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(Ministry of HRD Initiative)



Institute Innovatio Council

**SARVAJANIK UNIVERSITY
SARVAJANIK COLLEGE OF ENGINEERING & TECHNOLOGY**

R E P O R T of EVENT

“Achieving Problem-Solution Fit”

**Topic: OEP Meet: Solution to Open Ended Problem by
Young Engineers**

Proposed by

R&D Department

Date: 15th November 2025 (Saturday)

Time:11:00 AM to 1:15 PM

ORGANIZED BY

INSTITUTE INNOVATION CELL - SCET

Faculty Coordinators

Prof.(Dr.) Nirali Nanavati,

Prof.(Dr.) Tejal Joshi

R&D Dean

Dr.Utpal Pandya

Event Highlights

The Team

R&D dean	:	Dr. Utpal Pandya, SCET
IIC Cell – SCET	:	Dr. Utpal Pandya, President, IIC-SCET
Student Coordinators	:	Bhargavi Patel, Nyasa Sapariya
Faculty Coordinator	:	Prof.(Dr.) Nirali Nanavati, Prof.(Dr.) Tejal Joshi

Details of Event

Event Type	:	University / Institute Level Program
Event Platform	:	Sarvajanik College of Engineering & Technology (SCET)
Category	:	Achieving Problem-Solution Fit
Event	:	OEP Meet: Solution to Open Ended Problem(OEP) by Young Engineers
Schedule	:	15 th November, 2025 (11:0 am to 1:30 pm) Embedded lab ,Advance Control Lab,Computer Lab I&C and CO department, SCET
Aspirants	:	UG and PG students of Sarvajanik College of Engineering & Technology, SCET
Accessibility	:	Open to all (Students/Faculty members)
Registered Entry	:	47 teams + 22 OEP Faculty Mentors

About the Event

The concept of the Open Ended Program (OEP) was introduced by the Dean, R&D Cell in 2023. Since then, the initiative has received an increasingly enthusiastic response every year. This year, our faculties proposed 41 diverse OEPs and 47 student teams registered for giving the solution to the OEPs. The faculty mentors and student teams have been collaboratively working on innovative ideas and impactful projects through these OEPs. The remarkable growth in participation clearly reflects the rising inclination of students toward research oriented activities and interdisciplinary exploration.

This year's 'OEP Meet: Solution to Open Ended Problem(OEP) by Young Engineers' event, held in an extensive format at SCET was and it was organised across six laboratories simultaneously. This multi-lab setup not only allowed for smoother interaction but also created a vibrant, research focused environment across the campus. The Meetup aimed to motivate students, offer constructive

guidance and strengthen the culture of innovation among the participating teams. All teams participated with great enthusiasm, showcasing their ideas, prototypes, preliminary experiments, and thought processes. Faculty mentors across all six labs provided valuable suggestions, and guidance to help students progress in the right direction.

Objective of the Event:

- 1) to motivate students to develop novel solutions to recent open-ended problems proposed by faculty members from various department.
- 2) to encourage interdisciplinary teamwork among students from different departments in solving open-ended problems.

Outcomes of Event:

- 1) The event successfully cultivated a research-oriented mindset among students, encouraging them to explore open-ended, real-world problems beyond the regular curriculum.
- 2) The event motivated students to pursue further research, product development, publications, patents, startups, or participation in national-level competitions.
- 3) The presentation of simulations and experimental results provided students with valuable practical exposure and experiential learning opportunities and they are motivated further to go for prototype development in next stage.

Attendance of Students

Attendance Sheet (Faculty Members and Students Panel wise with title of OEP):

SCET Open Ended Problem (OEP) First Meetup - 25-26

Date: 15 Nov 2025, 11:15 AM -1:15PM

Panel 1: IT Lab 5 (Dr. Krishna Delvadiya, Dr. Mita Parikh, Prof. Rachna Oza)

