

**TELECOM CHRONICLES**  
**DEPARTMENT OF ELECTRONICS**  
**AND**  
**TELECOMMUNICATION**  
**2018-19**



# DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION

## About the Department

Electronics & Telecommunication Engineering (EXTC) Department of Xavier Institute of Engineering started in 2005 with an Under Graduate (UG) program with intake of 60. UG program of department is approved by the All India Council of Technical Education (AICTE), New Delhi, recognized by the Directorate of Technical Education, Govt. of Maharashtra and affiliated to University of Mumbai. The department has a good record of organizing seminars, workshops, and symposia in emerging technological areas.

The department emphasizes on holistic learning by providing quality education, training and empowering students to make significant contributions in the field of Research & Innovations under the guidance of trained and experienced faculty members & well equipped laboratories

# Vision

*To Nurture the Joy of Excellence in the World of Electronics and Telecommunication Engineering.*

# Mission

- To equip the students with strong foundations in the field of Electronics and Telecommunication Engineering to enable them for higher studies and lifelong learning.
- To educate the students in the state of art technologies and meet the challenges of the Electronics and Telecommunication field.
- To collaborate and associate with highly reputed Institutes that are in India and Abroad and enhance academic excellence in the field of EXTC.
- To impart total quality education for developing innovative, entrepreneurial and ethical professionals, fit for global competitive environment.
- To strengthen the soft skills and logical thinking of students through co-curricular and extra-curricular activities



# Message from the Director's Desk



Dear Students, Staff and Faculty  
of EXTC Department,

I am thrilled to read your technical magazine that you have bought out with your hard work and dedication. I wish that it helps you all as a productive technical material and subsidiary skill developing tool for the students.

It is not only great news for your department, but also for the whole college. It reflects what XIE stands for: An inner thirst to do more, not being content with what we achieve.

The philosophy of doing more for God results in doing more for others. This is what you have displayed through your technical and cultural activities

I wish EXTC department a great success in all your ventures. I also applaud the magazine committee for the efforts put in to bring out this informative magazine with innovative content.

With best wishes,

-Fr. Dr. John Rose, SJ  
(Director)



# Message from the Principal's Desk



It is with pleasure, I speak to all of you through this magazine. The EXTC department of XIE has shown marvellous contributions in the field of research, innovation and training over the past years. It is heartening to see such amazing enthusiasm from both teachers as well as students eager to explore new technologies in order to be prepared to tackle challenges.

I am thrilled to note the various initiatives taken up by the faculty in imparting knowledge by organizing conferences, training programs, workshops, competitions and guest lectures by alumni.

The institute's vision is "to nurture the Joy of Excellence in a world of high technology", and the Mission is "to strive to match global standards in Technical Education by interaction with industry, continuous staff training and development of quality of life."

My best wishes to all the teaching and non-teaching faculty and to the students of EXTC.

Thank you.

- Dr. Y. D. Venkatesh  
(Principal)

# Message from the HOD's Desk



It gives me immense pleasure to welcome readers to the Department of Electronics and Telecommunication. This magazine intends to give you an overview of the curricular, co-curricular and extracurricular activities and achievements of the students and faculty.

I commend the faculty for working as a closely knit team. They are dedicated wholeheartedly for the betterment of students. Through a nice blend of courseworks, projects and co-curricular activities, the department endows students with the ability

to apply knowledge of science, mathematics and Electronics & Telecommunication Engineering to work successfully in multidisciplinary teams, demonstrate leadership and technical proficiency.

The purpose of this magazine is to encourage the students and the faculty to be a better version of themselves each year and stay up to date with the happenings inside the college in addition to the outside world. I wish all the best to the faculty and my dear students.

-Dr. Suprava Patnaik  
(HOD EXTC)

# Message from the Editorial Team



EDITOR-IN-CHIEF  
PROF. TEJAL DESHPANDE

We are pleased to present to you the magazine for the academic year 2018-19 by the Department of Electronics and Telecommunication, Xavier Institute of Engineering. This magazine aims to bring into view the achievements, activities, accolades of the students and faculty, events, and happenings in the department. The magazine will serve as an interface between the Institute and the outside world.

