

TechVrutam

OCTOBER 2024

“ Engineers are the creators of tomorrow, turning imagination into reality one innovation at a time ”

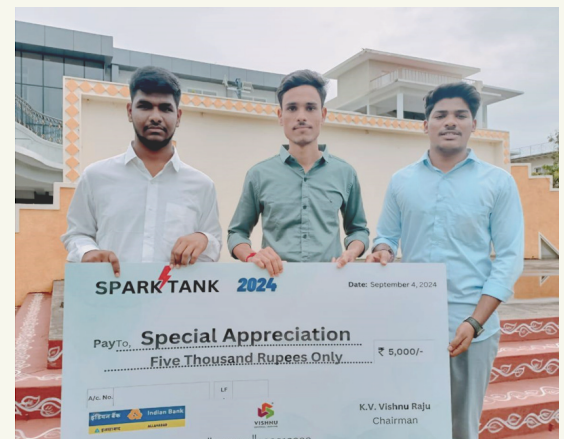


Explore
Experience
Empower

School of
Engineering

IN THIS ISSUE

- 1** EVENT OF ACADEMIC EXCELLENCE
- 8** INDUSTRY-ACADEMIA MEET
- 5** ENGINEERING DAY CELEBRATION
- 10** FACULTY PARTICIPATION
- 13** FACULTY ACHIEVEMENT
- 15** RESEARCH ERUDITE
- 18** STUDENTS' ACHIEVEMENT
- 21** STUDENT THINKS
- 24** FACULTY THINKS



EVENTS OF ACADEMIC EXCELLENCE



“ EXPERT WEBINAR ON HAZARD RECOGNITION AND RISK ASSESSMENT ”

Expert Talk webinar on "Hazard Recognition and Risk Assessment" was successfully conducted on August 27, 2024. The session was led by Mr. Ritesh Upadhyay and attended by Chemical Engineering students from Semester 5. The event was moderated by **Mr. Jigesh Mehta**, Assistant Professor, and supported by **Dr. Niraj Shah**, Dean & Director, and **Dr. Parag Sanghani**, Provost of P.P. Savani University. This insightful webinar provided valuable knowledge on critical safety measures for aspiring engineers

PPSU School of Engineering
P P SAVANI UNIVERSITY
UGC APPROVED

EXPERT TALK WEBINAR | Chemical Engineering Department,
School of Engineering

Hazard Recognition and Risk Assessment

DATE: Tuesday, 27-08-2024 | TIME : 3.00 pm to 4.00 pm

EXPERT
Mr. Ritesh Upadhyay
Manager,
Spoton Coating Pvt. Ltd.,
Kim, Surat.

TARGETED STUDENTS FOR THE SESSION
B.Tech - Chemical Engineering | Semester- 5
Diploma - Chemical Engineering | Semester - 5

MODERATOR

Mr. Jigesh Mehta
Assistant Professor,
Chemical Engineering Dept.,
School of Engineering,
P P Savani University

Dr. Niraj Shah
Dean & Director
School of Engineering,
P P Savani University

Dr. Parag Sanghani
Provost,
P P Savani University

“ e-Yantra Lab (eLSI) SETUP AT P P SAVANI UNIVERSITY INITIATIVE BY IIT BOMBAY ”



P P Savani University, Surat, in collaboration with **IIT Bombay**, proudly announces the establishment of an **e-Yantra Lab** under the prestigious e-Yantra Lab Setup Initiative (eLSI). This initiative, supported by the Ministry of Education (MoE) through the National Mission on Education through ICT (NMEICT), is aimed at fostering cutting-edge education in Embedded Systems and Robotics. This lab marks a significant step towards advancing technology education at P P Savani University and nurturing future engineers and innovators in the field of robotics.