S.N.	Student Department	Faculty Mentor/s	Name of Student	Title of OEP	Signature
1	AIDS	Dr. Krishna Delvadia	Bhavya Bavisi	Machine learning-driven clinical decision support system (Group-1)-Breast Cancer diagnosis system	Bhavya
	AIDS		Prapti Mehta		Prapti
	AIDS		Kunj Desai		Kunj
2	CO	Dr. Krishna Delvadia	Krishna Panwala	Machine learning-driven clinical decision support system (Group-2)-Fetus health monitoring system	Krishna
	CO		Chapadia Vansh		Vansh
	CO		Shah Parva		AB
	CO		Heer Mehta		AB
3	IT	Dr. Mayuri Mehta	Karankumar Mehta	Self-supervised learning for 3D light-sheet microscopy image segmentation (Group 1)	Karankumar
	IT		Kashyapbhai Vaghasiya		Kashyap
4	AIDS	Dr. Mayuri Mehta	Mit Makavana	Self-supervised learning for 3D light-sheet microscopy image segmentation (Group 2)	Mit
	AIDS		Manav Patel		Manav
	AIDS		Vatsal Parmar		Vatsal
5	CO	Prof. Rachana Oza	Shubh Lineshwala	Surgical Tool Detection from Surgery Videos	Shubh
	CO		Jeet Rao		Jeet
	CO		Jeel Donga	Automated anatomy/organ	Jeel H. Donga

6	CO	Prof. Rachana Oza	Dhyey Desai	Automated anatomy/organ segmentation from the surgical videos/images	Dhyey
	CO		Vishal Shingala		AB
7	CO	Dr. Dhruvi P Sharma, Prof. Mukesh Patel	Ramani Dwarkesh	Auto Attendance Generator (Group 3)	Ramani
	CO		Gajera Jenil		Jenil
	CO		Master Hetvi		AB
	CO		Mandviwala Astha		AB
8	CO	Dr. Mitali Desai	Krishna Rana (Team Leader)	LLM-Augmented Reflective Journaling from Passive Data Cues	Krishna
	CO		Siddhi Salunke		Siddhi
	CO		Manya Shah		Manya

Faculty Panel: Dr. Krishna Delvadiya, Dr. Mita Parikh, Prof. Rachana Oza

Signature:

[Handwritten signatures of Dr. Krishna Delvadiya, Dr. Mita Parikh, and Prof. Rachana Oza]

SCET Open Ended Problem (OEP) First Meetup - 25-26

Date: 15 Nov 2025, 11:15 AM -1:15PM

Panel 2: IT Lab 6 (Dr. Dhruti Sharma, Dr. Mukesh Patel, Prof. Ketki Pathak)

S.N.	Student Department	Faculty Mentor/s	Name of Student	Title of OEP	Signature
1	IT P	Dr. Krishna Delvadia	Manan Shah (Team Leader)	Machine learning-driven clinical decision support system (Group-3)-cardiac arrest prediction system	Manan Shah
	IT P		Soham Patel		
	IT P		Manav Avaiya		
2	CO P	Dr. Nirali Nanavati	Vadid Shaikh (Team Lead)	Business Intelligence and Strategic Equilibrium in trending OTT Or Food-Delivery Platforms.	Vadid Shaikh
	CO P		Yashesh Patel		
	CO P		PawanKumar		
	CO P		Parthiv Vaishnav		
3	EC P	Dr. Ketki C Pathak	Abhishek Boricha	Smart Pharmacy Inventory Management System	Abhishek Boricha
	EC P		Vibhuti Pansari		
	EC P		Tej Patel		
	EC P		Mahek Ranka		
4	IT P	Dr. Dhruti P Sharma, Prof. Mukesh Patel	Tanisha Agarwal	Intelligent Document Classification(Group 1)	Tanisha Agarwal
5	CO	Dr. Dhruti P Sharma, Prof. Mukesh Patel	Kanodia Avish	Intelligent Document Classification(Group 2)	
	IT		Patel Krish		
	EC		Somi Megha		

