



Vidyavardhini's College of Engineering and Technology, Vasai  
विद्यावर्धिनीचे अभियांत्रिकी आणि तंत्रज्ञान महाविद्यालय, वसई  
Affiliated to the University of Mumbai.

## Department of Civil Engineering NIRMAN 2021-22

**Event Details: NIRMAN 2021-22 at VCET, Vasai, arranged by Civil Department.**

**Duration: 14<sup>th</sup> & 15<sup>th</sup> April, 2022.**

**Venue: Vidyavardhini's College of Engineering & Technology, Vasai West.**

### ❖ About Nirman

Since its inception, Nirman has provided a stage for all civil maniacs to exhibit their intelligence, expertise, and abilities at the greatest level. The wide variety of contests, from technical to non-technical, such SimCity, the Egg Drop Challenge, House of Cards, and Panel Discussions, allow for the evaluation of participants' competency levels and the determination of their logical abilities.

### ❖ Aim & Objective

Nirman aims to eliminate the communication gap between the industry and the educational system by offering a robust sharing platform. Alumni, businesspeople, entrepreneurs, and college students have a unique chance to get engaged in the advancement of sustainable development, smart building, and the promotion of new construction methods in India. NIRMAN '2021-22 was the 21st iteration of this illustrious panel discussion and the first year the festival was organized online, both of which presented unique challenges. However, it was the combined efforts and zeal of the participants, the organizing committee, student volunteers, and faculty members that made NIRMAN '2021-22 a resounding success. Over the years, a large number of diploma, undergraduate, and industry people from many universities have attended the event.

This year, Nirman will undoubtedly set new records for competitiveness, enthusiasm, and energy. Nirman is the culmination of all of our hard work, devotion, passion, and sincere attempts to deliver you the fantastic event that everyone has been looking forward to.

## **I. EGG DROP CHALLENGE**

Egg Drop Challenge is a fun way to incorporate critical thinking and problem solving into an engaging activity. In this challenge, the students have to design a structure that will protect their precious payload: an egg. The structure built must be made from a limited number of materials that can support the egg when dropped from various heights.

- **Event Details:** NIRMAN at VCET, VASAI, arranged by IGBC Students Chapter, Civil Department in Academic Year 2021-22.
- **Duration:** 14<sup>th</sup> April, 2022.
- **Venue:** Vidyavardhini's College of Engineering & Technology, Vasai West.

### ❖ **Objectives**

1. To show inventiveness and creativity through design.
2. To improve team work.
3. To use problem-solving strategies in building simple structures.

### ❖ **Event Structure:**

1. Teams are required to decide on their design and choice of material keeping in mind the fixed credits of 50 units provided to them.
2. Materials would be disclosed on the day of the event itself.
3. Teams are required to submit their material requirement based on the available credits.
4. First slot for making the structure (1 hour will be given to each team for making their structure).
5. Eggs would be provided at the same time. If an egg is damaged before testing the structure, another egg would be given based on your spare credits.
6. Second slot is for testing of the structure.
7. The structure with the egg placed would be dropped from 40 ft height into a drop zone of a specific radius.

### ❖ **Rules and Regulations:**

1. Maximum size of structure – 12-inch x 12-inch x 12-inch
2. Fixed Drop height – 30 feet
3. Maximum of 3 members per team is allowed.
4. Use of adhesives between Material and Egg is not permitted.

5. Maximum time will be 1 hour for designing the structure after getting material from organizers.
6. The structure should be dropped with zero velocity.
7. Structure will be dropped by the event coordinator; no team member will be allowed to do so.

❖ **Judging criteria:**

1. Points will be allotted on the basis of:
2. Credits left (from credits given initially) will be converted into points.
3. Condition of the egg after drop test.
4. Displacement of the structure from the drop zone.

❖ **Guidelines:**

1. NIRMAAN, VCET reserves the right to disqualify any participant if found using unfair means.
2. NIRMAAN, VCET reserves the right to change any rule. Change in the rule will be highlighted and notified through email.
3. All modes of official communication will be through NIRMAAN e-mail only.
4. Completion of the structure should be within the time limit provided.

