P P SAVANI UNIVERSITY — School of **Engineering**

Encrypting the Journey of Academic Excellence...

About P P Savani School of Engineering

P P Savani School of Engineering strives hard to build a strong foundation of novel approaches to teaching-learning processes in order to impart quality education in Engineering in comfortable, enjoyable and easy learning environment to the budding engineers. We, at P P Savani School of Engineering, offer intensive learning programs accompanied with interdisciplinary studies and research. We aspire to provide skilled and motivated manpower catering to the rapidly changing industrial needs and also to train students through cut throat competitive and techno savvy world.

Additionally, these courses offered are delivered through world class state-of-art laboratories and hi-tech tools and equipment. We wish to inculcate leadership qualities, creativity, problem solving and many more skills like these by exposure to real time problem solution activities. We also thrive to produce competitive and employable human resource of Engineering for the global market through the establishment of Center for Skill Enhancement and Professional Development.

In the nutshell, we are aiming for excellence academic exposure to the students and hence, produce not only job seekers but also job creators and leaders of tomorrow

Academics @ School of Engineering

- ❖ Choice Based Credit System/Online Courses
- ❖ Curriculum aligned and supported from the Industrial spectrum
- ❖ Constant focused approach on students' attendance and performance
- ❖ Orientation programs for Students
- ❖ Intensive Industrial Exposure by visits
- ❖ Expert Lectures by the Eminent speakers from Industries and Academia
- ❖ Student Feedback System

Student Support Activities @ School of Engineering

- ❖ Academic Felicitation of Outstanding Performer in Teaching & Non-Teaching Staff
- ❖ Students' Mentoring/Counseling System
- ❖ Cash awards/Merit Scholarship to Rankers
- ❖ Skill Enhancement Programmes for the Students & Staff Members
- ❖ Student's involvement in several Outreach Activities like Model Making,
- ❖ Vibrant Gujarat Event, Empowering Rural Communities, Technical Festivals etc
- ❖ Availability of Hi-Tech Softwares for better visualization
- ❖ Site Visits for Practical Exposure
- ❖ Rich Knowledge Resource Center
- ❖ Hands on Activities/ Workshops for Students

Acknowledgement

We are grateful to all content contributors for making this issue a joyous experience of reading.

- Editorial Board, Tech वृतम्

From the Desk of the Dean...

Dr. Niraj Shah

Dean, P P Savani School of Engineering

Dear Reader

It is my honor to represent the brand of P P Savani, as a Dean of School of Engineering through Techवृतम् – a Quarterly Institute Newsletter.

Techवृतम् is an endeavor to narrate the innovative academic practices with the vision of holistic development of the students at P P Savani School of Engineering. It also aims to provide a platform to the students as well as faculty members to show case their hidden talent. It has received tremendous positive response from the students as well as faculty members in terms of contribution and appreciation of this effort.

Since inception in 2017, P P Savani School of Engineering has been striving hard to build a strong foundation of novel approaches to teaching-learning process to impart quality education in Engineering in comfortable, enjoyable and easy learning environment to the budding engineers. We, at P P Savani School of Engineering offer intensive learning programs accompanied with interdisciplinary studies and research. We aspire to provide skilled and motivated manpower catering to the rapidly changing industrial needs and also to train students through cut throat competitive and techno savvy world.

Additionally, these courses offered are delivered through world class state-of-art laboratories and hi-tech tools and equipment. We wish to inculcate leadership qualities, creativity, problem solving Dand many more skills like these by exposure to real time problem solution activities. We also thrive to produce competitive and employable human resource of Engineering for the global market through the

EVENTS AT A GLANCE

FRESHER'S PARTY 2K18

School of Engineering (SoE) organized Fresher's Party on September 15, 2018 to welcome the new batch of Engineering of 2018. The event was planned by the Class Representatives of 2017 Batch under the guidance of Cultural Committee of SoE.