AB

6	CO	Dr. Dhruti P Sharma, Prof. Mukesh Patel	Pawan Kumar	Auto Attendance Generator (Group 1)	
	CO		Yashesh Patel		
	IT		Karan Mehta		
7	CO P	Dr. Dhruti P Sharma, Prof. Mukesh Patel	Dhruvil Gopani	Auto Attendance Generator (Group 2)	Dhruvil Gopani
	CO P		Jeet Patel		
	CO P		Shivam Dubey		
	CO P		Abhiraj Gahlot		
8	CO P	Prof. Ketki C Pathak	Aryan Sariya (Team Leader)	AutoXpert:Smart Crops.	Aryan Sariya
	CO P		Het Vegad		
	CO P		Abhi Suthar		
	CO P		Jainim Jariwala		
	CO P		Dev Patel		

AB

Faculty Panel: Dr. Dhruti Sharma, Dr. Mukesh Patel, Prof. Ketki Pathak

Signature:

Dhruti Sharma

Mukesh Patel

Ketki Pathak

SCET Open Ended Problem (OEP) First Meetup - 25-26

Date: 15 Nov 2025, 11:15 AM -1:15PM

Panel 3: CO Research Lab (Dr. Nirali Nanavati, Dr. Purvi Tandel, Dr. Mitali Desai, Prof. Jaydeep Gheewala)

S.N.	Student Department	Faculty Mentor/s	Name of Student	Title of OEP	Signature
1	CO	Prof. Dhatri Pandya, Dr. Pariza Kamboj, Prof. Vandana Joshi	Krishna Dhola (Team Leader)	AI for Early Oral Cancer Detection	Krishna
	CO		Rudri Desai		Rudri
	CO		Khevana Vasani		Khevana
	CO		Saloni Rana		Saloni
2	CO	Dr. Nirali Nanavati, Dr. Mitali Desai	Amrit Singh (Team Lead)	Hallucination and bias in conversational AI systems.	Amrit Singh
	CO		Aayushi Tamakuwala		Aayushi
	CO		Dwip Shah		Dwip Shah
	CO		Hetvi master		H.M. Master
3	CO	Dr. Nirali Nanavati	Yash Dilkhush (Team Lead)	AI-Based Ingredient Recognition in Indian and Global Dishes	Yash
	CO		Vansh Sadadiwala		Vansh
	CO		Suhani Gohil		Suhani
4	CO	Dr. Nirali Nanavati	Charvi Desai (Team Lead)	AI-Based Ingredient Recognition in Indian and Global Dishes	Charvi
	CO		Yesha Patel		Yesha
	CO		Bhavya tagadia		Bhavya
	CO		Krishee Mehta		Krishee
5	AIDS	Dr. Nirali Nanavati	Sarah Shaikh	Business Intelligence and Strategic	Sarah
	AIDS		Krishna Patel		Krishna
	AIDS				

5	CO	Dr. Nirali Nanavati	Nyasa Sapariya	Equilibrium in trending OTT Or Food-Delivery Platforms.	Nyasa
	CO		Thumber Palak		Palak
6	AIDS	Dr. Mitali Desai	Krishna Patel (Team Leader)	Automatic Sarcasm Detection in Code-mixed Data with Emoticons	Krishna
	AIDS		Sarah Shaikh		Sarah
7	IT	Dr. Mitali Desai	Harshil Gajipara (Team Leader)	Knowledge Repository for Capturing and Organizing Learning Journeys	Harshil
	IT		Krishna Keraliya		Krishna
8	CO	Prof. Jaydeep Gheewala	Jariwala Zeel	Development of an AI based research agent	Zeel
	CO		Rajput Prathmesh		Prathmesh
	CO		Ronak Talaviya		Ronak
	CO		Khushi Patel		Khushi

Faculty Panel: Dr. Nirali Nanavati, Dr. Purvi Tandel, Dr. Mitali Desai, Prof. Jaydeep Gheewala

Signature:

Nirali

Purvi

Mitali

Jaydeep

SCET Open Ended Problem (OEP) First Meetup - 25-26

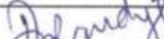
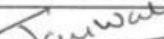
Date: 15 Nov 2025, 11:15 AM -1:15PM

Panel 4: CO Phase 4 Lab (Dr. Dipali Kasat, Prof. Dhatri Pandya, Dr. Vivaksha Jariwala, Dr. Vibha Patel)

