

### SARASWATI Education Society's

### SARASWATI College of Engineering

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

### DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

Newsletter: Jan '18- Jun '18

Vol.20

### **Our Inspiration**



Hon. Shri Prithvirajji Deshmukh Chairman, SES



Smt. Vrushali Deshmukh Founder Secretary, SES



Dr. Manjusha Deshmukh
Principal, SCOE

### **About College**



**VISION:** "To Become Center of Excellence in Engineering Education and Research."

**MISSION:** "To Educate Students to become quality technocrats for Taking up challenges in all Facts of Life."

### **About Department**

**VISION:** "To make students capable to contribute in development of society through research."

**MISSION:** "To impart quality education to train students in emerging technologies in Electronics and Telecommunication Engineering"



Prof. Sheetal Bukkawar H.O.D.

### From the HOD's Desk:

The Department of Electronics Telecommunication Engineering has consistently maintained exemplary an academic record. The greatest asset of the department is its highly motivated and learned faculty. The Department has been consistently working towards the goal to produce highly skilled and scientifically oriented manpower through flexible, adaptive and progressive training programs along with cohesive interaction with the research organizations. academicians and industries. In a nutshell, the department is well nurtured to cater the needs of education for the career enhancement of students from both technical as well as social aspects.

### Program Educational Objectives (PEO)-

### Graduates will,

- ➤ Apply the knowledge of mathematics and science to identify, formulate and define engineering problems in the field of Electronics and Telecommunication Engineering.
- Contribute to the needs of the society in solving technical problems using electronics & communication engineering principles, tools, and practices.
- Demonstrate professionalism, ethical attitude, communication skills and teamwork to adapt current trends by engaging in lifelong learning.
- ➤ Impart analytic and logical skills to initiate and develop innovative ideas for R &D, industry and multidisciplinary domain.
- > Excel in higher education and succeed in technical profession exhibiting global competitiveness.
- Design systems, components or processes that meet specified needs with appropriate considerations for public health & safety, cultural, societal and environmental considerations.

### Program Outcomes (PO)-

At the end of the Program, a student will be able to:

- > Engage in life-long learning and an understanding of the need to keep up with current developments in the specific field of practice
- Apply knowledge of mathematics, science and engineering as appropriate to the field of electronics & telecommunication engineering practice.
- > Understand of the effects of the engineering solutions in a global, economic, environmental and societal context.
- ➤ Design systems for applications based on the acquired knowledge to solve real time requirements.
- ➤ Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex problems.
- ➤ Demonstrates the knowledge of theoretical & practical aspects of signal processing to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety.
- ➤ Design, simulate and fabricate electronic and communication systems, components, devices as well as to design and simulate the analog and digital processes of physical world
- Acquire the communication skills necessary to interact effectively in multidisciplinary teams.
- > Participate and succeed in competitive examinations or seek employment in the industry.
- ➤ Demonstrate leadership, managerial and entrepreneurship skills
- ➤ Understand impact of engineering solutions on the society with awareness of project management and finance related issues.

### **Departmental Events**

# Workshop: Evoke your femininity: Enhance your flexibility

(2<sup>nd</sup> January ,2018)



Workshop entitled "Evoke your femininity:Enhance your flexibility" were organized to boost the health and fitness of all the ladies staffs of Saraswati college of engineering. The event was inaugurated by HOD of Electronics and Telecommunication department, Prof. Sheetal Bukkawar.



The workshop was conducted by Dr. Priyadarshini Jangam, Nutrionist as well as certified Zumba Instructor. Two session were conducted. First session was started by an interactive lecture on Mind and Fitness activity followed question queries and doubt solving round. She gave a deep insight on health and fitness and also helped staffs by answering all queries related to fitness. Second session was about Zumba session increase to flexibility. All the staffs had a wonderful experience and expressed a gratitude of thanks for the same.



The workshop was concluded by Prof. Suchitra Majumdar by expressing a vote of thanks on behalf of Saraswati college of Engineering to the guest of honor Dr. Priyadarshini followed by felicitation with token of appreciation by HOD of

Electronics and Telecommunication, Prof. Sheetal Bukkawar.

# " Design and Analysis of Antennas and Microwave Passive Devices using HFSS"

(3<sup>th</sup> -5<sup>th</sup> January ,2018)

The 3 days' National workshop on "Design and Analysis of Antennas and Microwave Passive Devices using HFSS "was inaugurated in the seminar hall in the presence of Dr. Manjusha Deshmukh, Principal, Saraswati college of Engineering.