The program commenced at 05:00 PM in the frontispieces of Admin Building of PPSU campus. Dr. Niraj Shah, Dean, SoE, the faculty members and students of SoE were present to grace occasion. Hetvi Majumudar from Computer Engineering (III SEM) and Aayushi Malaviya from Information Technology (III SEM) were the anchors of the event. The major events of the evening were Group Dance, Ramp Walk, competition of Mr. & Miss PPSU which was followed by DJ evening.

RASHTRIYA EKTA DIVAS

With reference to AICTE circular to celebrate 'Rashtriya Ekta Divas' on the occasion of 143rd Birthday of Shree Sardar Vallabhbhai Patel, the first Deputy Prime Minister and Home Minister of India. SoE organized three competitions and Oath taking ceremony for students and faculty members of P P Savani University. Ms. Meera Patel & Dr. Gaurav Thakarar, Assistant Professors, SoE coordinated the event under the guidance of Dr. Niraj Shah, Dean, SoE.

Essay Writing Competition was organized on the topic 'Iron Man of India'. Among 16 participants, Ms. Chandni Gohil won the competition which was judged by Dr. Gaurav Thakarar, Assistant Professor, SoE.
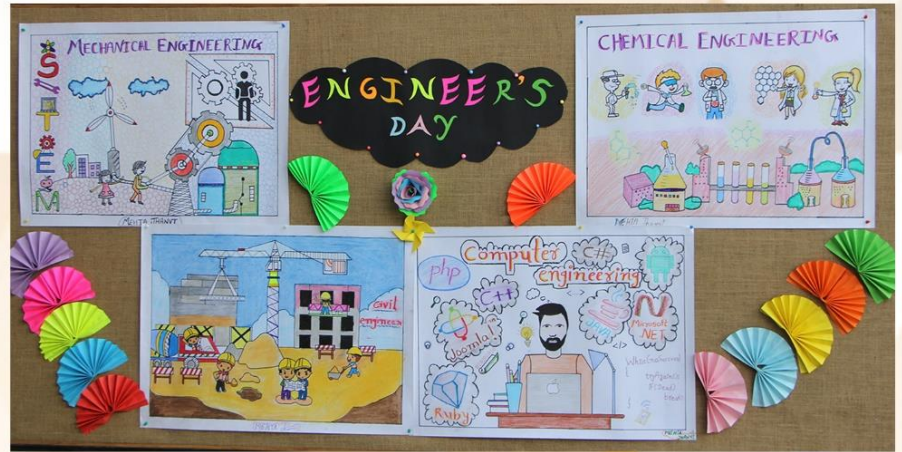
The Poster Making Competition was organized on the theme of 'National Unity'. Among 22 participants across the university, Mr. Vivek Ajudiya won the competition.The competition was judged by Mr. Abhishek Ganeshgudi, Principal and Mr. Bhavin Patel, Assistant Professor from School of Design.

The movie making was on the theme of 'Unity in Diversity' as organized. A team from the school of Nursing and Physiotherapy registered for the competition. However School of Nursing team couldn't turn up for the competition so the consolation prize was given to the students of Physiotherapy.

EVENTS AT A GLANCE

ENGINEER'S DAY CELEBRATION

P P Savani School of Engineering organized an Engineer's Day on the September 15, 2018, in the memory of Sir M. Visvesvaraya. The enthusiastic faculty team of SoE, led by Dr. Niraj Shah, Dean, SoE carried out the event successfully with the help of student volunteers.

In total, there were 15 event organized namely Code Cracker, Website Design , SPARK: A step towards Innovation, Graphic Design Competition, InQUIZitive, Raftaar, Model-O-Mania, Scrapheap, Nirman- Bridge Model Making (Truss), Biomimetics, Unsung Heroes, Ad Mad Show, Let's Debate, Popsicle Sticks, and ProdyoMaan Karmashaala.

The students participated in all the events with utmost enthusiasm. On this occasion Dr. Parag Sanghani, Provost, P P Savani University graced the event as the Chief Guest for Valedictory Function where all the winners and runners up were awarded with prizes.

