kale Swapnil Bhavarthi Sangmesh Nandargi Raosaheb Dhotre Deepak Mench	Tech-Tatva 2021 Project Competition.	JSPM-Tatavade, adapsar, Pune
2	Prathamesh Kale Swapnil Bhavarthi Sangmesh Nandargi Raosaheb Dhotre Deepak Mench	Exploring Arduino - Virtual Project Competition	Learn Electronic, India
3	Abhinay Chavan	Paper Presentation	Walk with World KITCOEK
		Astitva 2020, Kavyakala (Recitation)	Brihan Maharashtra college of Commerce Autonomus, Pune
		IEEE - Extempore	JSPM, Hadapsar, Pune
4	Soumya Jadhav	The Fundamentals of Digital Marketing	Google Digital Unlocked
5	Pooja Telekoni	Online Photography Contest	TOURS4 Youu (Travel CO.)

13) CONTRIBUTION OF FACULTY MEMBERS IN DEPARTMENT & 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	<ul style="list-style-type: none"> Head of Department, Chairman - Dept. Advisory Board IQAC member Member of Institute Innovation Cell Member of Anti- Ragging Prevention Committee
2	Prof. I. I. Mujawar	<ul style="list-style-type: none"> Dean Academics IQAC member Member of Institute Innovation Cell
3	Dr. P. D. Bahirgonde	<ul style="list-style-type: none"> PG coordinator R&D coordinator Head of Internal Complaint committee LMC member NPTEL coordinator Lab incharge – PG Research Lab KPIT Sparkle coordinator
4	Prof. S. S. Joshi	<ul style="list-style-type: none"> PTA coordinator Swadeshi Microprocessor challenge coordinator Lab incharge – Computational Lab-II
5	Prof. A. A. Kshirsagar	<ul style="list-style-type: none"> POE & Test coordinator Robo Club coordinator Library committee member Lab incharge –DT&MP Lab
6	Prof. P. P. Kulkarni	<ul style="list-style-type: none"> Institute level Coordinator of Orchitech Student's Industrial Training and Final year Internship coordinator MOU coordinator R&D member (Industry Connect) coordinator Expert lecture (Industry) coordinator CII coordinator

		<ul style="list-style-type: none"> Lab incharge – Communication Lab –I
7	Prof. Roshan Pushpan	<ul style="list-style-type: none"> Academic monitoring committee coordinator Secretary - Dept. Advisory board NAAC & NBA coordinator Project coordinator Orchitech Dept. coordinator Avishkar coordinator Alumni coordinator Suggestion Box incharge Lab incharge – Project lab
8	Prof. R. S. Bakare	<ul style="list-style-type: none"> Training & Placement coordinator CII institute coordinator NIRF Dept. coordinator Alumni coordinator Lab incharge – Communication Lab-II
9	Prof. A. I. Nadaf	<ul style="list-style-type: none"> Institute level VLab coordinator Institute level coordinator – Cultural committee Video recording coordinator Newsletter coordinator Lab incharge – Computational Lab –I
10	Prof. U. A. Bongale	<ul style="list-style-type: none"> Spoken Tutorial coordinator Co-curricular Courses coordinator
11	Prof. A. A. Chandanshive	<ul style="list-style-type: none"> Career counseling coordinator Diploma Connect coordinator AEXS coordinator R&D (Incubation) coordinator
12	Prof. R. R. Shriram	<ul style="list-style-type: none"> Sports Activity coordinator Time table coordinator ATOS IT challenge coordinator Lab incharge – BEE lab
13	Prof. S. R. Mulmane	<ul style="list-style-type: none"> Annual Magazine Report coordinator Department Library coordinator Archives coordinator Website coordinator Lab incharge – EDC lab

14) CO-CURRICULAR COURSES & WORKSHOPS CONDUCTED FOR VARIOUS POLYTECHNIC STUDENTS

“Virtual labs” is an initiative of Ministry of Education under the National Mission on Education through ICT. It is difficult to complete the laboratory experiments due to

closure of colleges for the students due to COVID-19 pandemic. Hence, virtual laboratories are used to conduct practicals of our students as well as students of many diploma colleges.

Sr. No.	Name of Faculty	Workshop conducted	Name of Polytechnic	No. of students attended
1	Prof. A. I. Nadaf Prof. A. A. Chandanshive Prof. S. S. Joshi Prof. P. P. Kulkarni	One day workshop on Introduction to VLab (21/01/21)	Government Polytechnic, Solapur	71
2	Prof. A. I. Nadaf Prof. A. A. Chandanshive Prof. A. A. Kshirsagar Prof. Roshan Pushpan Prof. R. S. Bakare	One day workshop on Introduction to VLab (14/01/21)	Moulana Azad Polytechnic, Solapur	13
3	Prof. A. I. Nadaf Prof. A. A. Chandanshive Prof. S. S. Joshi Prof. Roshan Pushpan	One day workshop on Introduction to VLab (12/01/21)	Swami Vivekanand Institute of Technology, Solapur	22
4	Prof. A. I. Nadaf Prof. A. A. Chandanshive Prof. S. S. Joshi Prof. Roshan Pushpan	One day workshop on Introduction to VLab (12/01/21)	SVSMD's KKI Polytechnic, Akkalkot	22
5	Prof. S. S. Joshi	One day workshop on VHDL Programming (08/05/21)	Govt. Residential Women's Polytechnic, Latur.	55
6	Prof. A. I. Nadaf	Stride to Success Quiz series	All Diploma colleges	300