As a gift to all our readers, we have added a 'Memories' page to highlight all our fun-filled, nostalgic moments we shared together with our friends and classmates because 'COLLEGE MEMORIES NEVER DISAPPEAR'.

A special thanks to the student editors for their committed efforts towards the timely publication of this magazine.

Happy Reading!

- The Editorial Team



## MANAGING EDITORS



**KAVITA SHARMA**



**KRITI GOEL**

## EDITORIAL ASSISTANTS



**MUTHU JYOTHIKA  
NARAYANAN**



**PREMRAJ NADAR**

## GRAPHIC DESIGNER



**ROHAN KHAMKAR**



# ACHIEVEMENTS



## **TRANSMISSION- TECHNICAL PRESENTATION**

Shreya Tembe, Sahar Khan, Sheetal Yadav and Rujuta Acharekar from BE EXTC guided by Prof Smita Pawar won the 1st place in IJSER Technical Presentation in Transmission 2018-2019 held at Xavier Institute of Engineering.



## **IOT CHALLENGE**

Anurag Bambardekar, Rahul Dhebri from TE EXTC, Parth Shah and Shubham Maurya from SE EXTC under the guidance of Prof. Prathibha Sudhakaran participated in “IOT Challenge 2019 “ with their project “IoT Medicine Vending Machine” and won 1st Prize on district level conducted at Bharatiya Vidyapeeth and 2nd on National level conducted at IIT-Bombay.





## **SPANDAN**

The fashion show competition held at Xavier Institute of Engineering during the annual fest SPANDAN 2018-2019 was won by the team “TATTVAS” of Xavier Institute of Engineering . Kunal Gupta, Ronak Singh Rajput from SE EXTC and Sajjad Syed,Umar Zhaga,Shivani Jaiswal from TE EXTC along with other students were the members of the team.



## **Fr. WILLAIM BORGES AWARD**

Manali Parab of TE EXTC received the Fr William Borges Award for Academic Excellence and the ROOKIE AWARD in 2018 from an NGO called Katalyst.



## **CLASS OF 2018, VALEDICTORIAN**

THE JOAN AND FRANK TROCKI SCHOLARSHIP FOR THE “BEST ALL-ROUNDER STUDENT “ WAS AWARDED TO MS. Maryann Benny Fernandes ( CLASS OF 2018,VALEDICTORIAN)

- The Employee of the Year Award Ceremony took place on January 13, 2019 amidst the festivities of Spandan. Dr. Suprava Patnaik accepted the Employee of the Year Award (Teaching Staff) for the year 2019.
- The Computer Society of Xavierites (CSX) organised a Project Competition on March 30, 2019 for the B.E. and T.E. students to display their projects in this exhibition. The project competition for B.E. was judged by Prof. Smita Pawar, Prof. Omprakash Yadav and Prof. Amit Narote. Shreya Tembe from BE EXTC won for her project Grow a Generation.





# SPARX





# SPARX ACHIEVEMENTS

EVENT	CLASS / STUDENT NAME	POSITION
OPEN FOOTBALL	SE EXTC	1st (WINNER)
OPEN FOOTBALL	TE EXTC	2nd
OPEN CRICKET	TE EXTC	1st (WINNER)
RINK FOOTBALL	BE EXTC A	2nd
RINK FOOTBALL	BE EXTC B	3rd
DODGE BALL	TE EXTC	1st (WINNER)
TUG OF WAR MIXED	SE EXTC	3rd
TUG OF WAR BOYS	SE EXTC	3rd
TUG OF WAR GIRLS	BE EXTC	2nd
KABBADI	TE EXTC	1st (WINNER)
ARM WRESTING	SAJJAD SAYED TE EXTC	1st (WINNER)