“ HOSTS EXPERT SESSION ON SOLIDWORKS ESSENTIALS BY MR. HARDIK ACHARYA ”

The Mechanical Engineering Department of the School of Engineering has organized an expert session on Solidworks Essentials on 4th September 2024. The session was conducted by Mr. Hardik Acharya (Founder and Director, Mechsacle Design and Engineering Institute)

PPSU
P P SAVANI UNIVERSITY

School of **Engineering**

Mechanical Engineering Department Organizes

Expert Session on
SolidWorks Essentials

Topics to be Covered

- ✓ Solid/Surface Modeling
- ✓ Sheet Metal
- ✓ Weldment
- ✓ Assembly
- ✓ Motion
- ✓ Simulation
- ✓ Drawing

Expert:
Mr. Hardik P. Acharya
Founder and Director,
Mechscale Design & Engineering Institute

4th September 2024
09:30 PM to 10:35 AM



“ SUCCESSFUL PLACEMENT DRIVE AT P P SAVANI UNIVERSITY SECURES 34 STUDENTS WITH TOP COMPANIES ”

School of Engineering Placement team, P P Savani University had organized a placement drive coordinating with different companies like Casepoint Pvt. Ltd., Gateway Corp , EnactOn Technologies, Diffrenz System, Daydreamsoft, Beetonz Infotech, Netizens Technologies, DhiWise, IAMOPS Surat, LaNet, Roima Intelligence. As a result 34 students got selected with average package of 4 LPA. This was coordinated by **Mr. Kaushal Singh, Mr. Aakash Gupta, Mr. Siddharth Shah and Mr. Vishal Shah**

ENGINEER'S DAY CELEBRATION

05

PPSU
P. P. SAVANI UNIVERSITY
EST. 1983

Engineering Computer Science & Application Diploma Studies

INVITATION

WE THE TEAM,
SCHOOL OF ENGINEERING,
INSTITUTE OF DIPLOMA STUDIES,
INSTITUTE OF COMPUTER SCIENCE & APPLICATION
CORDIALLY INVITES YOU
FOR THE INAUGURAL CEREMONY OF

ENGINEER'S DAY Celebration

On 19 September, 2024 At 09:00 AM Onwards
Venue: Auditorium

Chief Guest



Mr. Vaibhav Agarwal
Principal, Bharatiya Vidya Bhavan's GIPCL Academy

ENGINEER'S DAY AGENDA

- 09:00 Am Welcome & Introduction of Guest
- 09:05 Am Lamp Lighting With Chanting of Mantras
- 09:15 Am About the Engineers' Day Celebrations
- 09:25 Am Glimpse of Past Engineers' Day Celebrations
- 09:35 Am Flash Mob
- 09:45 Am Address by Chief Guest
- 10:00 Am Presidential Remarks by Provost
- 10:05 Am Vote of Thanks

Engineer's Day Event Starts...



On the occasion of Engineer's Day, School of Engineering organized various Technical and Non-technical Events on 19th of September 2024.



GLIMPSE OF THE EVENT:

06





'INDUSTRY-ACADEMIA MEET



MECHANICAL ENGINEERING DEPARTMENT VISITS NBC BEARINGS

School of Engineering, P P Savani University, faculties & students of Department of Mechanical Engineering visited Phase-1 & Phase-2 of National Engineering Industries Ltd. (NBC Bearings), Vadodara on 13th September 2024. During this visit, they had a learning experience with various Bearing Manufacturing Processes i.e., Raw Material Selection, Bar stock cutting, Forging & Turning, Turning & Grinding, Bearing Assembly, Lubrication.



They also gained an experience of advanced technologies such as CNC Machining, Noise Testing, Robotic Automation, and Digital Inspection Systems to improve Efficiency, Precision, and Quality Control in the Bearing Manufacturing Process. This experience not only enriched their learning but also highlighted the importance of Precision Engineering in Modern Manufacturing.



FACULTY PARTICIPATION



Ms. Sneha Saini, Assistant Professor, Computer Engineering Department participated in one week of FDP on “Applied AI: Practical Implementations” conducted by TechSaksham Program from September 09, 2024 to September 13, 2024.

Ms. Twisha Patel, Assistant Professor, Computer Engineering Department participated in 5 days Faculty Development program on “Applications of Blockchain Technology” organized by Department of Computer Science and Engineering in association with IQAC, Institute of Engineering & management, Kolkata from January 29, 2024 to February 2, 2024

Mr. Kaushal Singh, Assistant Professor, Computer Engineering Department participated in one week of FDP on " Applied AI: Practical Implementations" from Sept 09 to September 13, 2024.

