

PSG COLLEGE OF TECHNOLOGY



DEPARTMENT OF PRODUCTION ENGINEERING



PRODUCTION ENGINEERING ASSOCIATION SOCIETY OF MANUFACTURING ENGINEERS - STUDENTS' CHAPTER

present a technical inter-collegiate event



March 01 & 02 2025



Prize Pool

SCAN ME









ABOUT

PRODOTHON is an intercollege event for the engineering students organized by the Production Engineering Association and Society of Manufacturing Engineers - Students' Chapter. The event is scheduled for two days, featuring a total of 7 events (5 technical events, 1 workshop, and 1 paper presentation). The theme of each event will be around core subjects of manufacturing and the mechanical stream.

GENERAL RULES & GUIDELINES

- Prior registration to any event is required; on-spot registrations will be considered.
- Participants must bring a hard copy of the Bonafide certificate (issued by the principal) and should carry their college identity card during the entire course of the event.
- The judge's or judges' decision will be final.
- Participation certificates will be given to all participants.
- Accommodation can be availed at PSG tech hostels on a payment basis.
- Refreshments will be provided to the participants, Lunch should be managed on their own.
- Requirements for events (if any) should be met by the participant (who will be previously informed); the event organizers will not be accountable.
- The participants should be well-disciplined and maintain dignity throughout the event.
- Participants should be on time on the day of the event.
- Prize distribution will be done after the end of each event.





CODE OF CONDUCT FOR EXTERNAL PARTCIPANTS

- 1. Participants must always wear their event tag on campus without fail.
- 2. Participants must bring a hard copy of the Bonafide certificate (issued by Principal) from your college.
- 3. Participants must maintain discipline on campus; misconduct leads to disqualification.
- 4. Participants are prohibited to the classrooms and labs other than the event areas.
- 5. Participants staying in PSG Tech hostels must follow the rules and regulations; violations may result in accommodation and event cancellation.
- 6. Participants must dress modestly and presentably, respecting institutional decorum.
- 7. Participants must comply with security for ID checks and verifications on campus.
- 8. Volunteers will assist external participants; unnecessary roaming on campus is prohibited.
- 9. Any damage to college property, rule violations, or misconduct will result in disqualification and possible disciplinary action.
- 10. Participants must confirm their registration at the entry desk on event day, as it is mandatory for participation.
- 11. Participants shall not be permitted to meet students from the host college or roam with them inside the campus.
- 12. The judges' and event coordinators' decisions will be final and binding, with no room for disputes.

These rules are set to ensure safety and prevent indiscipline. Any participant violating them will face immediate disqualification from the event and be barred from future campus events.

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AGENDA

DAY 1 - 01/03/2025 (SATURDAY)		
Event Name Event Time		
Inauguration	8:30 AM – 9:30 AM	
The Production Meishu	0.20 AM 10.20 DM	
Robo Evade	9:30 AM – 12:30 PM	
Lunch Break	12:30 PM – 1:30 PM	
Paper Presentation	1:20 DM 4:20 DM	
Workshop	1:30 PM – 4:30 PM	

DAY 2 - 02/03/2025 (SUNDAY)		
Event Name	Event Time	
Stick it! Structure it!	9:00 AM – 12:00 PM	
Deconstructive Engineering	9.00 AIVI — 12.00 I IVI	
Lunch Break	12:00 PM – 1:00 PM	
Adventhon	1:00 PM – 4:00 PM	







THE PRODUCTION MEISHU

Event Description:

Participants will analyze a case study and present a comprehensive plan covering product design, manufacturing processes, and production efficiency. The presentation should address lean manufacturing, sustainability, quality control, and supply chain management, ensuring a holistic approach. Marketing strategies must also be integrated to demonstrate a complete product development and business strategy.

3 Hrs 9:30AM - 12:30PM



Maximum 3 per team



Y 201





Date: 01/03/2025

Event rules & guidelines:

- The topics will be given on the day of the event.
- Time allotted for preparing presentation 2 hrs.
- Maximum slide limit 6 slides (template will be given).
- Time limit for presenting the presentation 5 mins.
- The work should be original and it should not be copied from anywhere.
- Participants should bring their own laptops.
- Mobile phones are not allowed.





ROBO-EVADE

Event Description:

Robo-Evade is a robotics game inspired by Pac-Man where robots autonomously navigate a maze. One robot (Evader) tries to avoid being approached closely by other robots (Chasers). The Chasers aim to corner the Evader by strategic movement, while the Evader tries to keep as much distance as possible.

3 Hrs 9:30AM - 12:30PM





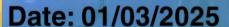


Maximum 3 per team





G-301



Overview	Details
Event Name	Robo-Evade: Robotics Competition
Theme	Navigate a maze inspired by Pac-Man in a battle of strategy and speed.
Roles	 Evader: Outwit and avoid Chasers. Chasers: Coordinate to corner and capture the Evader.
Focus	Innovative robot design, navigation skills, and strategy.