A SESSION ON SELF DEFENCE TUTORIAL FOR GIRLS

Self Defence tutorial was organized for girls of SoE and SoM by Women Development Cell, SoE on August 6, 2018. Mr. Ram Nizama, Karate Tutor, from Bharuch taught various karate techniques to girls which they can use for defense. The session started with warm up at 10:00 am and lasted for two hours with a practice of the techniques. More than 50 girls participated & were benefitted from the session.

A SESSION ON 'AWARENESS ON WOMEN'S RIGHTS'

A Session on 'Awareness of Women's Rights' was organized for all girls and female faculties of the University on October 12, 2018 by SoE. Dr. Smt Manisha V Shukla, Principal, Mahamandleshwar Shri Krishnanandji Law College, Bharuch was the speaker of the session. She talked about Women Welfare Rights and Laws against Sexual Harassment, Domestic Harassment and MeToo campaign. It was an eye opening session for girls as most them were unaware about rights and actions to be taken against harassment.

PHILANTHROPIC ACTIVITIES

JOY OF GIVING

To spread smiles on the faces of the people surrounding our campus; students and faculties of SoE and PPSU arranged Joy of Giving Event, coordinated by Ms Reshma Lakhani, Assistant Professor, SoE, in September 2018. Various items such as clothes, footwears and toys were contributed by PPSU family. Distribution of these items was done on September 17, 2018.

PPSU DAN UTSAV

As a part of Dan Utsav week celebration, Joy of Giving event was organized. Students and faculties of PPSU went to village 'Bharan' and distributed the items collected. Two students' team from SoE and SoP had performed Nukkad Natak to spread awareness about cleanliness and hygiene. Sanitory napkins were distributed to the women of the village and female housekeeping staff of the campus along with educating them how to use and why to use. These napkins were purchased through the funds raised under Joy of Giving during Dan Utsav. Financial support of 8000/- was contributed to 'Muk Bhadir Ashram' in Surat.

Unnat bharat Abhiyaan

PPSU has been selected as a participating institute under the flagship programme of MHRD and centrally coordinated by IIT Delhi, for Unnat Bharat Abhiyan on October 2, 2018. PPSU has adopted five villages namely: Mahuej, Kathwada, Nandav, Hathuran and Nana borsara for suggesting solutions to the problems existing there under this programme. SoE students and faculties will work for the development plans for Mahuej.

As a part of the first task, students were sent to villages to collect survey data from the villagers.

Glimpses of survey collected and Data entry on UBA portal by the students:

ACADEMIC EXCELLENCE @ SoE

TWO DAYS WORKSHOP ON DATA INTELLIGENCE AND ANALYTICS

School of Engineering, organized Two Days Workshop on Data Intelligence and Analytics during November 24-25, 2018 sponsored by GUJCOST & DST, Government of Gujarat at the PPSU campus. The workshop covered the topics such as Introduction to Machine Learning and Deep Learning, Current Trends in Data Science (AI/ML) with its Application, Tools and Technologies for Data Analytics, Research Areas in ML/DL, Challenges to Data Science along with Hands on Sessions to explore various libraries available for Data Analytics: Numpy, SciKits, Matplotlib, Scipy, Python, DL etc.

The workshop was graced by the experts from various reputed institutes such as SVNIT, Surat; DAIICT Gandhinagar; Reliance Jio Infocomm., Mumbai; SSCE, Bhavnagar and CHARUSAT, Changa. Participants from various institutes across the nation were the beneficiaries of the workshop.

RESEARCH ERUDITE

Ms Sofia Ahmed, Assistant Professor, Department of Chemical Engineering and team received Project grant of Rs. 50,000/- under the theme 'Swachchh Bharat' from Gujarat State Biotechnology Mission in BIOTHON 2018 - A Program approved by GSBTM of Department of Science & Technology, Government of Gujarat. The proposal for the project titled 'Microbial Fuel Cells as a Solution For Textile Waste Water Treatment' was presented by Ms. Sofia Ahmed, Assistant Professor, SoE and Ms. Parini Surti, Assistant Professor, SoS with Mr. Virajsingh Atodaria & Mr. Abhi Darshandiya, Students, Chemical Engineering; Ms. Bindu Sai & Mr. Dev Chauhan, Students, BioTech as a team members.