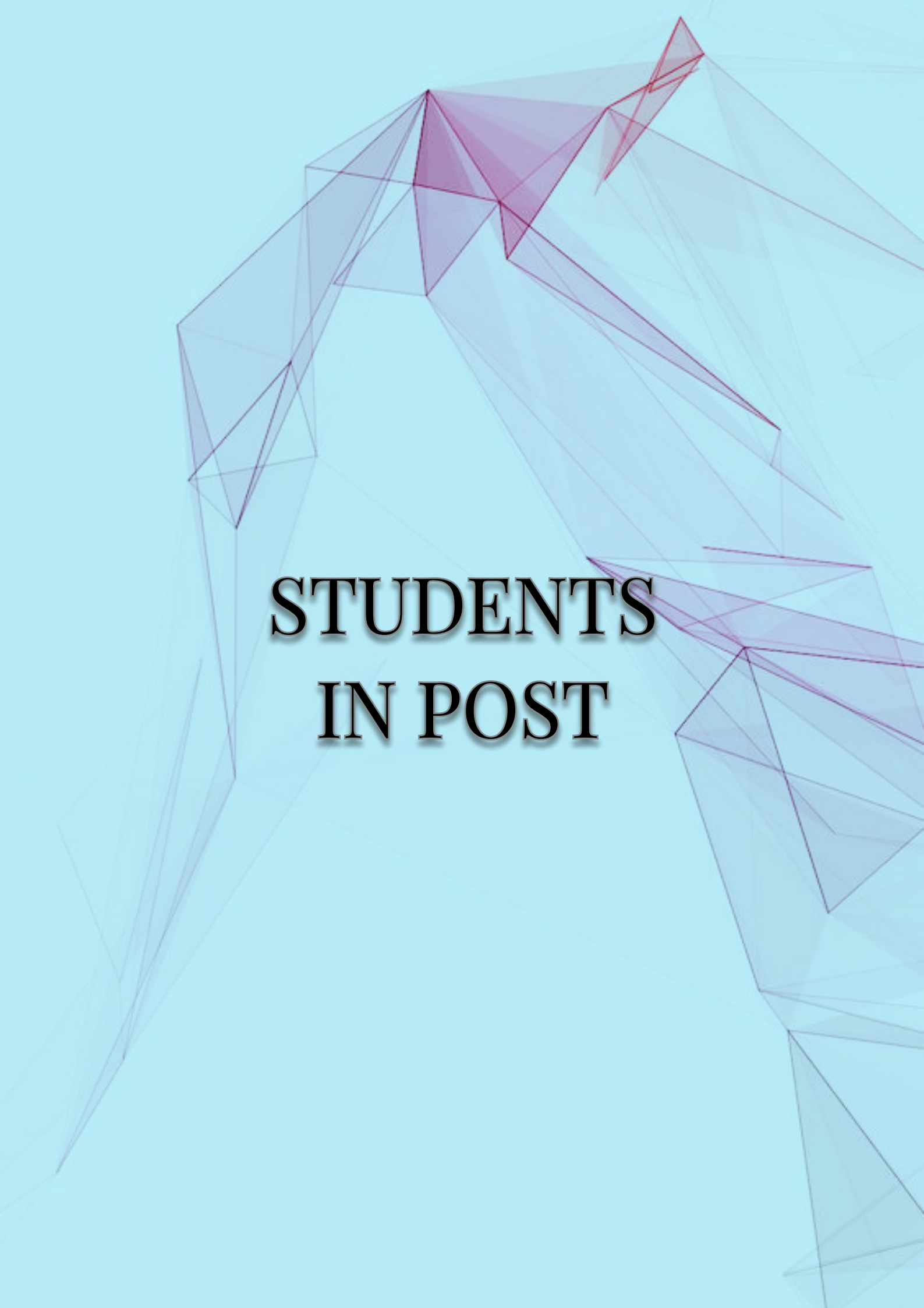


**JOURNAL /  
CONFERENCE  
PUBLICATIONS**

- Nitin Ahire , Shreya Bandodkar , Kanchan Gupta , Yasar Farooqui, "IOT Based Industrial Parameter Monitoring System", Parmana Research Journal , UGC approved a peer reviewed journal. UGC approved No. 22940, ISSN:2249-2976, SI No. 41241, , May 2019 .
- Nitin Ahire, Siddharth Gaud, Akash Pal, Rohit Thange and Vivek Bugalia, "Content Based Image Retrieval Using Texture And Color", Parmana Research Journal , UGC approved a peer reviewed journal UGC approved No. 22940, ISSN:2249-2976, SI No. 41241, May 2019 .
- Prof. Prathibha Sudhakaran ,Eldridge Fernandes , Joshua Fernandes , Ronak Sakhiya , Sourabh Mayekar , "Review of neural networks for sentimental analysis", Pramana Research Journal, VOLUME 9 ISSUE 2, ISSN NO: 2249-2976, 2019.
- Madhura Shirodkar, Miheer Bhilare, Jaydeep Dobaria, "Braille Watch", Pramana Research Journal, 2019.
- Madhura Shirodkar,Shubham Sawant ,Omkar Bhosale, "BRAILLE WATCH", Journal of Emerging Technologies and Innovative Research(JETIR), Volume 6 Issue 4, 304-308, 2019/4.
- Leena Tushar Patil, "Review of different directional MIMO Antenna", Pramana Research Journal, Volume 9,Issue 2, 75-77, Feb 2019.
- Prof. Smita Pawar, Sahar Khan, Shreya Tembe, Rujuta Acharekar, Sheetal Yadav, "Grow A Generation An IoT based Automated Hydroponics system using RPi", JASC: Journal of Applied Science and Computations ISSN NO: 1076-5131, Volume VI, Issue IV, 1549-1553, April/2019 .
- Mrs. Smita Pawar,Priya Thorat, Neha Upadhyay, Prachi Tailor, Tanuja Pawar, "IOT BASED BEVERAGE INDUSTRIAL AUTOMATION USING VLC TECHNOLOGY", 2019 JETIR www.jetir.org (ISSN-2349-5162), Volume 6, Issue 4, 281-284, April 2019.
