



SARVAJANIK EDUCATION SOCIETY
SARVAJANIK COLLEGE OF ENGINEERING & TECHNOLOGY
DR. R. K. DESAI MARG, ATHWALINES, SURAT - 395001
Towards progressive civilization.....



DEPARTMENT OF CIVIL ENGINEERING
Accredited by National Board of Accreditation, New Delhi for 3 years, w.e.f. AY 2023-24

A
Report on

NIRMAAN-2023

29th – 30th September, 2023

Under the banner of



About Kshitij

The tech-fest aimed to bring together students with their innovation and different ideas they have implemented and competed with peers in their academics. These fests are an amalgamation of fun and learning where spectacular ideas are displayed, and students learn and feel inspired. To provide the platform to these innovative minds and to keep them motivated, the SCET organizes a National Level Tech-Fest-“KSHITIJ”.

The events organized under the banner of KSHITIJ 2023 are:

- ✚ **NIRMAAN** (Department of Civil Engineering)
- ✚ **UPDATES** (Computer Engineering Department)
- ✚ **CONVERSE** (Information & Technology Department & Artificial Intelligence & Data Science)
- ✚ **SYMPOSIUM** (Electronics & Communication Department)
- ✚ **CHEMCLAVE**(Chemical Engineering Department)
- ✚ **URJA** (Electrical Engineering Department)
- ✚ **MOMENTUM** (Mechanical Engineering Department)
- ✚ **COIN** (Instrumentation & Control Department)
- ✚ **VIVACITY** (Master of Computer Application Department)
- ✚ Textile Technology Department
- ✚ Applied Science and Humanities Department

NIRMAAN-2023

Sarvajani College of Engineering & Technology organizes the technical festival ‘Kshitij – AnantGyan Ki Talash Mein’ annually since 2002. This technical fest is conducted for the young brains to boost their technical knowledge and showcase their innovative and creative skills.

Every year, Department of Civil Engineering organizes technical festival “Nirmaan” under the banner of Kshitij. Following this tradition, Nirmaan 2023 was held during 29th-30th September, 2023. This time the theme of the Nirmaan 2023 was based on sustainability. The group of students had made the eco-friendly Ganesha by using bobbins and husk of dry coconuts. Students from different colleges had participated in various technical events of Nirmaan 2023. We received the smash hit response from participants by enrolling more than 450 entries.

We introduced various events like **BOB- The Builder**, **Weight-O-Meter**, **Civil-O-Poly**, **Aavishkar**, **The Clue Crew**, **Takeshi’s Castle**, **The Tugging Titans**. After completion of all the events, the winners were awarded with prizes and certificates.



The poster for Nirmaan '23 is set against a vibrant purple and blue background with a glowing circular light effect. At the top, it reads "SARVAJANIK EDUCATION SOCIETY" and "SARVAJANIK COLLEGE OF ENGINEERING AND TECHNOLOGY DEPARTMENT OF CIVIL ENGINEERING". The central text "NIRMAAN '23" is large and bold, with "29-30 SEPTEMBER" below it. Surrounding the central text are logos for sponsors: Mangaldeep Hardware, Telesia Systems Pvt. Ltd., Bhargav Stationary, and Sopan. Various event icons are displayed: Takeshi's Castle, The Tugging Titans, The Clue Crew, Civil-O-Poly, Weight-O-Meter, Aavishkar, and Bob-The Builder. At the bottom, it lists the Faculty Coordinators (Prof. Ankita Parmar, Prof. Hemali Jardosh), the Head of Department (Dr. Mehali Mehta), and the Tech Heads (Aryan Maiyani, Meet Maniya). A QR code is located in the bottom right corner.

Inauguration of NIRMAAN 2023

The inauguration of NIRMAAN 2023 under the banner of Kshitij was held on 29th September, 2023 in Department of Civil Engineering. It was attended by all faculty members, students coordinators, volunteers and participants with full of energy and enthusiasm. The tech fest named Nirmaan 2023 was inaugurated with the blessing of God Ghanapati, the lamp lighting, aarti and releasing the balloons in the campus by all our worthy faculty members and students of the department. This technical fest not only showcased the students' talent but also highlighted the college's commitment to fostering a culture of innovation and learning.