Mr. Palak Patel, Assistant Professor, Department of Mechanical Engineering presented a joint Research Paper entitled Role of Renewable Energy (solar and biomass) and Information Technology for the development of Smart Villages to have Balanced Economic growth in India at IEEE Conference at Chennai (Madras Section) during September 7-8, 2018. The paper is to be published and it will be listed in IEEE Xplore digital Library.

Mr. Jigesh Mehta, Assistant Professor, Department of Chemical Engineering, presented poster (collaborative) at 6th IWA Regional Membrane Technology Conference (IWA-RMTC-2018), Vadodara, M S University on topic 'Assisted Nanofiltration of Reactive Yellow Dye Solution using Flow Reversal and Pressure Pulsation' during 10-12th December, 2018.

He has also presented research paper (collaborative) on 'Study on Effective Cleaning Strategies in a Membrane Separation Processes' in SCHEMCON-2018, IIChE student Chapter, Mumbai Regional Centre, Department of Chemical Engineering, Institute of Chemical Technology, Mumbai. Co-authors: Virajsinh Atodariya, Rudra Kansara (Students of Chemical Engineering).

SoE Faculty as Experts…
Mr. Jigesh Mehta, Assistant Professor, Department of Chemical Engineering, reviewed Syllabi of Chemical Engineering courses **Heat Transfer operations** and **Instrumentation & Process Control** for the Institute of Engineering, Nirma University, Ahmedabad in January, 2019.

ACADEMIC EXCELLENCE @ SoE

Mr. Ravirajsinh Chauhan, Assistant Professor, Department of Computer Engineering/Information Technology was invited as resource person to conduct One Day workshop on 'LATEX: Why, What and How?' for M. Tech students at Parul University on October 6, 2018.

Hall of Academic Excellence...

Semester I (AY 2018-19)

Name	Enrollment No.	Program (Branch)	SGPA
Nileshkumar Dudi	18SE02CV003	B. Tech. (Civil)	8.18
Pinak Dhaduk	18SE02ME003	B. Tech. (Mechanical)	7.86
Ravi Kachhadiya	18SE02CH018	B. Tech. (Chemical)	8.95
Vandana shree Mourya	18SE02CE029	B. Tech. (Computer)	9.48
Samarth Vavadiya	18SE02IT059	B. Tech. (IT)	9.05
Arun Singh	18SS02IT032	B.Sc. (IT)	9.38

Semester III (AY 2018-19)

Name	Enrollment No.	Program (Branch)	SGPA
Chandni Gohil	17SE02CV003	B. Tech. (Civil)	9.75
Anmol Patel	17SE02ME012	B. Tech. (Mechanical)	9.58
Abhi Dharshandiya	17SE02CH013	B. Tech. (Chemical)	9.52
Jay Thakkar	17SE02CE059	B. Tech. (Computer)	9.52
Mihir Jasani	17SE02IT018	B. Tech. (IT)	9.83

Industrial Visits...

❖ Chemical Engineering students of 1st year visited Zydus Cadila Health Care, Ankleshwar on July 24, 2018.
❖ Civil, Mechanical and Chemical Engineering students of 2nd year visited Adani Port, Mundra during August 14-15, 2018.
❖ Civil Engineering students of 2nd year visited Geo Test House, Bharuch on October 13, 2018.
❖ Mechanical Engineering students of 2nd year visited JMT India Inc., Sachin, Surat on October 13, 2018.
❖ Computer Engineering and Information Technology students of 2nd year visited Dev Information Technology Ltd., Ahmedabad during September 4-5, 2019.

Eminent Experts @ SoE

Brijesh Mistry, Project Leader in Jacobs India Pvt. Ltd. delivered an Expert Session on 'Importance of Structural Engineering in Construction Technology' on October 01, 2018.