S.N.	Student Department	Faculty Mentor/s	Name of Student	Title of OEP	Signature
1	AIDS	Prof. Dhatri Pandya	Vishva Gohil	Modeling Plant VOC Emissions for Space Habitats using AI/ML Approaches (Group 2)	Vishva
	IT		Yashvi Dihora		
	IT		Drashti Kalathiya		
2	CO	Dr. Dipali Kasat	Satyam Tiwari	Whisper-Based Voice Liveness Detection	Satyam
	CO		Anika Mehta		
	CO		Srushti Patel		
	CO		Krish Tejani		
3	CO	Dr. Dipali Kasat	Satyam Tiwari	A Personalized Dysarthric-to-Fluent Voice Transformer with Emotion	Satyam
	CO		Krish Tejani		
	CO		Parth Patel		
	CO		Akshar Prajapati		
4	CO	Dr. Dipali Kasat	Pawankumar Navinchandra	Multimodal Deep Learning for Early Detection and Classification of Parkinson's Disease using Speech and Olfactory EEG Signals.	Pawankumar
	CO		Singh Kunwar Vijay		
	CO		Yashesh Patel		
	CO		Ronit rathod	Mindful Metrics: An AI-Powered Platform for	Ronit

5	CO	Prof. Vandana Joshi, Prof. Dhatri Pandya	Manan Sariya	AI-Powered Platform for Proactive Mental Wellness	Manan
	CO		Vansh Sadadiwala		
6	CO	Dr. Dhruvi P Sharma, Prof. Mukesh Patel	Vegad Het	Intelligent Course Recommendation	Het
	CO		Patel Dev		
	CO		Amrit Singh		
	CO		Aryan Sariya		
	CO		Vir Gupta		
7	IT	Dr. Vivaksha Jariwala/ Dr. Vibha Patel	Ishika Gadhwal	ChatBot for Sarvajank University Website (Group 1)	Ishika
	IT		Vanshika Kapadia		
8	IT	Dr. Vivaksha Jariwala/ Dr. Vibha Patel	Soham Patel	ChatBot for Sarvajank University Website (Group 2)	Soham
	IT		Manan Shah		
	IT		Karan Mehta		

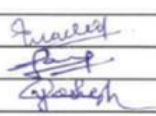
Faculty Panel: Dr. Dipali Kasat, Prof. Dhatri Pandya, Dr. Vivaksha Jariwala, Dr. Vibha Patel

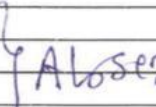
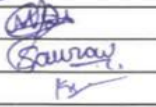
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SCET Open Ended Problem (OEP) First Meetup - 25-26

Date: 15 - Oct 2025, 11:15 AM -1:15PM

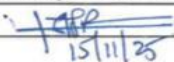
Panel 5: IC ACL Lab (Dr Keyur. Rana, Dr. Mayuri Mehta, Dr. Gayatri Kapadia, Dr. Mayank Jain)

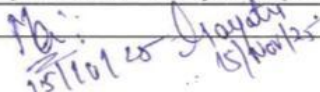
S.N.	Student Department	Faculty Mentor/s	Name of Student	Title of OEP	Signature
1	CO	Dr. Dipali Kasat, Dr. Purvi Tandel	JIT PRAJAPATI (Team Leader)	Smart Animal Detection and Deterrent System Using Computer Vision and Ultrasonic Sound	
	CO		MANGALYA DESAI		
	CO		AARAV PATEL		
	CO		KRUTARTH PATEL		
	CO		FALGUN RATHOD		
2	CO	Dr. Keyur Rana, Prof. Dhatri Pandya	Umang Kakiotar	MediGPT: An AI-Powered Medical Question Answering System Using Indian Medical Guidelines and Literature	
	CO		Zeel Jariwala		
	CO		Prathmesh Rajput (Team Leader)		
3	CO	Dr. Keyur Rana	Shaikh Vaaid	A Language Model Trained on Engineering Educational Content	
	CO		Pawankumar		
	CO		Yashesh Patel		
4	CO	Dr. Mayuri Mehta	Vasu Jivani	Mitosis Detection and Classification from Microscopy Images (Group 1)	
	CO		Harsh Radadiya		