Ms. Neha Kunjan Shah, Assistant Professor, Computer Engineering Department participated in one week of FDP on " Applied AI: Practical Implementations" from Sept 09 to September 13, 2024.

Ms. Subhashini K, Assistant Professor, Computer Engineering Department participated in one week of FDP on " Applied AI: Practical Implementations" from Sept 09 to September 13, 2024.

Ms. Misha Patel, Assistant Professor, Computer Engineering Department participated in one week of FDP on " Applied AI: Practical Implementations" from Sept 09 to September 13, 2024.

Mr. Krunal Mandwale, Assistant Professor of Mechanical Engineering Department, School of Engineering at P P Savani University were attended webinar on “Biogas reactor for methane production” from the Editor-in-Chief, International Journal of Information Technology (BJIT), Published by Springer Nature; Journal No.: 41870

Mr. Abhijitsinh Parmar, Assistant Professor, Computer Engineering Department participated in 2 Days of Workshop on “Business Intelligence using Power BI” conducted by Mr. Jatan Shah, Skill Nation from July 13, 2024 to 14 July, 2024.

Mr. Abhijitsinh Parmar, Assistant Professor, Computer Engineering Department participated in 14 Days of MOOC on “ eLSI: Basics of Embedded Systems and Robotic” conducted by eYantra - Indian Institute of Technology (IIT), Bombay from June 23, 2024 to 8 July, 2024.

Ms. Meenakshi Kashyap, Assistant Professor, Computer Engineering Department participated in five days of FDP on “Applied AI: Practical Implementations” conducted by Microsoft India & SAP India led TechSaksham from September 09, 2024, to September 13, 2024.

Ms. Urvashi Solanki, Assistant Professor of Computer Engineering Department, School of Engineering at P. P Savani University has successfully attended "Emergence of Digitizaion & Automation in Automotive Embedded Systems on September 21, 2024 organized by BVICAM, New Delhi



FACULTY ACHIEVEMENT





Mrs. Hema Ransingh Parmar (ID No. 12DRCL001) has successfully completed her Doctor of Philosophy (Ph.D.) degree. Her thesis, titled "Hydro Geological Study of Multi Aquifers Causing Waterlogging and Salinity in Dharoi Command Area," was conducted under the esteemed supervision of **Dr. Niraj Shah, Director at P.P. Savani University, Surat**. Mrs. Parmar achieved this academic milestone August 7, 2024. Congratulations to her on this outstanding accomplishment.

Dr. Balraj Krishnan Tudu, from the Department of Chemical Engineering at the School of Engineering, P P Savani University, has been honored with the prestigious Best Male Teacher Award on Teachers's Day-2024

Mr. Ankur N. Shah of Computer Engineering Department, School of Engineering at P P Savani University was granted certificate for "Interactive Teaching Using Senses Interactive Technology" on June 14th, 2024.

Mr. Ankur N. Shah of Computer Engineering Department, School of Engineering at P P Savani University were invited Reviewer for "3rd International Conference on Advancements in Smart Computing and Information Security [ASCIS 2024]", at Marwadi University, Rajkot on May 22nd, 2024

Mr. Chirag Desai (Mechanical Engineering Department) & **Mr. Siddharth Shah** (Civil Engineering Department), Assistant Professor, School of Engineering, P P Savani University were awarded with Golden Trophy at 6th Surat chapter Convention on Quality concept organized by Quality Circle Forum of India, Surat chapter" under the theme of "INVESTING IN PEOPLE, BUILDING A BETTER FUTURE" on August 31, 2024.

RESEARCH ERUDITE



Dr. Ranjit Kumar Dehury (Lead and Corresponding Author) of Mechanical Engineering Department, School of Engineering at P P Savani University in collaboration with external researchers have published a research paper on “Experimental Investigation on the Effect of Cr and Mn in High Temperature Oxidation of Cantor Alloy” in prestigious Metals and Materials International (A SCI Indexed Journal), DOI No.: 10.1007/s12540-024-01770-1

Dr. Vinit Gupta Associate Professor of Mechanical Engineering Department, School of Engineering at P. P. Savani University was invited as an editor for editing a book titled “Multi Attribute Decision Making in Industrial Engineering” to be published under Scrivener-Wiley Publishing.