Language Club – an initiative by SoE

Center for Skill Enhancement and Professional Development initiated the First Ever Club of the P P Savani University namely Language Club. The club took shape under the guidance of Dr. Niraj Shah, Dean, SoE and was inaugurated by Dr. Parag Sanghani, Provost, PPSU on October 13, 2018. More than one twenty students across the University witnessed the launch of the club.

Faculty Thinks...

EACH ONE TEACH ONE

Mr. Jigesh Mehta

Asst. Professor, Department of Chemical Engineering

Education is the most powerful weapon to change the world. Can anyone get this weapon in the childhood when we need the most! For India it may be wrong.

In eleventh report of ASER (Annual Status Education Report) which is released in New Delhi, January 18, 2017, Enrolment of the age group 6-14 has been 96 % or above since 2009. This proportion increased from 96.7 % to 96.9 % in 2017. According to Google, 3 out of 10 ladies are educated. Government is trying their best to increase literacy rate but due to lack of awareness and people mindset it failed.

Education is the only way to understand the things. Now a days, government try to digitalize the things. In 2017, mobile phone users expected number is 730.7 million, what about others! Still 500 million people who are not using mobile phones. This is why uneducated and unaware people are biggest obstacle for the growth of country.

Now coming to the solution of it, being an educated citizen and as a youth, our hopes are more from the Government to develop country. In English Literature, there is a saying "Helping hands are more powerful than Speaking Mouths". We all heard this type of sentences in day to day life and finally we say "what can I do ?", "I haven't the money to educate the poor people". But is money the problem???? Think well. We all have the powerful weapon of "Knowledge". If we really want to change the mindset of people, let them glow with the bunch of knowledge we have and let it share with all of them. We can apply the formula "EACH ONE TEACH ONE".

STUDENTS' ALLEY

PATIENCE IS A VIRTUE, PROCRASTINATION IS AN EVIL.

Meet Vasani
Department of Computer Engineering

Before judging and going deep in both the topics and considering the effects, let's elaborate them to get a better understanding. Patience is a virtue- to become successful in life, things take time, no success is achieved overnight, but procrastination is an evil – avoiding tasks which lead to path of success will take you nowhere.

Patience is a very powerful word in itself. The more work you do, the more you put efforts, the more you practice, the more time you spent on doing a particular task, aiming to your goal, no matter you fail 99 times but just do. Don't stop at that 99th time you fail, you are closer to your success you think it's not working, you feel of going off track. You put down the 100th time try and it will lead to procrastination. You were an inch apart from your goal, your biggest dream of life at that stage, but because of the rapid failures in the past you presume it's not working and avoid it, which sometimes makes life out of tracks. You see it's all interrelated if you don't do you work patiently it will lead you to procrastination. Just don't waste time doing unnecessary things. If you are failing, focus on the weak points and make it strong, repeat everything again and again. The results will come, definitely the results will come, only if you lead to the part of patience. If you choose procrastination it will make things more worse. You will feel depressed, you will be overwhelmed by others, just go on with smart work, patience is the only way through, competitions are increasing day by day in this stumpious digital era. There are many inspirational examples out there who are now successful in their respective fields only because of hard work and great mindset. Patience is the only habit one should follow even if things go worse.

STUDENTS' ALLEY

TEARS

Harshit Patel

Department of Information Technology

From the moment we come into this world crying in hands of mother,
to the moment we first fall trying to reach open arms of father.
From 15 years old weeping over a heartbreak,
To over 21 sobing beside the dead mate.
All the moments we have lived,
Joyful or nervewrecking.
No one was there, But
There were tears. Comforting, Descending .
dropping from the eye-lids Slowly
running on cold cheeks Warmly

Who says brain can't know pain.
Whenever our heart fills with uncontainable hurt-chain.
It is Brain who makes our eyes rain.
they might be salty by taste
but their effect is sweeter than the wine.

CREATIVE CORNER...

CREATIVE SKETCHES

ART & CRAFT

JHANVI MEHTA
(COMPUTER ENGINEERING)