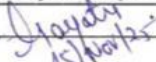
5	CO	Dr. Mayuri Mehta	Dhvani Maktuporia	Mitosis Detection and Classification from Microscopy Images (Group 2)	
	CO		Kuldeep Kevat		
6	CO	Dr. Vivaksha Jariwala/ Dr. Vibha Patel	Shreya Gohil	ChatBot for Sarvajani University Website (Group 3)	
	CO		Vikas Luhar		
	CO		Rudra Soni		
7	MCA	Dr. Gayatri Kapadia, Dr. Mayank Jain	Meet Kapadiya	InfraDesk for SCET	
	MCA		Saurav Pandey		
	MCA		Krishi Aggarwal		

Faculty Panel: Dr Keyur. Rana, Dr. Mayuri Mehta, Dr. Gayatri Kapadia, Dr. Mayank Jain

Signature:


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SCET Open Ended Problem (OEP) First Meetup - 25-26

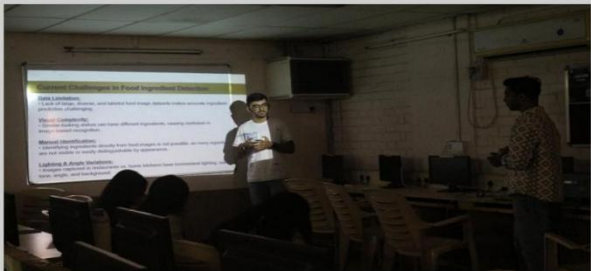
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Panel 6: IC Embedded Sys Lab (Dr. Nehal Shah, Dr. Tejal Joshi, Dr. Pariza Kamboj, Prof. Vandana Joshi)

S.N.	Student Department	Faculty Mentor/s	Name of Student	Title of OEP	Signature
1	CO	Prof. Dhatri Pandya	Himanshi Borad	Modeling Plant VOC Emissions for Space Habitats using AI/ML Approaches (Group 1)	Himanshi
	CO		Devanshi Trivedi		Devanshi
2	CO	Dr. Mayuri Mehta	Khamir Desai	Fusion for Enhanced Diabetic Retinopathy Diagnosis using Explainable AI (Group 1)	Khamir
	IT		Sree Saicharan Vadapalli		Sree
3	AIDS	Dr. Mayuri Mehta	Dharmika Gajera	Multimodal Information Fusion for Enhanced Diabetic Retinopathy Diagnosis using Explainable AI (Group 2)	X
	AIDS		Mill Moradiya		
	IT		Rishi Ginoya		
4	CO	Dr. Pariza Kamboj, Prof. Dhatri Pandya, Prof. Vandana Joshi	Ritu Varnja	Data-Driven Classification and Analysis of River Water Quality in India	Ritu
	CO		Masoom Viral Parekh		
	CO		Umang Kaklotar		
	CO		Pratik Kanadiya		
	CO		Aenish Gohil		

5	CO	Dr. Pariza Kamboj, Prof. Dhatri Pandya, Prof. Vandana Joshi	Patel Sujal	Cross-Breed Generalization in Video-Based Canine Emotion Recognition Systems	Sujal
	CO		Siddhi Patel		
	CO		Jainim Jariwala		
	CO		Kavya Patel		
6	CO	Prof. Vandana Joshi, Prof. Dhatri Pandya, Dr. Pariza Kamboj	Shekh Mohammad Abrar	Dust, Data, and Decisions: A Spatiotemporal Analysis of India's Air Quality	Abrar
	CO		Darshil Moradiya		
	CO		Vatsal Modi		
	CO		Chahat Vora		
	CO		Het Tejani		
7	EC	Prof. Nehal Shah	Riddhi J Kapadia	Real-Time Biometric Access Control System with Facial and Fingerprint Authentication	Riddhi
	EC		Sharda Kelvin D		
	EC		Sondigala Bhavyakumar H		
8	AIDS	Prof. Nehal Shah	Rushabh Solanki	Smart Water Management System using IoT & Data Analytics	Rushabh
	AIDS		Yash Thummar		
	AIDS		Parthiv Patel		
	AIDS		Rudra Baruwala		

Glimpses of Event



Compiled and Prepared By
Dr. Nirali Nanvati, Dr. Tejal Joshi