❖ **Registration**

1. The team should consist of minimum 2 or maximum 3 members.
2. No team member should be present in more than one group
3. Registration will be accepted through the goggle form link which is provided below  
Link: <https://forms.gle/2MNo3GgrYEkNz1zm7>

❖ **Entry Fees: Rs. 150/-**

❖ **EGG DROP CHALLENGE REGISTRATIONS LIST:**

Sr. No.	Participant Names	Year
1	Yomit Golatkar	BE
2	Mithil Naik	BE
3	Nitish Kambli	TE
4	Rahul Chaudhari	BE
5	Abhishek Vishwakarma	BE

6	Faraz Ansari	TE
7	Shreyas Mandavkar	BE
8	Piya Ghorai	BE
9	Abhishek Singh	TE
10	Uday Ghodke	TE

❖ Some Glimpses:





# VIDYAVARDHINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY

K.T. Marg, Vasai Road (W), Palghar - 401202



**NIRMAAN**

PRESENTS

## EGG DROP CHALLENGE

In association with



- Material will be disclosed on the day of event.
- Participate in a team of maximum 3 members.

[Register Now!](#)

<https://forms.gle/2MNo3GgrYEkNz1zm7>

Registration deadline  
11<sup>th</sup> April, 2022.

Contact :  
Mr. Anand Nair  
+91- 77700 79021



Prize worth  
**Rs.3200**  
INR



Scan to register

Mr. Mohit Verma  
+91- 77739 31994

## II. HOUSE OF CARDS

Explores the concepts of structural engineering and how to measure the critical load, or the weight at which a structure will fail. Students learn about basic structures, how to reinforce, materials selection, and working as a team, design and build a prototype structure to hold the greatest weight.

➤ **Event Details:** NIRMAN at VCET, VASAI, arranged by IGBC Students Chapter, Civil Department in Academic Year 2021-22.

➤ **Duration:** 14<sup>th</sup> April, 2022.

➤ **Venue:** Vidyavardhini's College of Engineering & Technology, Vasai West.

### ❖ **Rules and Regulations:**

1. Each team will be provided with 2 decks of cards.
2. Cards can be given of any shapes.
3. No type of adhesive should be used.
4. The structure should be G+1 and self-supporting.
5. 1 hour will be allotted to make the structure.
6. No misconduct will be tolerated.
7. A ply of 6 mm will be kept on the structure upon which load will be applied.
8. The structure should not deform prior to loading, if happens so no second chance will be provided for applying loads.
9. Any other criteria will be instructed at the same day of the event.
10. Loading will be stopped as soon as even a single card falls from the structure.
11. The decision of the Event Heads & Judge's will be final.

### ❖ **Judging criteria:**

Team successfully satisfying the following criteria will be declared as winner-

1. Minimum numbers of cards used.
2. Maximum weight taken by the structure.
3. Minimum time for making the structure.

❖ **Guidelines:**

1. NIRMAAN, VCET reserves the right to disqualify any participant if found using unfair means.
2. NIRMAAN, VCET reserves the right to change any rule. Change in the rule will be highlighted and notified through email.
3. All modes of official communication will be through NIRMAAN e-mail only.
4. Completion of the structure should be within the time limit provided.

❖ **Registration**

1. The team should consist of 2 members only.
2. No team member should be present in more than one group
3. Registration will be accepted through the goggle form link which is provided below  
Link: <https://forms.gle/2MNo3GgrYEkNz1zm7>


❖ **Entry Fees: Rs.100/-**


❖ **HOUSE OF CARDS REGISTRATIONS LIST:**

Sr. No.	Participant Names	Year
1	Ashish Bavdane	BE
2	Tushar Dhangar	TE
3	Vrushali Gavit	TE
4	Rahul Chaudhari	BE
5	Abhishek Vishwakarma	BE
6	Faraz Ansari	TE
7	Shreyas Mandavkar	BE
8	Rupesh Patil	BE
9	Abhishek Singh	TE
10	Nikita Shivdas	TE
11	Dhruv Naik	External


❖ Some Glimpses:



 **VIDYAVARDHINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY**  
K.T. Marg, Vasai Road (W), Palghar - 401202

 **NIRMAAN**  
PRESENTS

**HOUSE OF CARDS**

In association with  TQBC


- Two decks of cards is given to each team.
- Participate in a team of maximum 2 members.