All the events received magnificent response from the student participants from different departments and colleges which made the Nirmaan 2023 a successful one. In Nirmaan 2023, total seven different technical and non-technical events were designed for the students to develop and showcase their skills like Planning, Management, Technical, Communication, etc.



Technical Event

- **Civil-O-Poly** (Based on Monopoly with different elements of Civil Structure)
- **BOB-The Builder** (Based on Planning of Building)
- **Weight-O-Meter** (Based on Lami's Theorem used in Engineering Mechanics)
- **Aavishkar** (Based on Working/Prototype Model)

Non-Technical Event

- **Takeshi's Castle** (Based on Stone Paper Scissor on critical path)
- **The Clue Crew** (Treasure Hunt)
- **The Tugging Titans** (Tug of War)

Civil-O-Poly



It was a live Business monopoly event modified into its technical version in civil engineering, implemented and coordinated by faculty coordinator **Dr. Khushbu Gandhi**. Instead of cities, the civil and structural elements are needed for building construction like foundation, beam, column, slab, and equipment. Each player gets an initial amount from the online bank as per the dice roll, and they have to spend their money wisely to win. For a fair game, Jury member **Er. Rakesh Patel** was invited from the **Surat Municipal Corporation (SMC)**. The winner is decided as per the type and number of structural elements purchased by the player. The winner received the certificate along with the winning prize. Here they are mapped and win based on their knowledge about elements of structure, their skills of management and finance. Students enjoyed the technical game of mind and management.



BOB- The Builder



The event was based on residential building planning which was coordinated by faculty coordinator **Prof. Sejal Bhagat**. Participants were instructed to prepare a model in 40 x 30 ft of plot area. There were 4 compulsory elements given to accommodate in model like living room, kitchen, wash area and bed room. Apart from that each team have been allocated with 4 more elements randomly and by using all 8 components, the team had prepared a model. A lintel level section was given to each participant with wall height of 4.5 ft. In this event, Jury member **Er. Chintan Mistry** was invited from the **Surat Municipal Corporation (SMC)**. He has added some more criteria to prepare model like aspect, prospect, roominess and grouping from the principles of planning. Finally the winners were awarded with prize money and certificates.



Weight-O-Meter



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NIRMAAN 2023
WEIGHT-O-METER

DATE : 29/09/23
TIME : 02:00 PM - 04:00 PM
VENUE : ENGINEERING MECHANICS LAB



FACULTY HEAD
DR. MINAKSHI VAGHANI

STUDENT HEAD
**DIPESH KANTHARIYA (☎ 6354651462)
AVANI BORSADIYA (☎ 9265330200)**

The Weight-O-Meter event was based on Lami's theorem under the subject of Engineering Mechanics and event was coordinated by faculty coordinator **Dr. Minakshi Vaghani**. This theorem has been used to relate the ratios of the lengths of the sides of a triangle to the sines of its angles. In this event the participant have to bring balance of weight hung at the end string passing through the pulleys. The 50gm piece of weight has been used to balance the same. The event was hosted on 29th of September and the allocated time to each participant was 3 mins. Total 28 team of students took part in the event and they enjoyed a lot. At the end of the event, our respected Jury **Er. Vijay Dhami** decided the final winner and the first come completed the competition in 1 min and felicitate with winning prize and certificates.



Aavishkar



Model presentation was a three dimensional representation resulting from the logical and innovative ideas. Model was prepared using variety of materials and fabrication techniques. In this event, every person was a model maker by mixing a unique combination of art and science into their work of replicating, creating mock-ups, volume studies, and scale reproductions of anything from a building to an automobile. The event was carried out under the guidance of faculty coordinator **Prof. Payal Zaveri** wherein total 43 participants under 7 different team were participated and presented their individual models. The jury **Prof. Rupal Desai** from **STBS College, Surat** was invited and she had given the expert reviews/comments on models prepared by the participants based on the criteria given by the students and faculty coordinator. Out of 7 team, 2 winner teams were declared winner and awarded with winning certificates and prize.