The Speakers Prof. Amit Naik and Prof. Aniket Jangam were welcomed with a token of appreciation. The First day session was conducted by Prof. Amit Naik & Prof. Aniket Jangam, in which they



have covered various fundamentals of antenna designing.



In the later session of day 1, the installation steps and the basic tools used in HFSS Version 18.0 were explained by both the Speakers.

On Day 2 of the workshop, the Inset feed and Probe feed antenna designing was practiced on the software with some additional features in the existing software of HFSS



On Day 3 of the workshop, the designing continued for Microwave waveguides and Filters. Prof. Aniket explained the concept of waveguides and filters with a theory.

later on hands-on was carried out on HFSS software. The Day 3 Session was ended by one to one discussion between the Participants and the Speakers of the workshop. The workshop came to an end by Certificates Distribution to the participants and Delivering vote of the thanks to the speakers and coordinators.

principal Dr. Manjusha Deshmukh Madam and some of the E&TC staff.



"PRATIDHWANI"

(20<sup>th</sup> January ,2018)



'Pratidhwani' was an event organized by ETSA committee from E&TC Dept.On 20th Jan, 2018 under the guidance of head of E&TC department Sheetal Bukkawar madam wherein our past alumnus were invited to share their experiences with the current students in presence of respected

The event started at 10:00 am with the lighting of lamp, introduction of alumni and their felicitation followed by the speech from respected principal Dr. Manjusha Deshmukh and Hod of E&TC Sheetal Bukkawar.



After this began the interaction session, wherein alumni discussed the issues related to placement, higher studies, entrepreneurship etc.

### "Expert lecture on Virtual Reality Application"

(22<sup>nd</sup> January ,2018)

Expert lecture on "Virtual Reality Application" was organised by the Electronics and Telecommunication Engineering department for Second Year Students on 22<sup>nd</sup> January, 2018. This event was coordinated by Prof. Nilesh Patil.



Mr.Tejas Kasare conducted this expert lecture in which he explained the concept of virtual reality and how we can use virtual reality concept in designing in gaming sector .He also introduced to students how to develop their personal game and which type of tool and training required for the same. Many students were interested in designing game so sir gave brief introduction to android and designing of game using virtual reality

## "Expert lecture on IOT application"

(8th February ,2018)

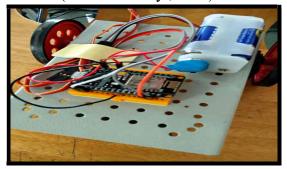


Expert lecture on Internet of Things were organised by the Electronics and Telecommunication Engineering department for Final Year Students on 8th February, 2018. This event was coordinated by Prof. Nilesh Patil .Mr Santosh Kambale, R&D Head Saitronics Industry Karad conducted this expert lecture in which he explains concept and application of IOT He also introduced the new emerging technology in field of IOT.

He gave the final students insight of the Career Opportunity in IOT Sector in future. After lecture students clarified their doubt regarding developing IOT based projects and future scope of IOT.

## "IOT based Robotics Workshop"

(23<sup>rd</sup> February ,2018)



IETE (Institute of Electronics and Telecommunication Engineers), student forum of the Electronics and Telecommunication Engineering department conducted the IOT based Robotics workshop on 23rd February ,2018 to foster the growth of knowledge in the robotics field amongst the students. The **IETE** actively organizes and participates in technical activities of the department.



The event started at 10.00 am in presence of Respected HOD Prof. Sheetal Bukkawar, In this IOT Workshop the main agenda was to give a brief idea where the

participated students could understand the arduino basics, introducing them with various components like Bluetooth module interfacing with arduino, interfacing with ESP8266 (WiFi-Module) and also basics of developing simple android app.



All students actively participated and showed interest in making project IOT based project. At the end of the workshop, student were able to make IOT based project on different with the entire kit. The kit given was take away kit for the students. The workshop was conducted successfully.

### Farewell 2K18"

(30<sup>th</sup> April ,2018)

ETSA (The Electronics and Telecommunication Students Association), is an association formed by the students of Electronics and Telecommunication Engineering to foster the growth of knowledge in the field amongst its students.



The ETSA actively organizes and participates in technical activities of the department. As per schedule of EXTC Department, event started at 5:30 pm in presence of Respected HOD Prof. Sheetal Bukkawar, and faculty co-ordinator Prof. Prof. Pallavi Kharat, and other faculty members and the students of EXTC Department.

Event started with games such as first



come first win followed by funny awards. Then, speech was given by HOD EXTC and all other students. After speech, Best Outgoing Student award given to Suchitra Naregal and Best Student of the year 2017-18 to Abhijit Patil. Awards was announced, which was given by HOD EXTC.