Prize worth **Rs.3200** INR

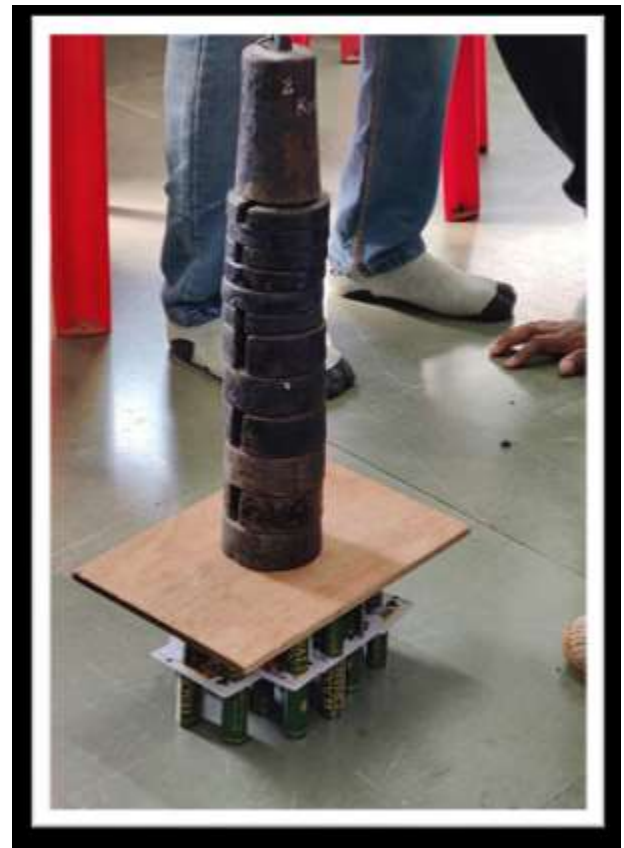
[Register Now!](https://forms.gle/2MNa3GpVtKxvzcm7)

Registration deadline  
11<sup>th</sup> April, 2022.

Contact :  
Mr. Viraj Gavali  
+91- 74149 01414

 Scan to register

Mr. Harshad Pawar  
+91- 70217 42873





### III. TECHNICAL POSTER PRESENTATION

A platform for all those technocrats to present their research work in one of the highly competitive competitions of Technical Paper Presentation. Participants prepare their paper based on the theme and are judged on the basis of the reports as well the presentation.

- **Event Details:** NIRMAN at VCET, VASAI, arranged by IGBC Students Chapter, Civil Department in Academic Year 2021-22.
- **Duration:** 15<sup>th</sup> April, 2022.
- **Venue:** Vidyavardhini's College of Engineering & Technology, Vasai West.

#### ❖ **Aim of this competition:**

1. To encourage participation in the civil engineering research area.
2. To provide an excellent platform for the exchange of new ideas and knowledge among Academia, Industry professionals, and Research Scholars.

#### ❖ **Topics for Technical Paper Presentation:**

1. Intelligent Transportation Systems
2. Application of GIS in Civil Engineering
3. Green Building Technologies
4. Trends in Concrete Technology
5. Low-cost housing technologies
6. Waste management (solid/medical/hazardous)
7. Waste water treatment
8. Pavements constructed with recycled materials
9. Wind resisting building
10. Smart city
11. Sustainable Urban Infrastructure

#### ❖ **Poster Content:**

1. Poster title
2. Problem Statement
3. Current Scenario (Statistic Data)
4. Proposed Solution
5. Real application of solution
6. Outcome of Solution
7. Implementation of Solution
8. Conclusion or Result

### ❖ **Rules and Regulations:**

1. E-Poster Size: (Standard 4:3)
2. File Size: Maximum file size is 25 Megabytes (25MB)
3. File Format: Save your file as a PDF for quick and easy upload
4. Software: Free to choose any type of software; hand-drawn posters also accepted, etc.
5. The decision of the Event Heads & Judge's will be final.

### ❖ **Judging criteria:**

1. Title of poster (5 Points)
2. Showcase of current scenario (5 Points)
3. Innovation in solution (10 Points)
4. Methodology (10 Points)
5. Aesthetic view (Area management of poster) (10 Points)
6. Presentation (10 Points)

### ❖ **Guidelines:**

1. NIRMAAN, VCET reserves the right to disqualify any participant if found using unfair means.
2. NIRMAAN, VCET reserves the right to change any rule. Change in the rule will be highlighted and notified through email.
3. All modes of official communication will be through NIRMAAN e-mail only.
4. Submission of Poster should be within the timeline only.