- Prof. Smita Pawar, Neha Upadhyay, Priya Thorat, Prachi Tailor, Tanuja Pawar, "IOT BASED BEVERAGE INDUSTRIAL AUTOMATION USING VLC TECHNOLOGY", Pramana Research Journal 2019 ISSN NO: 2249-2976, Volume 9, Issue 2, 53-56, 2019.



- Smita Y Pawar, Shreya Tembe, Sahar Khan, "Design Of An IoT Enabled Automated Hydroponics System Using NodeMCU And Blynk", 5th International Conference For Convergence In Technology 2019 IEEE Bombay Section, 29th-31th March 2019.
- Lalita Wasudeo Moharkar And Suprava Patnaik, "DETECTION AND QUANTIFICATION OF MILK ADULTERATION BY LASER INDUCED INSTRUMENTATION", FIFTH INTERNATIONAL CONFERENCES FOR CONVERGENCE OF TECHNOLOGY (I2CT 2019), March 2019.
- Shailaja Udtewar , Delroy Dsouza , Anugrah Aghamkar, "Visible Light Information System For Museums", International Journal Of Scientific And Research Publications (IJSRP), Volume: 09, Issue: 02, February 2019.
- Shailaja Udtewar, Keone Crasto, Paul Dsouza, Anugrah Aghamkar, Delroy Dsouza, "Visible Light Information System For Multiuser Using Arduino", Journal Of Emerging Technologies And Innovative Research (JETIR), Volume: 06, Issue: 04, , April 2019.
- Prof. Tejal Deshpande, Joel Kinny, Tanmay Malekar, ""Comparison Of MLP And SVM For Autonomous Vehicle Navigation"", Journal Of Emerging Technologies And Innovative Research (JETIR),, Volume 6, Issue 3, (ISSN-2349-5162), 253, © 2019 JETIR March 2019.
- Prof. Tejal Deshpande, Stella J., "FPGA Based Blood Sample Characterisation", Journal Of Emerging Technologies And Innovative Research (JETIR), Vol 6, Issue 6, 807, June 2019.
- Manali Tayade, Aron Dsouza, Jaykumar Patel, "Deformable Image Segmentation", Pramana Research Journal, Volume 9, Issue 2, 2019, 32-37, January 2019.
- Prof. Prathibha Sudhakaran, Amlan Sahu, Sabih Momin , Suraj Singh, Yash Karve, "LOW FREQUENCY BASED FIRE EXTINGUISHER", Parmana Research Journal, Volume 9, Issue 2, ISSN NO: 2249-2976, 2019.