7	Prof. A. I. Nadaf	Android Application Development	All Diploma colleges	150
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10	Prof. S. S. Dhotre	Career Opportunities in E & TC Engineering (23/10/20)	Government Polytechnic, Osmanabad	56
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Following is the list of Practical's conducted for polytechnic colleges

15) EXPERT LECTURES DELIVERED AND PRACTICALS CONDUCTED BY OUR FACULTY MEMBERS FOR VARIOUS POLYTECHNIC COLLEGES

Following faculty members have contributed in development of the students of other institutes by delivering expert lectures.

Sr. No	Name of faculty	Expert lecture Topic and Date	Name of Polytechnic college	No. of students attended
1	Prof. A. A. Chandanshive & Prof. S. R. Mulmane	IC555 and IC565 (17/05/21)	Swami Vivekanand Institute of Technology, Solapur	21
2	Prof. S. S. Dhotre	Multi Protocol Label Switching (15/05/21)	Government Residential Women's Polytechnic, Latur	36
3	Prof. Shivaji Chavan	Interview Techniques (13/05/21)	SVSMD,S Polytechnic, Akkalkot	44
4	Prof. A. A. Chandanshive & Prof. S. R. Mulmane	IC 555 and IC 556 (08/05/21)	Government Polytechnic, Solapur	69
5	Prof. Roshan Pushpan.	Satellite Communication (11/05/21)	SES Polytechnic Solapur	17
6	Prof. S. S. Dhotre	Expert session on "Career Opportunities in E&TC Engineering" (24/12/20)	Puranmal Lahoti Govt. Polytechnic, Latur	120
7	Prof. P. P. Kulkarni	Microwave Engineering (20/11/20)	Government Polytechnic, Solapur	41
8	Prof. S. S. Dhotre	Career Opportunities in E & TC Engineering (04/11/20)	Government Polytechnic, Solapur	71
9	Prof. Roshan Pushpan	Mobile Communication (28/10/20)	Government Polytechnic, Osmanabad	55

Sr. No	Faculty Name	Practical conducted and Date	Name of Polytechnic college	No. of students attended
1	Prof. Roshan Pushpan	Virtual Lab for Computer Networks (22/05/21)	SES Polytechnic, Solapur	16
2	Prof. U. A. Bongale & Prof. S. R. Mulmane	Linear Integrated Circuits (15/05/21)	GP, Osmanabad	55
3	Prof. Roshan Pushpan	Virtual Lab for Computer Networks (15/05/21)	Swami Vivekanand Institute of Technology, Solapur	21
4	Prof. Roshan Pushpan	Virtual Lab Session on Computer Network (12/05/21)	GP, Osmanabad	55
5	Prof. Roshan Pushpan	V- Lab session on Computer Networking & Data Communication (09/05/21)	GP, Solapur	30
6	Prof. S.S. Joshi	A Virtual Lab session on Digital Techniques (20/01/21)	GP, Osmanabad	84
7	Prof.P. P. Kulkarni	Microwave engg practicals through virtual Lab (08/01/21)	SES Polytechnic, Solapur	12
8	Prof. S. R. Mulmane	Control Systems Practicals (02/11/20)	SES Polytechnic, Solapur	13

16) PARENT TEACHER ASSOCIATION (PTA)

PTA is a platform for parents to participate in students and department progress. The PTA

includes two parents from each class and faculty members. PTA meet is conducted at least once in a semester. Also it is a good interface between faculty, students and parents to put their problems and resolve the same.

Following is the list of PTA members.

Class	Name of Student	Parent Name
SY	Ms. Battul Vijeta Ms. Vijapure Meghana Mr. Kulkarni Piyush	Mr. Pradeep Battul Mr. Rajashekhar Vijapure Mr. Sachin Kulkarni
TY	Ms. Hiremath Shravani Ms. Pooja Rajkumar Birajadar	Mr. Krishna Hiremath Mr. Rajkumar Rudarappa Birajdar
Final year	Mr. Prathamesh Kale Ms. Sanika Ghanate Mr. Shankar Patil	Mrs. Suvarna Nanasaheb Kale Mrs. Revati Ravindra Ghanate Mr. Vilas Patil

Online meeting of PTA members was held on 9th September 2020 through Google meet. Prof S. S. Dhotre presented initiatives taken by department for conduction of online activities and NPTEL courses. Also concept of major and minor degree was discussed. Parent members expressed satisfaction about placements.

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

(Prof. S. S. Dhotre)
Head of Department