Mr. Kaushal Singh published a chapter “Security Challenges in Big Data Analytics” in “Handbook of Institute of Engineering and Technology (IET)” Scopus Indexed, September 29, 2024

Dr. Vinit Gupta (Corresponding Author) along with **Dr. Ranjit Kumar Dehury** of Mechanical Engineering Department, School of Engineering at P P Savani University in collaboration with external researchers have published a research paper on Synthesis and Characterization of Novel Graphene Nano Platelet based Nanofibers for Thermal Energy Storage in prestigious Nano (A SCI Indexed Journal), DOI No.: 10.1142/S1793292024501339

Dr. Ranjit Kumar Dehury (Lead and Corresponding Author) of Mechanical Engineering Department, School of Engineering at P P Savani University in collaboration with external researchers have published a research paper on “Tailoring oxidation resistance of Cantor alloy by addition of Ta and Al” in prestigious Intermetallics (A SCI Indexed Journal), DOI No.: 10.1016/j.intermet.2024.108425

Dr. Ranjit Kumar Dehury (Corresponding Author) along with **Dr. Vinit Gupta, Dr. Rahul Kumar** of Mechanical Engineering Department, School of Engineering at P P Savani University in collaboration with external researchers have published a research paper on “Influence of aluminium in wetting characteristics of Zn-Al alloy” in prestigious Materials Letters (A SCI Indexed Journal), DOI No.: 10.1016/j.matlet.2024.137079

Mr. Kaushal Singh has published a paper on “Leading-Edge Sentiment Analysis: A Survey of Application Context, Challenges and Advanced Techniques” in Recent Advances in Computer Science and Communications, Published on: 19 September, 2024 Article ID: e26662558312258 ISSN (Print): 2666-2558 ISSN (Online): 2666 2566 DOI: 10.2174/0126662558312258240911111028 (Scopus Indexed).

Dr. Vinit Gupta (First Author) of Mechanical Engineering Department, School of Engineering at P P Savani University in collaboration with Mr. Yogesh Joshi of S.B. Jain Institute of Technology, Management and Research, Nagpur (India) have published a research paper on Modelling and Study of Dynamics and Control of a Two- Link Serial Manipulator & in prestigious Lecture Notes of Mechanical Engineering (A Scopus Indexed Proceedings).

The design for the "Chassis Welding Fixture" by Amit Dodia (UG Student, Mechanical Engineering Department), **Chirag Desai**, **Hardik Majiwala**, and **Amir Patel**, Assistant Professor from the Mechanical Engineering Department, School of Engineering, has been registered.

Ms. Meenakshi Kashyap, **Mr. Ravirajsinh Chauhan** has published a paper on & Towards a Sustainable Future: Enabling Industry with Green Web 3.0, Decentralized AI, and Edge Intelligence in ITM Web of Conferences, Volume 65, July 16, 2024, eISSN: 2271-2097.

Mr. Ankur N. Shah of Computer Engineering Department, School of Engineering at P P Savani University was invited as a Reviewer of research paper for the "Journal of Integrated Science and Technology", Scopus Journal on Sept 28th, 20204

The design for the "Vertical Glass Cleaning Robot" by **Mr. Chirag Desai**, Assistant Professor from the Mechanical Engineering Department, School of Engineering, has been registered.



STUDENTS' ACHIEVEMENT



“ GDSC LAUNCHES GENERATIVE AI PROGRAM ”

We are excited to announce that GDSC will be launching a Generative AI Program for students, starting from 1st October. The club has received an overwhelming response, with 360 students already registered. The selected participants will have the opportunity to take a Generative AI course from Google, and successful completion will award them with a valuable Google badge and certificate. The mentioned club are consisting following core members led by **Vivek Jetani**, a student of CSE Semester 5, School of Engineering.

