

INDIAN SOCIETY FOR TECHNICAL EDUCATION



ASSAM ENGINEERING COLLEGE STUDENTS CHAPTER



TECHAXOM 2025

EVENT RULEBOOK











INVENTOSPHERE

PROJECT EXHIBITION

SUBMISSION: 16TH MARCH 2025



OBJECTIVES

A platform for students to showcase innovative projects, promoting creativity and tech advancements.



Students from various institutions (Any branch, any year)

PRIZES AND CERTIFICATES

Winner **Rs. 5000** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 3000** + **Rs. 6K** Course Scholarship by Sandpaper Academy.

2nd Runner-Up **Rs. 2000**

REGISTRATION

Visit our website
[iste.aec.ac.in] to register
yourself.
Scan this QR Code

FEE

- Rs. 249/- for teams of 3 to 4 members (per team).
- Rs. 199/- for teams of 1 to 2 members (per team).

For ISTE members

- Rs. 199/- for teams of 3 to 4 members (per team).
- Rs. 149/- for teams of 1 to 2 members (per team).

RULES AND GUIDELINES

- The project exhibition is open category. There is no any particular theme.
- Participants must submit a brief abstract or summary explaining the idea, objectives, and methodology of the project before the submission date.





RULES AND GUIDELINES Participants should provide some context for the project - why it matters, the problem you are solving, and your inspiration. Participants should bring printed materials (brochures, flyers) with information about the project on the day of exhibition. **SUBMISSION** Projects are to submitted via our email [isteaecstudentchapter@gmail.com] before the submission deadline.



TECHXPLORE

ULTIMATE TECH QUIZ

DATE: 18TH MARCH 2025

OBJECTIVES

TechXplore invites curious minds to take an exciting challenge of questions testing your analytical thinking.

WHO CAN ATTEND?

Students from various institutions (Any branch, any year).



Winner **Rs. 3500** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 2000** + **Rs. 6K** Course Scholarship by Sandpaper Academy.

2nd Runner-Up *Rs. 1000*

REGISTRATION

Visit our website [iste.aec.ac.in] to register yourself.
Scan this QR Code

RULES AND GUIDELINES

- The guiz is open to all participants.
- Each team can consist a maximum of two members.
- Individual participants (Lone wolves) are allowed.
- Cross Teams are allowed.
- The competiton will have a pre-screening (Prelims) round, followed by the mains guiz.
- Six teams (or individuals) will qualify from the preliminary round.
 The guiz master's decision will be final and binding.

FEE

For ISTE members:

- Lone wolf: Rs. 49/-
- Team: Rs. 99/-

For Others:

- Lone wolf: Rs. 79/-
- Team: Rs. 149/-

SEISMIC TOWER

BUILD FOR THE SHAKE

DATE: 18TH MARCH 2025

OBJECTIVES

To test your engineering skills as you design and construct seismic-resistant towers capable of withstanding tremors.

WHO CAN ATTEND?

- Students from various institutions (Any branch, any year)
- Teams must consist of 2 participants.



Winner **Rs. 3000** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 2000** + **Rs. 6K** Course Scholarship by Sandpaper Academy.

2nd Runner-Up *Rs. 1000*

FEE

- Rs. 149/- for ISTE members. (Per team)
- Rs. 199/- for others. (Per team)

RULES AND GUIDELINES

Construction Guidelines:

- Towers must be constructed solely from toothpicks and glue.
- Towers must be free-standing and must not be attached to any external support structures.
- The use of additional materials like tapes, wires, or any non-toothpick material is strictly prohibited.



REGISTRATION

Visit our website
[iste.aec.ac.in] to register
yourself.

Scan this QR Code





- Participants are allowed to use provided toothpicks and glue only.
- Toothpicks and glues will be limited and no more materials will be provided.
- A base will be provided for the construction of the tower.

