

IE(I) STUDENTS' CHAPTER- CIVIL CHAPTER CODE: 388120/BVME/CV

B.V.M. ENGINEERING COLLEGE V.V. Nagar – 388120.



Program Report

1. Event name: Visit to "7th Smart Cities Expo - 2022", New Delhi

Day & Date : 23 March – 29 March 2022

Venue: New Delhi

Organized by : IE(I) Civil Student Chapter

Organized for : 8th semester civil engineering students

2. Program details:

Civil Engineering Department, B V M Engineering College had planned to get acquainted their final year students with visit to such international platforms and be industry ready and start-ups. Final Year B. Tech (Civil Engineering) Students, have attend the "7th Smart Cities - India Expo 2022", at Pragati Maidan, New Delhi on 24th March and 25th March 2022.

Team IE(I) Civil has organized a technical visit to the "Smart Cities Expo – 2022, held at Pragati Maidan, New Delhi, which was held on 23-25 March 2022. Our visit to Delhi was of 4 days, from 24th March 2022 to 29th March 2022. Total of 60 of us visited the **7th Smart Cities Expo** - **2022, New Delhi** inclusive of 52 boy students, 5 girl students and 3 faculty members. Prof. Amit. N. Bhavsar, Prof. Amit. A. Amin and Ms. Mrunali Vasava guided, lead and supported the students during the trip.

The Trade Fare Authority of India, Central Government and Industry partners have jointly organized the INDIA'S LARGEST TECH & INFRA EXPO, 7th Smart Cities - India Expo 2022 during 23-25 March, 2022 at Pragati Maidan, New Delhi.

The objectives of Expo are:

- 1. Building Digital and Smart India,
- 2. Sustainable infrastructure is an integral part of the Smart Cities Mission,
- 3. To promote the initiatives and vision of the honourable government under the Swachh Bharat Mission.

The followings are the major areas for the Expo-2022:

1. SMART CITIES:

AI | Augmented Reality | Blockchain | Communication Systems | Consultants | Data Storage and Management | Digital and Urban Infrastructure | Digital Twins | Disaster Management | e-Governance | Fintech | Geographical Information Systems | Healthcare | Heritage Cities | Industrial IoT | Industrial Parks | Innovative Urban Planning Practices | Integrated Command Control Centres (ICCCs) | IoT | IT Parks | Semiconductors | Sensors | SEZ | Smart Manufacturing | Software Applications | System Integrators | Townships | Virtual Reality

2. BUILDINGS:

Building Information Modelling (BIM) | Construction Equipment & Materials | Elevator | Escalator | Flooring, Ceiling, Walling & Other Interior Finishes | HVACR | Green/Smart Building Materials | Roofing, Cladding & Glazing | Bathroom, Sanitary Ware & Kitchen appliances | Safety, Security & Surveillance | Smart Homes | Smart Lighting | Windows, Doors, Hardware & Sun Protection Systems

3. CLEANTECH:

Air, Land and Water Pollution Controls | Cleaning Equipment | Cleaning Technologies | Green Toilets | Industrial Waste & Street Sweeping | Recycling Technologies | Sanitation: Toilets for all | Waste Management | Waste to Value | Waste Treatment | Waste to Energy | Waste Collection SMART ENERGY Batteries & Storage | Biomass | Decarbonization | Green Hydrogen & Natural Gas | Grid Components | Smart Energy meters | Smart Grid solutions | Solar & PV

4. TRANSPORT:

Access Automation & Access Control | ADAS | ANPR | Battery & Storage | EV Charging Infrastructure | EVs / HEVs, Smart Mobility Solutions | GPS / Tracking Solutions | Intelligent Transportation System | Mapping | Parking Management | Public Transport | RFID / Sensor Technology | Road Infrastructure | Road Safety | Traffic & Security Management | Toll & HTMS

5. WATER:

Air to Water Technologies | Consultants | Desalination | Drinking Water | Drip Irrigation and Rain Water Harvesting | Ground Water Recharge | Lake Rejuvenation | Monitoring Instruments and Equipment | Pipeline Maintenance | Pumps | Smart metering | System Integrators | Wastewater Treatment | Water Purification | Water Quality | Water Storage System | Water Supply and Distribution

The technical-tour started on 23 March 2022, at 2:30 PM, from BVM Engineering college, Vallabh Vidyanagar. The group reached Ahmedabad junction by BVM-bus at 5:00 PM. We from Ahmedabad at 6.20 pm and reached old Delhi railway station at 10.00 am and enjoyed the post Covid journey in 'Ashram Express', with all protections according to railway SoP. The stay at Delhi was at Shree Delhi Gujarati Samaj, Civil Lines, New Delhi. At the Delhi Gujarati Samaj the morning breakfast, lunch and dinner facilities are qualitative and economical.

Technical day-one, 25th March 2022, after the early morning breakfast we left for the Expo by Delhi Metro. The Delhi Metro is by far the largest and busiest metro rail system in India. The network consists of 10 color coded lines serving 255 stations with a total length of 328.12 km. Pink line, blue line and yellow line are the major metro lines which connects the important locations of the city. The pink line connects Maji's Park and Shiv VIhar which is 58.43 km long. The blue line connects Dwarka Sub City in the west with the satellite city of Noida in the east, covering a distance of 56.61 Km. The Yellow Line is the first underground line to be opened as the part of Delhi Metro. It runs for 49 Km from north to south and connects Samayapur Badli with HUDA City Centre in Gurgaon. DMRCs 'Delhi metro rail' app on android and IOS is an app which gives complete information about the Delhi metro like nearest station, route planner, fare calculator, timings and online recharge of metro card. Delhi metro was praised by everyone because of its fast service, easy accessibility, hassle free ticket booking and its brilliant construction.