19

**VIVEK JETANI**

22SE02CS021
Computer Science - Sem
5

GDSC LEAD

**HASTI RUPARELIYA**

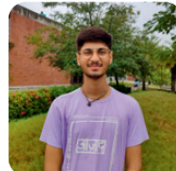
22SE02IT035
Information Technology -
Sem 5

NON-TECH LEAD

**KARTIK GOLANI**

22SE02CS017
Computer Science - Sem 5

EVENT LEAD

**SMIT MANIYA**

22SE02CE044
Computer Engineering -
Sem 5

TECH LEAD



The **Spark Tank 2024** at Vishnu Institute of Technology successfully organized in Sita Auditorium, Andhra Pradesh. The event was held for the student to share their innovative ideas and skills. In which the many college student have participate and share their Start up project. The Team name “Smart Shoes” from PPSU has been selected and get a Prize as Special Appreciation.

The team from B.Tech ITE-7, Team Member:- **1) Manish Bhagat 2) Ashish Mishra 3) Nikhil Rachcha** Which was leading By Mentor :- **Mrs. Meenakashi Kashyap**



STUDENT THINKS



HARMONY CROSSROADS

In the kingdom of choices, a question arises true,
What weighs heavier on our hearts, to consider through?
Is it the pursuit of being right, or seeking joy's embrace?

A contemplation to unravel, to find our rightful place.
For often in life's tapestry, we encounter paths unclear,
Where righteousness and happiness may not fully adhere.

To be right, a noble quest, upholding truths untold,
Yet happiness, a gentle breeze, can mend a weary soul.

Does the scale of justice tip, favoring right's demand,
Or does happiness hold sway, guiding our every strand?

To be right brings validation, a sense of moral worth,
But happiness brings contentment, a solace in rebirth.

In times of moral quandary, the heart may feel confined,
Pulled between principles steadfast and desires undefined.
To be right may bring approval, from society's discerning eye,
But happiness, a cherished gem, within our hearts can lie.

Sometimes the right path leads to sacrifices great,
A selfless act, though it may burden our own fate.

Yet happiness, a fleeting star, beckons us to seize,
To embrace life's simple pleasures, to feel our hearts release.

But let us not forget the realm where both can intertwine,
Where being right and being happy can harmoniously align.
For in the depths of righteous choices, a joy may softly gleam,
And in the warmth of happiness, a moral compass may redeem.

So what matters more, you ask, in life's intricate design?

To be right or to be happy, which path shall we define?

The answer, perhaps, lies in finding balance's embrace,
To navigate life's maze with grace, each step a precious trace.

For being right and being happy need not be at odds,
When empathy guides our actions, and love transcends all facades.

So seek the path that aligns with your soul's truest call,
And may you find the sweet spot where happiness entwines with all



Hasti Samirkumar Rupareliya

Btech IT5

22SE02IT035

મનોદશા

આદિ થી અનંત કાળ નું સત્ય જે...
બની ગયું માત્ર અનુભવોનું તથ્ય ?

અપેક્ષાઓ ની સાથે મોહ નું જ પર્યાપ્ત સ્થાન
નોતરે કામ , વાસના ને હતાશા નું મર્યાદિત જ્ઞાન !

પ્રસન્નતા ની બલી આપી ને મન ની સંતુષ્ટિ
કદીએ ના બની શકે જીવન પ્રવાહ ની તૃપ્તિ

વિચલિત મન માં ચાલતું મહાભારત નું યુદ્ધ !
બિનપ્રયાસ કેમે સ્થાપિત કરે શાંતિ રૂપી બુદ્ધ ?

પ્રણ લઈને આરંભ કરીએ સ્વનિશ્ચિત પથ કાયા
જેમાં સ્વયં નું પ્રતિબિંબ પણ નય મૂકી શકે બાધા

યથાર્થ દ્રષ્ટિ નું અનુસરણ કરીને જતા લક્ષીત રાહ પામવા
ગતિમાન સમય પણ આતુર છે ધ્રુવીના એ પળ ને માણવા !

જિંદગી

મુશ્કિલ हैं ये ज़िन्दगी जनाब ...