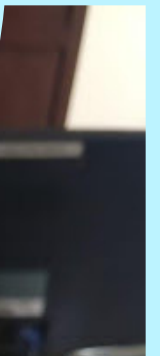
**STUDENTS  
IN POST**

<b>STUDENT NAME</b>	<b>POST</b>	<b>YEAR</b>
<b>Mayura Rajadhyaksha</b>	<b>Cultural Secretary</b>	<b>TE</b>
<b>Ashish Gapat</b>	<b>Vice Secretary of E-Cell</b>	<b>TE</b>
<b>Dhruva Mahajan</b>	<b>Dept. Secretary of E-cell,HOD Formals</b>	<b>TE</b>
<b>Antoinette Fernandes</b>	<b>Tedx licensee</b>	<b>TE</b>
<b>Shubham Maurya</b>	<b>Assistant Technical Secretary, HOD of Robotics</b>	<b>TE</b>
<b>Arnold Dsouza</b>	<b>Music HOD</b>	<b>TE</b>
<b>Nikita Kondhalkar</b>	<b>HOD Fine Arts</b>	<b>TE</b>
<b>Shivam Tripathi</b>	<b>HOD Professor Spandan</b>	<b>TE</b>
<b>Sayali Nimbalkar</b>	<b>HOD of Technical</b>	<b>TE</b>
<b>Rishika Dhanawade</b>	<b>HOD of Hospitality</b>	<b>TE</b>
<b>Zalak Pandya</b>	<b>HOD Inter and Intra Spandan</b>	<b>TE</b>
<b>Sarvesh Pawar</b>	<b>HOD of Stage in Spandan</b>	<b>TE</b>
<b>Wendell Mendonca</b>	<b>HOD of Hosts and Fillers</b>	<b>TE</b>
<b>Pranay Malusare</b>	<b>Admin of Spandan and Sparx</b>	<b>TE</b>
<b>Umar Karbari</b>	<b>Admin of Spandan, English Editor Connexion, TEDx Event manager</b>	<b>TE</b>
<b>Umar Zhaga</b>	<b>Admin of Sparx, HOD of Security in Spandan</b>	<b>TE</b>
<b>Sajjad Sayed</b>	<b>HOD of Security in Spandan, English Editor in Connexion</b>	<b>TE</b>
<b>Chandan Ingale</b>	<b>Ecell-Event Manager</b>	<b>TE</b>
<b>Elton Alphonso</b>	<b>Editor in Chief in Connexion</b>	<b>TE</b>
<b>Pragati Mishra</b>	<b>Hindi Editor in Connexion</b>	<b>TE</b>
<b>Manali Parab</b>	<b>Marathi Editor in Connexion</b>	<b>TE</b>
<b>Kapil Dongardive</b>	<b>Marathi Editor in Connexion</b>	<b>TE</b>





**WORKSHOPS /  
SEMINARS  
CONDUCTED**



<b>NAME OF THE FACULTY /STUDENT</b>	<b>TITLE OF WORKSHOP/SEMINARS</b>	<b>DATE</b>
<b>Prof.Smita Pawar</b>	<b>Jio Telecommunication Systems</b>	<b>30/08/2018</b>
<b>Prof.Nitin Ahire</b>	<b>Modern Sensors, Signal Processing and Applications</b>	<b>25/09/2018</b>
<b>Prof.Smita Pawar and BE students: Rajnish Tailor, Alric Pinto, Shunak Prabhu, Michael C</b>	<b>One day workshop on IoT: Hands on practice using Arduino and Raspberry pi</b>	<b>28/09/2018</b>
<b>Prof. Leena Patil</b>	<b>Network Security in Telecommunication</b>	<b>12/10/2018</b>
<b>Prof. Smita Pawar and Prof. Prathibha Sudhakaran</b>	<b>Industrial Automation and Robotics for SE students</b>	<b>26/02/2019 to 27/02/2019</b>
<b>Prof.Smita Pawar</b>	<b>One day workshop on "Antarchakshoo"</b>	<b>15/03/2019</b>
<b>Prof. Pratibha Sudhakaran and Prof. Smita Pawar</b>	<b>Effective communication skills</b>	<b>19/03/2019 to 20/03/2019</b>
<b>Prof. Tejal Deshpande and Prof. Nitin Ahire</b>	<b>Industrial Automation and Robotics for TE students</b>	<b>20/03/2019</b>
<b>Prof.Prathibha Sudhakaran</b>	<b>Two day workshop on "3D Printing"</b>	<b>5/04/2019 to 6/04/2019</b>