Then a dance and singing performance was given by BE students. After that DJ was started at 7 pm till 8:30 pm followed by dinner. And then event was successfully ended at 10 pm.

### **Students Achievements**

### ♣ Result At Glance List of Toppers for Academic Year- (MAY-JUN 2018)

S.E. SEM-IV

TOPPER LIST FOR DIVISION SE-overall 17-18 EVEN		
NAME OF STUDENT	SGPI	RANK
Mandal Ankit Kumar	8.74	1
Gawada Ramkrishna Devraj	8.49	2
Waman Sampada Shivaji	8.34	3

T.E. SEM-VI

TOPPER LIST FOR DIVISION TE-overall 17-18 EVEN		
NAME OF STUDENT	SGPI	RANK
Dudam Komal Hreenivas	7.81	1
Kadam Sampada Jayprakash	7.76	2
Phadke Amogh Uday	7.75	3

**B.E. SEM-VIII** 

TOPPER LIST FOR DIVISION BE-overall 17-18 EVEN		
NAME OF STUDENT	SGPI	RANK
More Krutika Vilas	8.73	1
Shendge Suraj Ramdas	8.71	2
Chavan Prashant Permanand	8.69	3

Heartiest congratulations to our Toppers as well as placed students. "God bless you and we hope that you make us proud in the future as well".

### Placement Details

We proud and glad to notify that our final year students have been placed in following companies.

1. GVK 10 Zeus E-Learning

2.Fiction 2 Fact 11.GLOVVE

3.Mindcraft 12. Reliance JIO

4. Wipro 13.Zepo Technology

5. QAD 14.Sprylogic

6. Amazon 15. Selec Control

7. Ashida Electronics 16 KPIT

8. Hinduja Tech limited 17 VYOM Labs

9. Rivigo 18 Nucsoft

### **Faculty Achievements**

### **Publication in International Journals/Conferences**

Name Of Publisher/presenter	Publications
Prof. Sheetal Bukkawar	1. "Dual band U Shaped Fractal Monopole Antenna", IEEE Conference, 'WISPNET', Chennai, March, 2018
	<ol> <li>"Square Shaped Fractal Antenna for Multiband Application", IEEE International Conference on Smart City &amp; Emerging technologies (ICSCET), Mumbai, Jan ,2018</li> </ol>
Prof. Nilesh Patil	<ol> <li>"Non Systematic coded OFDM", Journal IJERND, April,2018</li> <li>"Home Automation using Raspberry-pi", Journal IJERND, April,2018</li> <li>"Human to Human interface", Journal IJERND, April,2018</li> </ol>

- ➤ Prof Sheetal Bukkawar, Prof.Sheetal Bhujade, Prof. Rajashri Narwade, Prof. Sonal Gahankari, Prof. Mandeep Kundhal, Prof Umesh Pinjarkar, Prof. Vijay Kapure, Prof. Megha Pande, Prof.Sarita Kale, Prof. Sneha Burnase, Prof.Neha Mahajan Prof. Suchitra Majumdar, Prof. Naresh Kumar Joshi and Prof. Nilesh Patil has attended 3 day workshop on "Design And Analysis of Antenna and microwave passive devices using HFSS on 3rd Jan to 5th Jan, 2018
- ➤ Prof. Nilesh Patil has attended 7 days STTP on "New Trends in Solid Work in Engineering" at BVCOE kharghar on 12th April -21st April,2018.

### **Student Achievements**

त्री नरेंद्र मोदी सध्या वर्चा झाल्याचे सूत्रानी सागितले. काश्मीरचा मोठा भाग भारताच्या हद्दीतच दाखवण्यात आलेला नाही.

धावत्या युगात प्रत्येक जण जलदगतीने मिळणाऱ्या सुविधांचा विचार करतो. आणि त्या त्या सुविधा माणसाला नव्या टेक्निक सॉफ्टवेअरच्या संशोधनातून मिळताना दिसत आहेत. सध्याचे युग

कनौजिया यांनी प्राध्यापक डॉक्टर मंजूषा देशमुख यांच्या अभ्यासी मार्गदर्शनातून जून २०१७ मध्ये या प्रकल्पाच्या अध्यासाला सुरुवात केली.

