



NIRMAN

INNOVATION AND ENGINEERING

11th - 12th NOVEMBER, 2022

RULE BOOK

CIVIL ENGINEERING DEPARTMENT INSTITUTE OF TECHNOLOGY NIRMA UNIVERSITY

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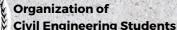
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TECHNICAL EVENTS

- PLACEMENT GURU
- SPOT LEVEL
- BRIDGE FABRICATION
- CAD DESIGN
- GEO SYNTHESIS
- WORKSHOP
 - BEST OUT OF WASTE









PLACEMENT GURU

Registration Fee: Rs.50 per person

• Team of : 1 student

PRIZE POOL: Rs.5000

Ready to fill your empty pockets? Placement is your way to go. But how difficult is it to perform under pressure? This event will give you a great experience and an excellent opportunity to analyze your skills, ability, and knowledge before appearing for actual placements. This event will help you know your strong points and the areas of concern.

The event will consist of 3 rounds.

- 1. General Aptitude Test
- 2. Group Discussion
- **3. Personal Interview**

Round 1: Aptitude test

• First round will be an aptitude test which will include questions based on, Logical reasoning and Engineering. Time limit will be 30 minutes.

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PLACEMENT GURU

Round 2 Group Discussion

Organization of

Civil Engineering Students

 Top 50 percentile students will qualify for round 2.Group will be allotted by the organizing committee. The topic of discussion will be different for each group and will be decided on the spot. Students will be judged based on their contribution to the discussion.

Round 3 Personal Interview

 Qualified students from round 2 will be promoted to round 3 which will be a personal interview. Judges will assess the finalist based on the performance in the interview and provide them with the remarks.

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SPOT LEVEL

Registration Fee: Rs.50 per person

Team of: 2 Students

PRIZE POOL; Rs.5000

Do you know the first step of any project? Yes, you are correct its surveying. We've got all for you. This event will certainly boost up your surveying skills which are the essentials for any construction activity.

Event will consist of 1 round, but it will be in two stages:

Stage-1: <u>Accurate centering and levelling of dumpy level.</u> Dumpy level instrument and tripod will given to participants in dismantled form. They have to assemble and adjust dumpy level on tripod on given spot. Its accuracy will be considered for judging.

Stage-2: Level measurement of specified points using the dumpy level.

After adjusting dumpy level, participant has to take level readings of 2 specific points. Its accuracy will be considered for judging.



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SPOTLEVEL

Team with least time to complete both stages with better accuracy will be considered winner.

- One dumpy level will be provided per team. Each team will be required to center and level the dumpy level. A small demonstration of Instrument will be given before event, so that doubt regarding instrument get clear
- Supporting tools & other equipment such as peg, tripod stand, hammer, ranging rods, thread will be provided by the organizers.

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BRIDGE FABRICATION

Registration Fee : Rs.50 per person

- Team of : 2 to 3 Students
- PRIZE POOL; Rs.5000

Organization of

Civil Engineering Students

Model bridges promote the study and application of physics and engineering and help students develop "hands-on" skills. Participating students get to experience what it is to be an engineer, designing structures to a set of specifications and then see them perform their function.

Guidelines:

- Teams will have to make bridge of given span with the help of specified quantity of Popsicle Sticks (Ice-Cream Sticks).
- The groups will be given 2 hours time to make the model. Materials will be provided by us.
- On completion of 2 hours, the groups will perform centre point load test with the help of different weight loads provided by the volunteers present at event venue.
- The testing will be done by the participants themselves, under the guidance of judges

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BRIDGE FABRICATION

- Participants will be judged on following basis:
- a. Innovation and creativity involved in the design
- b. Material usage
- c. Centre point load test results

Team with least material usage, more innovativeness and more bearing capacity will be considered winner.

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CAD DESIGN

- Registration Fee : Rs.50 per person
- Team of : 1 to 2 Students
- PRIZE POOL; Rs.5000

"Design is intelligence made visible". Get ready to showcase your creative side. This event will allow you to display your creativity and technical design skills on AutoCAD.

Guidelines:

- Participants will have to make plan Layout of G+1 Storey Residential Building of both floors – ground floor and first floor.
- Plot size, FSI, Carpet Area and other parameters will be provided at time of the event.
- Participants will design a Floor Plan on AutoCAD during time duration of 2.5 hours.

Designed Floor Plans will be judged on the basis of Technical criteria, effective area usage, creativity, tec.

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CAD DESIGN

Instructions:

- Duration of 2.5 hours will be provided to the participants to create and submit both plans and section.
- Submissions after the deadline will not be considered.
- Single pdf file will be considered which should include
 a. Ground Floor Plan
 - b. First Floor Plan
- The submissions need to be done in .pdf format with the name of the file as "team name.pdf".
- Further guidelines will be provided during the event.

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GEO-SYNTHESIS

Registration Fee : Rs.50 per person

• Team of : 2 Students

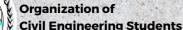
PRIZE POOL; Rs.5000

Soil is one of the most significant part of civil engineering. Sometimes, soil does not match the required strength specifications but even the weakest soil can be strengthened in the modern, high-tech world with the use of reinforcing materials such as discarded plastics, paper, fabrics can be used to improve shear strength. Here is great opportunity for you to experience modern soil improvement technique.

Guidelines:

- Participants will be explained all the instructions regarding competition at the time of event.
- Participants will have to prepare soil sample in the cube mould (15cmx15cmx15cm) with reinforcement material provided by organizing committee.
- Each team will be given some virtual points, which they can use to buy reinforcement material. This materials will be used to increase the strength of soil.

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GEO-SYNTHESIS

Judging criteria would be based on the extent to which participants can make strongest soil sample with minimum usage of materials to be checked using load with help of sand bucket.

In case of same strength testing, participants will be tested based on material usage and time taken to complete it.

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BEST OUT OF WASTE

Registration Fee : Rs.50 per person

Team of : 3 to 4 Students

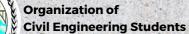
PRIZE POOL; Rs.5000

This competition requires the use of creative skills by the participants, highlighting role of Civil Engineering as a basis of designing which leads towards sustainability. Pertaining to the problem of wastage in our society from households and industries, we now require a very innovative approach to get rid of them. Recycling and reusing the valuable waste material can result in development of fantastic and usable products.

Guidelines:

- Each team will have to make any infrastructure model which is related to Civil Engineering field, for example Bridge, building, tower, statue, etc. and they will be required to present the idea of the model to the judges.
- Waste material will be provided by the committee and will include: Plastic bottle, Newspapers, Threads, Cardboard boxes, Fibers, Ice cream sticks, Bamboo sticks etc.
- Time Limit of 2 Hours will be given.

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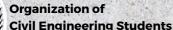
BEST OUT OF WASTE

Participants will be judged based on their creativity, innovation, design, utilization of resources and idea presentation of the model.

For any Query, Contact: Lay Baria +91 6354812277 Krisee Patel +91 9925638989

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WORKSHOP

Registration Fee : Rs.200 per person

• Team of : 1 Student

Workshop will include showcase of different instruments used for Non-destructive tests (NDT). There are various types of tests carried out to get different properties of concrete. These includes two types of tests: Destructive testing and Non-Destructive Testing.

Nowadays, Non-destructive testing is very popular to get information about strength or health condition of buildings or any type of concrete structure. It is first step for maintenance purpose of any Concrete Structure. Hence, this workshop will give you a exposure to various latest Non Destructive Testing(NDT) equipments used in the market.

Guidelines:

• Participants will be demonstrated about various NDT Instruments and then they will be allowed to use all instruments and perform test.

For any Query, Contact:

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