At the Expo-Hall, Pragati Maidan everyone had completed registration process and obtained the unique entry card with lots of information, all had group photo session and enjoyed to click many pictures. Then, the learning started as all students started exploring the Expo in Hall No. 5, 6, and 7. There were several start-ups and brands, present at the expo. The latest innovations in the field of Technology, IoT, Engineering, Construction, Automobiles, IT, Banking, Transport, Electronics and many more field were showcased by more than 500 brands and startups. Ultratech Cement, Quin-Trans Hyperloop, Shubh IoT, JK Super Cement, Namami Gange project, Astral Pipes, MG Motors, Ubon, U&I, Smart Cities stalls from various states and many more.

The Ideas related to the Civil Engineering fields included Smart Cities, Smart homes, Hyperloop, Plastic blocks, Recycling of non-biodegradable wastes, Glass fiber composites as an alternative to steel bars, innovative products in artificial wood, building blocks, etc. are presented by various national and international manufacturers. Many types of Cements, and ready to use Concretes & Plasters with varied characteristics, are showcased by Ultratech Cement and JK Super Cement.

The expo had many interesting and new ideas which were helpful for the students as well as it had some innovations which were multi-disciplinary that combined various fields, creating new possibilities. There were several start-ups showcasing their ideas and products, it inspired the students to learn more about the start-up culture and the way they function. Everyone explored the expo till late evening.

The 2023 G-20 Summit is going to be held at Delhi and the special buildings, halls and facilities for the same was under construction adjacent to the Expo Halls and Supreme Court of India building. The said project is being constructed by Shapoorji Pallonji & Co.

During the late evening all visited Akshardham: The Cultural Centre and witnessed the marvel crafted in the stone by BAPS. World's best laser & sound water fountain show with cultural heritage of India was enjoyed with katha. Lal-Killa the famous place of Flag hoisting on every Swatantra Divas, Laxmi Narayan Birla Temple, Parliament House, Rashtrapati Bhavan, Vijay Chowk, Embassy Area, these places were shown from distance as it's not allowed for visit to visitors. The legacy of our freedom fighters, late prime minister Indira Gandhi Museum, the life history of Indira Gandhi, Rajiv Gandhi was presented. We also visited Lalbahadur shastri's museum and Raj Ghat. We all prayed for the Mahatma Gandhiji. We explored the ancient architecture of Qutub Minar and modern architecture of Lotus Temple. We also astonished to watch the Taj Mahal, and prayed Shri Krishna at Mathura temple.

We started our return-journey on 28th March at 3:20 pm, with spending the morning available time for the shopping at famous Chandni Chowk. We reached Ahmedabad Junction at 7:40 AM on 29th safely. The college bus was waiting at the railway station, everyone boarded the bus, and reached BVM engineering college at 8:40 AM. The trip ended with taking a group photo.

The trip was successfully completed, with cooperation of the students, faculties, BVM office, CVM management and all the other people who have helped in organizing this trip. The group leaders Neel Parmar(Chairman), Pradeep Baldaniya(Secretary), Shrey Rana (head, tech and tour), Hardik Patel and Nikul Rathod (Treasurers), made all the arrangements and planning for the trip to be enjoyable, comfortable and rememberable forever. Everyone enjoyed the trip. It was full of knowledge, enthusiasm, interesting information and an experience of a lifetime. The Expo helped in gaining the knowledge of new innovations, emerging technology, projects related to the civil engineering fields, start-ups, multi-disciplinary project ideas. The sightseeing at Delhi and Agra included the Mughal Architecture, Modern Architecture, which is among the highly praised architecture in the world, showcases the architectural principles, planning and aesthetics of a building. It was an inspiration for the students. Delhi Metro was a modern marvel which blew everyone's mind. It is with the effort of team IE(I), Prof. A. N. Bhavsar, Prof. Amit Amin, Ms. Mrunali Vasava and all the students, the trip was successful and a memorable one.

3. OUTCOMES:

- 1. The students got to learn the emerging technologies in the field of civil engineering a well as other fields.
- 2. They got to know about the startups and companies which are working on new products and providing services to the society that may inspire them.
- 3. The students got to interact with experts and owners of start-ups and got a chance to know their thoughts and ideas which pioneered their journey of start-ups in relevant domains.
- 4. The students explored various historical and religious places in and out of Delhi and got a chance to experience a different lifestyle & diversified culture of the Capital.
- 5. The students bagged home huge collection of memories which would be remembered throughout their life.

4. PHOTO GALLARY:



Group photo at 8th Smart Cities Expo 2022







Stelmax, construction steel solution



GreenJams, Carbon negative construction materials





EPYK, outdoor solar lights

Namami Gange



Startup Pitch Competition



At India Gate



Light show at Red Fort



At Agra Fort



Taj Mahal



Group photo at BVM Engineering College at the end of trip.