### ❖ **Registration**

1. Either individual or the team consisting of a maximum of 4 members are allowed.
2. No team member should be present in more than one group
3. Registration will be accepted through the goggle form link which is provided below  
Link: <https://forms.gle/2MNo3GgrYEKz1zm7>

### ❖ **Entry Fees: Rs.200/-**

❖ **TECHNICAL POSTER PRESENTATION REGISTRATIONS LIST:**

<b>Sr. No.</b>	<b>Participant Names</b>	<b>Year</b>
1	Shreyas Raju Mandavkar	BE
2	Gauravi Dayanand Alave	BE
3	Rahul Pravin Chaudhari	BE
4	Krutarth Mistry	BE
5	Krutik Patil	SE
6	Kanchan Patil	TE
7	Nitish Narendra Kambli	TE
8	Phadatara Abhishek Satish	TE
9	Shreyas Landge	TE
10	Pooja Dhanwade	TE
11	Rishabhdev Sharma	External
12	Parab Siddhant S	External
13	Atharva Mukund Kadam	External
14	Yash Wavage	External
15	Satyanarayan Gupta	External
16	Tejas Shevale	External
17	Nimish Vardam	External

❖ Some Glimpses:



 **VIDYAVARDHINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY**  
K.T. Marg, Vasai Road (W), Palghar - 401202

In association with 

 **NIRMAAN**  
PRESENTS  
**TECHNICAL POSTER PRESENTATION**

- Prepare a poster based on the given theme.
- Participate in a team of maximum 4 members.

**Prize worth Rs.4500 INR**

[Register Now !](https://forms.gle/2MNoJGgrYEkNz1m7)

Registration deadline  
11<sup>th</sup> April, 2022.

Contact :  
Mr. Rahul Ahire  
+91- 80978 89687

 **Scan to register**

Mr. Yash Bamania  
+91- 77384 46442



## IV. SIMCITY

Sim City is a competition, in which teams have to develop a given town by applying knowledge of urban planning. Teams will be provided with different amenities like water supply system, power plant, fire station buildings, etc. acquired by them through auction/credit.

- **Event Details:** NIRMAN at VCET, VASAI, arranged by IGBC Students Chapter, Civil Department in Academic Year 2021-22.
- **Duration:** 15<sup>th</sup> April, 2022.
- **Venue:** Vidyavardhini's College of Engineering & Technology, Vasai West.

### ❖ Event structure:

Teams will be provided with virtual cash and a brochure which will be having different amenities with their prices.

1. Initially auction will be conducted by the organizing member for buying the Amenities. Each amenity will have a base price and population that can be occupied. The items will be sold to the team who will bid the highest amount.
2. Each team will be given an arena to start with, and will build the city with the elements they bought in the auction; the city should be built in such a manner that maximum population can be facilitated with all the basic requirements in an eco-friendly manner.

### ❖ Rules and Regulations:

1. Number of amenities and their base price will be disclosed on the day of event.
2. Full imperial sheets will be provided for placing the amenities/buildings.
3. Teams can only use amenities/buildings provided at the time through auction, using materials from outside will lead to disqualification.
4. Discussion time: 10 minutes, Bidding time: 20 minutes, Preparation/Building time: 20 minutes.
5. No extra time will be provided.
6. The decision of the Event Heads & Judge's will be final.

### ❖ Marking scheme:

1. Following rule Book = 10
2. Placing of amenities = 10
3. Orientation of components = 15
4. Aesthetic View = 10
5. Environmental Significance = 20
6. Economic Planning = 15
7. Presentation = 20

### ❖ Guidelines:

1. NIRMAAN, VCET reserves the right to disqualify any participant if found using unfair means.
2. NIRMAAN, VCET reserves the right to change any rule. Change in the rule will be highlighted and notified through email.
3. All modes of official communication will be through NIRMAAN e-mail only.
4. Completion of the structure should be within the time limit provided.

### ❖ Registration

1. The team should consist minimum 2 or maximum 4 members.
2. No team member should be present in more than one group.
3. Registration will be accepted through the goggle form link which is provided below  
Link: <https://forms.gle/2MNo3GgrYEkNz1zm7>

### ❖ Entry Fees: Rs.200/-


### ❖ SIM CITY REGISTRATIONS LIST:

Sr. No.	Participant Names	Year
1	Abhishek Vishwakarma	BE
2	Faraz Ansari	TE
3	Shreyas Mandavkar	BE
4	Saish Sankhe	SE
5	Sarthak Yadav	BE
6	Hardik Mhatre	BE
7	Prathamesh Gondhalekar	TE
8	Dhruv Nayak	Ext
9	Roshni Salunkhe	TE


### ❖ Some Glimpses:






 **VIDYAVARDHINI'S COLLEGE OF  
ENGINEERING AND TECHNOLOGY**  
K.T. Marg, Vasai Road (W), Palghar - 401202

In association with

 **NIRMAAN**  
PRESENTS


**SIM CITY** 

- Formulate the action plan for the city.
- Participate in a team of minimum 2 or maximum 4 members.