DIMENSIONS

- The maximum base dimensions should be 200mm x 200mm.
- The height of the tower from the base should be a minimum of **300mm**.
- Towers can be of any shape and height as long as they meet the construction guidelines.
- Any violation of the dimensions provided will lead to immediate disqualification.

SEISMIC SIMULATION

- The seismic simulation will be conducted using a designated shake table.
- The shake table will generate controlled seismic waves with constant intensity.
- The tower's ability to withstand the seismic waves will be tested by gradually increasing the static loads with weight plates.

TESTING PROCEDURE

- Towers will be tested in a group of 4 at a time on the shake table.
- Each tower will undergo multiple rounds od seismic simulation with increasing loads.
- The tower's height, stability, and ability to remain standing during the simulation will be evaluated.

SCORING

- Towers will be scored based on their height, stability, and ability to withstand seismic activity.
- Taller towers that remain stable throughout the seismic simulation will receive higher scores.
- Towers that collapse or show signs of instability during the simulation will receive lower scores.

JUDGING Judging will be conducted as appointed by the organizers. Judges' decisions are the final and binding. DISQUALIFICATION Towers that do not comply with the construction guidelines or fail to meet safety standards may be disqualified. Participants found violating the rules or engaging in misconduct may be disqualified from the contest. **RULE MODIFICATIONS** The organizers reserve the right to modify the rules and regulations of the contest at any time for the fair and smooth conduct of the event.

ROBOSUMO

CLASH OF BOTS

DATE: 18TH MARCH 2025



Robosumo merges robotics and sports, creating an exhilarating game that demands both strategy and strength.

WHO CAN ATTEND?

Students from various institutions (Any branch, any year)

PRIZES AND CERTIFICATES

Winner **Rs. 6000** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 4000** + **Rs. 6K** Course Scholarship by Sandpaper Academy.

REGISTRATION

Visit our website
[iste.aec.ac.in] to register
yourself.
Scan this QR Code

FEE

- Rs. 249/- for ISTE members (Per team).
- Rs. 299/- for non-members (Per team).

TEAM SPECIFICATIONS

- A team may consist of a maximum of 4 participants, all from the same institute or may be from different institute.
- Every team must have a name which must be unique.
- Organizers reserve the right to reject entries from any team whose name it deems inappropriate, offensive or conflicting.





CRITERIA FROM TRIUMPH

- A robot is declared victorious if its opponent is immobilised.
- A robot will be declared immobile if it cannot display linear motion of at least one inch in a timed period of 30 seconds. A bot with one side of its drive train disabled will not be counted out if it can demonstrate some degree of controlled movement.
- A robot is declared victorious in a round if he can push out more than 50% of the opponent's robot out of the arena.
- A robot is declared victorious in a round if he can push out more than 50% of the opponent's robot out of the arena.

BOT SPECIFICATION

- Bot Dimensions: 30cm x 30cm x 30cm
- Weight: **8kg** | Bots which does not satisfy the weight criterion will be disqualified.
- Tolerance: 10%
- Use of LEGO kits or ready-made basis will lead to disqualification.
- All robots must have easily visible and controlled mobility in order to compete.
- Robots operating on pneumatic or hydraulic mechanisms are not allowed.
- Robots using fire or flame throwers are not allowed.
- Robots with jumping and hopping mechanisms are not allowed.
- The use of IC engines is not allowed. Flying (using airfoil, helium balloons, ornithopters, etc.) is not allowed.
- The robots cannot have any kind of active weapons eg. Cutters, drums, lifters etc. The robot can be wired or wireless.
- The length of the wire should be more than 3 meters.
- The robot must be powered electrically. Use of an IC engine in any form is not allowed. Onboard batteries must be sealed, immobilized-electrolyte types (such as gel cells, lithium, NiCad, NiMH, or dry cells).
- The use of damaged, non-leak-proof batteries may lead to disqualification. Special care should be taken to protect onboard batteries. If the judges find that the battery is insufficiently protected, the team will be disqualified immediately. The teams are suggested to have at least one extra battery ready and charged up during competition so that on advancing to the next level, they won't have to wait or suffer due to an uncharged battery.