# **INDUSTRIAL VISITS**





# DOORDARSHAN IV



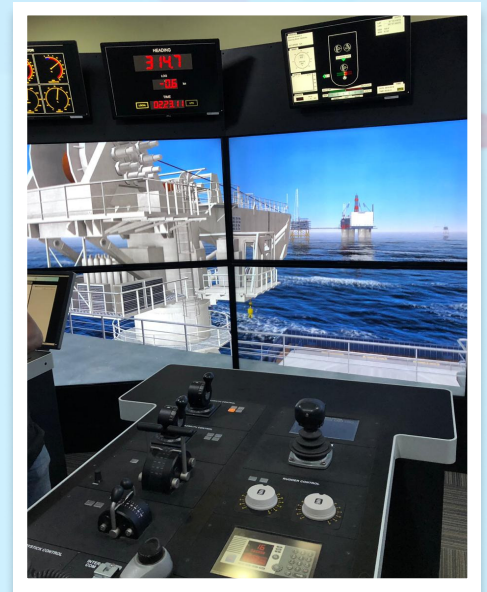
Prof. Manali Tayade and Prof. Nitin Ahire arranged one day visit to Doordarshan Kendra (Prasar Bharati), Worli for the TE students belonging to the department of EXTC on October 4, 2018. The students visited the studio and observed the workings of broadcasting and transmitting sections of a television.





# MARITIME VISIT

Prof. Manali Tayade from the Department of Electronics and Telecommunication Engineering arranged a lab visit to Global Maritime Training Centre at St. Xavier's Technical Institute, Mahim for the T.E students having Radar Engineering as their elective subject on March 14, 2019. Prof. Pratibha Sudhakaran accompanied the group.



During this visit, the students observed the latest simulators and other engine room technology equipment imparting classroom-based detailed understanding of a ship's operation.







# OPTICAL COMMUNICATION IV



An Industrial Visit to OFC Mux Station, Prabhadevi, Mumbai was planned for Final year EXTC students to make them aware of different multiplexing technologies that are enabling the evolution of network speeds on fiber optic cabling. Such technologies include time division, space division and wavelength division multiplexing.

Today's global businesses demand faster, more secure and larger capacity communication systems for their network operations. Fiber optic technology is expected to play a major part in this growth. Every engineering student has a right to fair knowledge in this fast-growing technology. As students of the final year Electronics and Telecommunication have Optical Communication and Networks as one of their subjects, so the visit to OFC Mux Station would definitely help them to provide a practical scenario of Optical Fiber Networks and their boundless performance capabilities.



# SAMEER VISIT



On the occasion of the National Science Day, Prof. Manali Tayade from the Department of Electronics and Telecommunication arranged an educational visit to the Society for Applied Microwave Electronics Engineering & Research (SAMEER) located in the IIT-B campus, for the T.E. students of the department accompanied by Prof. Lalita Moharkar on February 28, 2019. The students were able to observe various ongoing projects in the lab like FMCW radar, MRI machine, microwave dryer and so on.



# SATELLITE EARTH STATION AT YEUR



An Industrial Visit to a Satellite Earth Station at Yeur, Thane was planned for Final year EXTC students to make them aware of the various tasks and activities or work carried out in the Earth Station. Every engineering student has a right to fair knowledge in this fast-growing technology, since, Satellite Communication is a fast growing field, having advanced uninterrupted features and on huge demand in the global market. As students of the final year Electronics and Telecommunication have Satellite Communication and Networks as one of their subjects, so the visit to Satellite Earth Station, Yeur, Thane would definitely help them to provide a practical scenario of Satellite Communication and Networks and the Earth Station.