कोई किसी के लिए जीते हैं , तो
कोई किसी पर जीना रखते है ।

कोई चाहकर भी दूर है तो ...
कोई दूर होकर भी चाह रखता है !

हसीन दिल मे खलिश लिए तपिश है एक मुलाकात की
जिसे मिलना है उसे मौका नहीं और मौके वाला मिलता नहीं

एतबार है मरहम बनने का पर ...
कमबख्त लायक ज़ख्म भी तो नहीं



સ્વનિર્મિત

The Dhruvi

23SE02CE056

FACULTY THINKS



" दास्तान-ए-ऑब्जेक्ट-ओरिएंटेड प्रोग्रामिंग "

("A Tale of Object-Oriented Programming")

हकीकत-ए- Class & Object

जिसके ऊपर है टिका पूरा " **object-oriented programming** " का आधार,

वो दो शागिर्द हैं " **object** " और " **class** "

class की शक्ल में कल्पना का रंग

object में ढलता है, हकीकत का संग

Class सिर्फ बताता है क्या हैं **Attributes** और **Methods**,

पर **Object** बनने के बाद ही मिलता है असली मतलब

सफ़र-ए- Inheritance

Inheritance की क्या बात कहे, ये नाचीज़ है सबसे खास

Built in Libraries का डंका चलता है इसके बलबूते पर आज

Single, Multi-Level और **Hierarchical** सब हैं इसके प्रकार

और सभी को जोड़ दो तो **Hybrid** बन जाता है वो यार

Parent-Child Class के बीच में रिश्ता है ये बनाता

चीज़ें(**attributes & methods**) बांटने का हुनर इसे खूब है आता

Dynamic Method Dispatch है इसका ही एहसान और Reusability के मामले में यही तो है अलमदार

" दास्तान-ए-ऑब्जेक्ट-ओरिएंटेड प्रोग्रामिंग "

("A Tale of Object-Oriented Programming")

गुस्ताख-ए-Polymorphism

Polymorphism की बात है, एक फन का राज
गुस्ताखी में बदले, कई शकलें वो साज़

एक नाम की दुनिया, अलग-अलग किरदार

Function की खुदी में, मुक्तलिफ़ पहचान का
इज़हार

Overloading और **Overriding** हैं इसके दो
प्रकार

Reusability देना है इसका सबसे बड़ा कमाल

जलवा-ए- Access Specifier

ये जो "**Access Specifier**" हैं, क्या खूब इनके
मसाइल हैं,
कभी नुमायां कभी पोशीदा, हो जाते हैं स्टूडेंट्स बेचारें
हमेशा गुमराह

लगता है जो सबसे आसान वो है बेशर्म "**public**",
बुलाओ न बुलाओ, हो जाता है हमेशा हाजिर

और एक है बंदा "**default**", जो शेर बने फिरता है सिर्फ
अपने मोहल्ले ('**package**') में
क्योंकि औकात नहीं उसकी कहीं और मुखातिब होने की

Specifier "protected" है एक हद-बंदि की बात,
जैसे मिलती है विरासत में बच्चों को बाप से ज़ायदाद

"**Private**" की दीवारें हैं ऊँची, नाजुक और खामोश,
सिर्फ अंदर की ही बातें और बाहर से बेहोष



Ms. Tasneem Kagzi
Assistant Professor
CE/IT Department,
School of Engineering

UNCHERISHED LOVE...

The divinity that looked through those eyes,
a strength beyond, that ego structure could survive;
Something deep down, the gaze approached,
the bond of oneness, a prevailing silence wrote;
A selfless self, tried to surface itself,
amid a strong resistance from the apparent presence;
The eyes realized the disturbance within,
pondered over the surface streams;
Confused with the annoying expressions,
surface overpowering the depth's essence;
Material bounds overwhelmed the boundless,
breaking away the eye contact;
A deep craving stood within,
but then the false existence wins;
The peak of affection is not realized,
a memory of bliss could only survive.



Dr. Vinit Gupta

Associate Professor,
Mechanical Engineering Department,
School of Engineering

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