ARENA SPECIFICATION

Dimension- The arena is a circle of radius 1.5 meters.

NOTE

Team Representative – Each team must specify their team representative (leader) at the time of registration. All-important communications between organizers and the registered teams will be done through their team representatives. The team representative must give their valid contact details at the time of registration

UNEFOLOWER ROBOT

RACE TO PRECISION

DATE: 18TH MARCH 2025

OBJECTIVES

LFR challenges you to design an autonomous robot that navigates its path with accuracy and efficiency.

PRIZES AND CERTIFICATES

Winner **Rs. 5000** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 3000** + **Rs. 6K** Course Scholarship by Sandpaper Academy.

2nd Runner-Up Rs. 2000

TEAM SPECIFICATIONS

- Students from various institutions (Any branch, any year).
- Team of maximum 4 participants.
- Cross-institute teams allowed.
- Every team must have a name which must be unique.
- Organizers reserve the right to reject entries from any team whose name it deem inappropriate, offensive, or conflicting.



REGISTRATION

Visit our website
[iste.aec.ac.in] to register
yourself.
Scan this QR Code

FEE

- Rs. 249/- for ISTE members (Per team).
- Rs. 299/- for non members (Per team).

BOT SPECIFICATIONS

- The robot participating in the event must be autonomous.
- Lego kits are strictly prohibited. The robot must not be made from any ready-made kit, if found so, the team will be disqualified.
- The Robot must be non-destructive and non-harmful to humans and the track.

BOT SPECIFICATIONS

- Participants must arrange their own batteries.
- The use of IC engines or compressors is not allowed. All vehicles must depend only on electric motors for their motion and control.
- The Robot must not emit smoke or fire, leak, stain, or soil.
- The power source must be on board.
- Robots must have sensors onboard to sense the black line marked on the arena.

DIMENSIONS

- Width Not more than 30 centimeters
- Length Not more than 30 centimeters
- Height Not more than 30 centimeters
- Maximum weight must not exceed 2 kg (However a tolerance of 5% is acceptable)

POWER SOURCE

- Only Electrically powered Robots are allowed in the event.
- Batteries must be sealed, immobilized electrolyte type (gel cell, lithium, NiCad, or dry cells).
- The electric voltage anywhere in the machine should not be more.

CONSTRUCTION

Any robotic parts/building material can be used until the robot meets the above specifications and the design and construction are primarily the original work of the team. Ready-made robots are not allowed to compete in the competition.

ARENA

- The competition arena has a track length of 100 ft. approx.
- The width of the black line will be 30mm.
- Arena Dimension: 20×20 Sq. Ft.(subjected to change)
- The surface of the track will be white with a black line marked on it.
- There may be intersections on the track.
- The arena will be made out of printed flex.

GAMEPLAY

Knockout Round: In this round two teams will compete one-on-one starting at the same time, the team finishing the race in the minimum time will qualify for the Final round.

Final Round:

- Qualified teams will compete in this round to achieve the minimum runtime. A single run will be conducted for each qualified team. Teams with the minimum runtime will be nominated as the winner of the competition.
- Race clock: The race clock begins as soon as the robot crosses the starting point and ends when the robot reaches the finishing line without any fail.
- *Runtime*: The robot must traverse the full track from the starting point to the finishing point in a single run at least once for each round within the maximum access time (5 minutes). This runtime will be the official runtime for the team.
- **Pre-Game setup**: Before starting the competition, each team will get 10 minutes to calibrate the robot and make a trial/testing run on a given separate practice arena. All the preparations must be done during this time (adjusting the sensors, reprogramming the robot etc).
- **Game Zone:** An area around the field will be designated as the GAME ZONE. No one is allowed inside the game zone except the robot handlers and the referees.
- *Traversing*: A robot must traverse on top of the line. It must travel straight upon arriving at any intersection.