<https://forms.gle/2MNa0GgrYEK5zJzm7>

Registration deadline  
11<sup>th</sup> April, 2022.

Contact :  
Mr. Hritik Birwadkar  
+91-96534 88402  
+91-82916 13255

  
Scan to register.

Prize worth  
**Rs.4500**  
INR



**Mr. Viren Chandanshive**  
Staff-In-charge  
IGBC Student Chapter

**Dr. Ajay Radke**  
H.O.D. Civil



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Affiliated to the University of Mumbai.

**Department of Civil Engineering**  
*A Panel Discussion on*  
**“Scope and Opportunities in Civil Engineering”**

**Event Details:** PANEL DISCUSSION at VCET, Vasai, arranged by Civil Department.

**Duration:** 14<sup>th</sup> April, 2022.

**Venue:** Vidyavardhini's College of Engineering & Technology, Vasai West.

**Convener:** Dr. Ajay Radke

**Faculty Coordinator:** Mr. Viren Chandanshive

The Department of Civil Engineering of Vidyavardhini's College of Engineering & Technology organized a Panel Discussion on “**Scope and Opportunities in Civil Engineering**” from 10:30 a.m. to 1:30 p.m. on 14th April, 2022. The objective of the program was to bring together the experts, practicing engineers, officials from local bodies, students, and academicians to discuss and debate on scope and opportunities in the fields of Civil Engineering.

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- **Venue:** Vidyavardhini's College of Engineering & Technology, Vasai West.

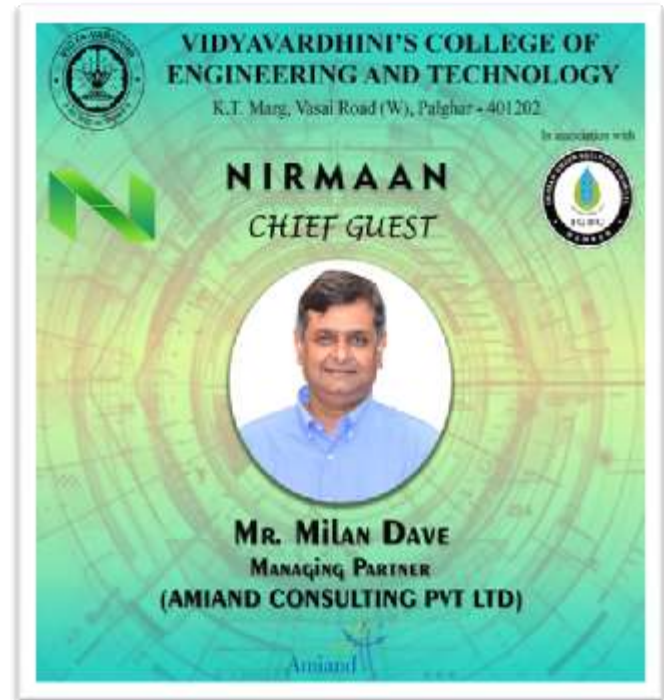
The panelists were eminent personalities from the various fields of Civil Engineering Industry, like **Mr. Satish Nayak**, Director, Best Geotechniques Pvt. Ltd.; **Mr. Milind Dave**, Managing Director, AMIAND Consultancy Pvt. Ltd.; **Mr. Debashish Mohanti**, Executive Director, Bhugol GIS Pvt. Ltd.; **Mr. Deepak Choksi**, Technical Director, Bhugol GIS Pvt. Ltd.; and **Dr. Ajay S. Radke**, Professor, Department of Civil Engineering, Vidyavardhini's College of Engineering & Technology College, who acted as a moderator in the panel discussion.



❖ Some Glimpses:







**Mr. Viren Chandanshive**  
Staff-In-charge  
IGBC Student Chapter

**Dr. Ajay Radke**  
H.O.D. Civil