एक वर्षाच्या रिसर्च नंतर या विद्यार्थांनी पेटर्न रेकॉगनाईस ऑफ ऑटोनॉमिक हे टेक्निकल युग आहे. खारघर सेक्टर निव्हेंर्स सिस्टम यूजिंग आर्टिफिशिअल

असलेल्या रोगाचे नमुने दाखवल्या नंतर सॉफ्टवेअर माणसाला कोणता रोग आहे K हे काही वेळातच माहीत होणार आहे. या प्रकल्पातून तीन विद्यार्थांनी तीन रोगांची ओळख मिळवली आहे. ते म्हणजे जलद हृदयगती (Tachycardia), मंद हृदयगती (Sinus Bradycardia) आणि निलर संकृपन (premature ventricula contraction). तसेच विविध छोटे छो आजारातून होणारे रोग ओळखणे देखीत या सॉफ्टवेअरच्या माध्यमातून माहीत होत असल्याने विज्ञान तंत्राच्या युगात अजू एक क्रांतीच पाऊल पुढे पडत असल्याः डॉक्टर मंजूषा देशमुख यांनी सांगितले.

हल्ली कोणताही आजार आला की आपण रुग्णालयात जातो त्या दरम्याः डॉक्टर रुग्णाला रक्तापासून वेगवेगळ्या टेस करायला सांगून रिपोर्ट काढायला सांगतार मात्र त्यामुळे वेळ तर जातीच पण असलेल आजार ओळखायला दिवस देखील व्यश जातो. दूसऱ्या दिवशी मिळालेला रिपोर घेउन रुग्ण डॉक्टरकडे गेल्यानंतर डॉक्ट रुग्णाला कोणत्या आजाराचे लक्षण आ हे सांगतात. अशा विज्ञान तांत्रिक युगार लक्षण पटकन कळावे यासाठी आर्म्ह हा सॉफ्टवेअर सर्च केला असल्यान



५ येथील सरस्वती महाविद्यालयातील अभियांत्रिक कॉलेजच्या शेवटच्या वर्षात शिकणाऱ्या तीन विद्यार्थी मित्रांनी मिळून रोग ओळखणारा सॉफ्टवेअर सर्च केला आहे. अभियांत्रिक कॉलेजचे विद्यार्थी

नियुरल नेटवर्क (pattern recognition इलेक्ट्रॉनिक्स आणि टेलिकम्युनिकेशन of autonomic nervous system using artificial neural network) हा अभिनव प्रकल्प सादर केला आहे या आम्ही रुग्णाला त्याच्या आजाराः विद्यार्थीचे सर्व स्तरातून कौतुक होत आहे. विविध प्रकारचे रोगाचे ईसीजी आऊटपुट ओमकार कड़ा, दिप तिवारी आणि गणेश म्हणन देऊन सॉफ्टवेअरच्या इनपटला या विद्यार्थीनी प्रतिक्रिया देताना सांगितले





नवी मुंबई : खारघर सेक्टर ५ येथील सरस्वती महाविद्यालयातील इलेक्टॉनीक्स आणि टेलिकम्युनिकेश शाखेच्या अंतिम वर्षातील चार विद्यार्थ्यांनी प्रोफेसर निलेश पाटील यांच्या मार्गदर्शनाखाली ह्यमन ट् ह्यमन इंटरफेस या अभिनव प्रकल्पाचे सादरीकरण केले आहे. यामुळे या विद्यार्थ्यांचे सर्वत्र कौतुक होत आहे.

सिद्धांत रमेश, अंकुश सिंह, साई शिकें आणि राहल पाटील या चार विद्यार्थ्यांनी बनवलेला हा प्रकल्प आंशिकरित्या पक्षाघात असणाऱ्या रुग्णाना रोजच्या हालचालींसाठी मदत करणारा ठरणार आहे. या प्रकल्पाच्या माध्यमातून

सर्व मानवी हालचालींवर नियंत्रण येऊ शकते. करता भविष्यातील धोकादायक पर्यावरणात मानवी क्षमतेवरची अवलंबितता कमी करेल असे युद्धक्षेत्रे, नैसर्गिक आपत्ती व इतर तसेच रोबोटिक्स कंपन्याच्या माध्यमातून दरस्थकार्य करणारे डॉक्टर या प्रकल्पाचा उपयोग करून कठीणातले कठीण उपचार करु

शकतील. हा प्रकल्प त्याच्या मुळ पुर्ववर्धकापेक्षा कमी किंमतीत बनवण्यात आला असल्याची माहिती प्रोफेसर निलेश पाटील यांनी दिली. या प्रकल्पाला साई इलेक्ट्रॉनिक्स उद्योगाचे सीईओ पासून पुर्ण प्रायोजकत्व मिळाले आहे.

### **EDITOR:**

**Prof. Mandeep Kundhal**