STARTS AND RESTARTS

- Only the team Leader will be allowed to handle the robot during the gameplay.
- The robot will be placed at the starting point with the consent of the referee.
- A robot may restart the run if the person handling it feels the necessity. A restart can be requested only if the robot doesn't follow the line, has stopped on halfway or has lost the directions/Black line.
- At any restart, the robot must be re-positioned back at the start point.
- It is not allowed to reprogram the robot or to add/remove parts on the robot during the run, but adjusting the sensors is permissible with the consent of the referee.
- Only 3 restarts are allowed for each round.

A ROBOT MUST RESTART IF

- The robot does not start after pressing the Start Button for 1 minute.
- The robot is touched by a human without the consent of the referee.
- The robot moves out of the arena.
- The referee orders to restart.



DEVILSADVOCATE

DEBATE.DEFEND.DOMINATE

DATE: 18TH MARCH 2025



OBJECTIVES

It's your chance for a thoughtful discussion, present strong arguments and defend your points with analytical thinking.

WHO CAN ATTEND?

Students from various institutions (Any branch, any year)



PRIZES AND CERTIFICATES

Winner **Rs. 3000** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 2000** + **Rs. 6K** Course Scholarship by Sandpaper Academy.

2nd Runner-Up **Rs. 1000**

REGISTRATION

Visit our website
[iste.aec.ac.in] to register
yourself.
Scan this QR Code

FEE

- Rs. **59**/- for ISTE members.
- Rs. 99/- for non-members.

RULES AND GUIDELINES

- 1. Eligibility and Participation:
 - There is no restriction on the number of participants from a single institution.
- 2.Topic Selection:
 - Topics will be shared soon, from which participants can choose one.

RULES AND GUIDELINES

• Each participant must select only one topic to speak on.

3. Time Limit:

- A maximum of 3 minutes will be allotted to each participant to present arguments.
- Exceeding the time limit may result in penalties.

4. Language Options:

 Participants may speak in either English or Assamese, as per preference.

5. Judging Criteria:

- Evaluation will be based on the following criteria:
- a) Strength of Argument Quality of argument, including logic, reasoning, and counterpoints presented.
- b) Clarity and Structure Overall clarity and logical flow of ideas.
- c) Presentation Skills Confidence, body language, and delivery.
- d) Creativity Original or bold approaches to arguments.
- e) Persuasiveness Impact and effectiveness of the argument in convincing the audience.

6. Code of Combat:

- Participants are encouraged to take a strong stance, regardless of personal opinions — the essence of Devil's Advocate is to argue convincingly even for controversial or unpopular views.
- The decision of the judges will be final and binding.

HALLOFFRAME

CAPTURE WINNING FRAME



SUBMISSION: 16TH MARCH 2025

OBJECTIVES

Hall of Frame provides a space to tell stories through photography, capturing emotions and moments to be cherished.

WHO CAN ATTEND?

Students from various institutions (Any branch, any year)

PRIZES

Winner **Rs. 1500** + **Rs. 12K** Course Scholarship by Sandpaper Academy.

1st Runner-Up **Rs. 1000**

2nd Runner-Up *Rs. 500*

FEE

 Rs. 29/- for ISTE members.

Rs. 39/- for others.



REGISTRATION

Visit our website
[iste.aec.ac.in] to register
yourself.
Scan this QR Code

RULES AND GUIDELINES

- Participants must submit atleast 3 and not more than 6 ORIGINAL photographs for the contest.
- Photographs shot on DSLRs, Mobile phones, or any other devices are accepted.
- Entries must be of high quality. (JPEG, PNG, TIFF, RAW, DNG format accepted)
- Participants must provide a story behind the photographs taken.
- Photos must not be altered or edited significantly. (No adding, removing, or distorting elements). Al-generated or modified photos will be disqualified.
 Entries containing obscene, violent, racist, or defamatory content will be disqualified.
- The decision of the judges and organizers are final and binding.