**EXTRA  
ACTIVITIES**



- The graduated toppers were felicitated during XIE's 10th Convocation Ceremony which was held on Saturday, February 16, 2019 by the Chief Guest, Dr. Eric Borges, a renowned cardiologist and the Guest of Honour, Dr. Bapu Gopinathrao Pawar, Joint Metropolitan Commissioner, MMRDA. The third rank holder Navitha Pujari (EXTC) 8.93, The second rank holder Sheldon Passanah (EXTC) scoring 8.98, The first rankers, Sonal Pawar (EXTC) scoring 9.06.
- The Department of Electronics & Telecommunication Engineering displayed its 10 best B.E. Projects of the Academic Year 2018-2019 on April 5, 2019 under the banner 'ExXpo19' under the supervision of Prof. Leena Patil, the coordinator for Projects in the Department of EXTC. This was an initiative by the department to encourage and motivate S.E. and T.E. students to follow a tradition.
- XIE celebrates the festival of Navratri by organising Garba Nights for the students on October 12, 2018 in the Basketball Court. The event was organized by the Student Council's Cultural Team headed by Mayura Rajadhyaksha student of TE EXTC. The event was observed to be colourful and vibrant where many students showed enthusiasm through their performance. In the midst of stressful submissions and exams, this event created a very festive and cheerful environment in the campus.
- Prof. Lalita Moharkar from the Department of EXTC was invited by Lokmanya Tilak College of Engineering to deliver an expert lecture on "Video Processing" for the final year students in the Department of EXTC on September 7, 2018.



**MINOR  
RESEARCH**

NAME OF THE FACULTY	TOPIC	AMOUNT SANCTIONED
<p data-bbox="181 300 424 407">Prof. TEJAL DESHPANDE</p> 	<p data-bbox="612 542 995 712">FPGA Based Blood sample Characterisation</p>	<p data-bbox="1145 618 1394 667">Rs. 30,000/-</p>
<p data-bbox="175 1335 430 1442">Prof. MANALI TAYADE</p> 	<p data-bbox="616 1460 983 1765">'Enhancing 3D Printing Shape Accuracy for Complex Shaped Objects'</p>	<p data-bbox="1171 1585 1420 1635">Rs. 30,000/-</p>





**PLACEMENTS**  
**2018-2019**

<b>STUDENT NAME</b>	<b>COMPANY</b>	<b>PACKAGE</b>
<b>Amit Kumar Yadav</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Amlan Sahu</b>	<b>Zycus</b>	<b>3.6-3.8LPA</b>
<b>Delroy Dsouza</b>	<b>Reliance Jio</b>	<b>3.5LPA</b>
<b>Eldrige Fernandes</b>	<b>Mediadotnet</b>	<b>3LPA</b>
<b>Glen Fernando</b>	<b>Glen Fernando</b>	<b>5LPA</b>
<b>Joel Kinny</b>	<b>Capgemini</b>	<b>3.8LPA</b>
<b>Neha Upadhyay</b>	<b>Qspider / Polycab</b>	<b>2.5LPA</b>
<b>Pratik Pashte</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Priya Thorat</b>	<b>RSMastute Consulting</b>	<b>5LPA</b>
<b>Riddi Surti</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Rutuja Acharekar</b>	<b>Alpha Plus</b>	<b>4.5LPA</b>
<b>Sahar Khan</b>	<b>Zycus</b>	<b>3.6-3.8LPA</b>
<b>Saurabh Mayekar</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Shaun Gomes</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Shreya Tembe</b>	<b>LTI/Reliance Jio</b>	<b>3.5LPA / 3.5LPA</b>
<b>Shubham Shinde</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Suraj Singh</b>	<b>Mediadotnet</b>	<b>3LPA</b>
<b>Tanuja Pawar</b>	<b>Qspider</b>	<b>2.5LPA</b>
<b>Tejas Bhatkal</b>	<b>Qspider/Reliance Jio</b>	<b>2.5LPA / 3.5LPA</b>
<b>Yash Karve</b>	<b>LTI/Reliance Jio</b>	<b>3.5LPA / 3.5LPA</b>
<b>Yashaswi Shetty</b>	<b>Infosys</b>	<b>3.5LPA</b>
<b>Fabian Fernandes</b>	<b>Endurance</b>	<b>4LPA</b>
<b>Sabih Momin</b>	<b>Reliance Jio</b>	<b>3.5LPA</b>
<b>Sushil Kumar Yadav</b>	<b>Reliance Jio</b>	<b>3.5LPA</b>
<b>Varsha Patil</b>	<b>Reliance Jio</b>	<b>3.5LPA</b>



**CLASS  
PHOTOS**





## EXTTC FACULTY



## BE EXTTC





**TE EXTC**



**SE EXTC**



# MEMORIES