The Clue Crew



One of the most exciting non-technical event was 'The Clue Crew' treasure hunt, which drew significant participation and coordinated by faculty coordinators **Prof. Abhishek Shinde** and **Prof. Chaitali Solanki**. This event incorporated an innovative approach by utilizing QR code scanning technology. Participants, numbering around sixty in pre-registration and approximately fifteen in on-the-spot entries, navigated the college campus scanning QR codes strategically placed at different locations. The event culminated in the announcement of first three winners, recognizing the efforts and intelligence of the participants. Winning Prizes and certificates were distributed to the top performers, encouraging healthy competition and motivating students to excel in such intellectually stimulating environments.



Takeshi's Castle



The event was based on the swiftness and presence of mind of students. It was carried out under the guidance of faculty coordinator **Dr. Kamlesh Dalal** on 29th September 2023 near dome of College. Total 140 participants under 35 different teams participated in the event. The event was divided into two rounds. In the first round, two teams from opposite directions compete with each other to complete their path with langdi. A game of stone paper scissors to clear the obstruction from your opponent and continue the path. Maximum number of team stay till the end with time limit is qualified for the second round. The second round was same as first round but the twist was to play stone paper scissors 3 times and complete the game in two minutes. Three teams won the prize. 1st winning team completed the game in 26 seconds, 2nd winning team completed the game in 28 seconds and 3rd winning team completed the game in 33 seconds. All the winners have been awarded with winning prize and certificates.



The Tugging Titans



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NIRMAAN 2023
THE TUGGING TITANS

DATE : 30/09/23 **TIME : 10:00 AM - 12:00 PM**

VENUE : SCET GROUND

QR CODE

FACULTY HEAD
PROF. MITALI SHAH

STUDENT HEAD
DEV PATEL (☎ 8866050777)
NUPEN PATEL (☎ 9998760157)

The event was coordinated by faculty coordinator **Prof. Mitali Shah**. Total 10 teams were participated from different branches of SCET, out of that 2 teams were selected for final round. First winner is Rushi Dhameliya and team and second place are given to Dev Italiya and team. Two teams were participated in girls group, in which Vaibhavi Rana got prize on third place. Winners were awarded with prize money and certificates.



Valedictory

Valedictory Function held on **30th September** from **3:00 PM** onwards in the reading hall to acknowledge the hard work and dedication of our student team **NIRMAAN 2023** and also appreciate the winners by awarding them with prize money and certificates. Both the tech head **Mr. Aryan Maiyani** and **Mr. Meet Maniya** expressed vote of thanks. At the end, feedbacks were also received from the students towards the grand success of the **NIRMAAN 2023**.



Acknowledgement

We would like to thank **SES management** for providing the infrastructure and support for conducting the tech fest. We would like to express our gratitude to **Dr. Hiren Patel, Principal, SCET** for continuous motivation and support to organized such a technical festival called **NIRMAAN 2023** under the banner of **Kshitij – Anant Gyan Ki Talash Mein**. We heartily thank **Dr. Mayank Dalal, Dean SAWC** for providing funds to conduct the different events under Nirmaan-2021. We extend our heartfelt thanks and gratitude to **Dr. Mehali Mehta, Head, Civil Engineering Department** and all the worthy faculty members as well as non-teaching staff members of the department for making the **NIRMAAN-2023** a grand success. Special thanks to the entire team of student tech-heads, student coordinators and volunteers for their efforts towards making **NIRMAAN-2023** successful. Finally, we thank all the participants without whom the event would not have been possible.



Thanks from Nirmaan-2023 team



Faculty Conveners:
Prof. Ankita Parmar
Prof. Hemali Jardosh

Tech Heads:
Mr. Aryan Maiyani
Mr. Meet Maniya