RULES & GUIDELINES	DETAILS		
Robot Specifications	 Size: Length -15 cm to 20 cm, Breath - 15 cm to 20 cm, Height - 15 cm to 20 cm. Control: Remote-controlled (RC, BT, Wired). Build: Handcrafted by participants; no pre-made robots allowed. 		
Match Format	 3 teams per match. Roles: 1 team as Evader, 2 as Chasers (roles alternate). Each team gets one chance as the Evader and two as Chasers. 		
Round Duration	3 minutes per round.		
Scoring System	 Evader: Loses 5 points per capture. Chasers:10 points for each capture. Bonus: 40 points for 4 captures in a round. Magical Zone Grants the Evader temporary invisibility. Activates once per minute. Winner: Team with the highest total score after all rounds. 		



PAPER PRESENTATION

Event Description:

Paper presentation event is a platform for showcasing innovative ideas and research, engaging audiences with key insights and fostering collaboration through discussions.

- 1. Al in Smart manufacturing
- 2. Sustainability and Green Manufacturing
- 3. Functionally Graded Materials and Manufacturing
- 4. Digital Twins in Modern Manufacturing
- 5. Industrial Automation and IOT
- 6. Manufacturing Metrology and Computer Aided Mission Vision
- 7. Industrial Ergonomics
- 8. Lean Manufacturing
- 9. Design and Analysis of Engineering Products

Note: Participants can also present any technical paper from Mechanical stream. It's preferred if the content is streamlined to focus specifically on the topics mentioned above.

3 Hrs 1:30PM - 4:3<u>0PM</u>



Maximum 2 per team





Y 202





Date: 01/03/2025



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EVENT RULES & GUIDELINES

- All the participants who registered will get a confirmation mail with a Google form to submit their abstract.
- The abstract should not exceed 250 words.
- The abstract will be evaluated by the committee members and they will receive a mail regarding the submission of the paper and presentation slides.
- The paper should be in IEEE format and need not exceed 12 pages.
- The presentation slides should not exceed 12 slides.
- The last date to submit the abstract 18/02/2025.
- The last date for submission of the paper and presentation will be 26/02/2025.
- The shortlisted teams will receive a confirmation mail on/ before 28/2/2025.
- The participants have to showcase their work through a presentation for 10 minutes followed by interactive Q & A.
- The presentation will be evaluated by the committee members.



WORKSHOP

(In collabration with Thinkinnov solutions)



Unlocking the power of PLM: From concept to End of life

Event Description:

The PLM workshop provides students with an in-depth understanding of how products are developed, managed, and improved throughout their lifecycle. Participants will interact with industry professionals to learn how Product Lifecycle Management (PLM) is used to streamline product data and optimize manufacturing processes. The workshop will also highlight the role of PLM in Industry 4.0, digital transformation, and sustainable manufacturing. Students will explore various career paths in PLM, including design, engineering, data management, and process optimization, while gaining insights into the key skills necessary to succeed in this dynamic field. The participants will be also given overview about the Teamcenter (PLM Software).

3 Hrs 1.30 PM - 4.30 PM



Y 202



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Date: 01/03/2025

in PEA PSG Tech & SME Students' Chapter





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STICK IT! STRUCTURE IT!

Event Description:

Inspired by the iconic Mistissini Bridge in Canada, where renewable wooden Trusses replaced traditional stainless steel through innovative design, this event challenges you to think sustainably and creatively! Participants will design and build a Truss structure using only wooden sticks, glue, elastic thread, and basic tools. The goal is to construct a Truss capable of holding the maximum load before failure, showcasing strength, durability, and efficient material use. Judges will gradually apply loads to test each structure's stability, with the strongest Truss earning the highest points. Aligned with SDG 12: Responsible Consumption and Production, promoting sustainable practices by encouraging minimal material usage and creative resource management. Build smart, build strong, and showcase your engineering ingenuity!







Rules and Guidelines		
Objective	 Design and construct a truss that holds the maximum possible weight before failure while maintaining endurance. Bonus points for creative and advanced engineering designs. 	
Time Duration	90 mins	
Materials	 All required materials will be provided (Wooden Sticks, glue, etc.) Except for sticks and glues participants can bring supporting items like rulers, and markers 	
Scoring Criteria	 Load-Bearing Capacity (60%): Total weight the truss holds before failure. Creative Design (30%): Unique, efficient, and complex designs will earn additional points. Time to Failure (10%): Duration the truss withstands the applied load before breaking. 	







DECONSTRUCTING A DESIGN: A Reverse Engineering Showdown

Event Description:

In this event, participants will apply reverse engineering principles to analyse and recreate a physical product using CAD software. The event will an opportunity to develop skills in product disassembly, dimensioning, 3D modelling and reverse engineering (RE).

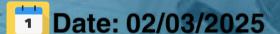
3 Hrs 9.00 AM - 12.00 PM



Maximum 3 per team







Y Block

Event rules & guidelines:

- Participants can also bring their laptops with CAD software installed.
- The topics will be given on the day of the event.
- Time allotted for preparing a presentation 2 hrs.
- Maximum slide limit 6 slides (template will be given).
- The time limit for the presentation 5 mins.
- The work should be original and it should not be copied from anywhere.
- Participants must prepare a presentation on a proposed reverse-engineered product and justify their material, design and manufacturing optimization as well as End-of-life considerations.
- · Assessment will be based on their 3D models, adherence to the constraints and applications of reverse engineering effectively.
- Mobile phones are not allowed



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- +91 82208 81320

Aishaa Nihar Z - +91 93630 22355

Kancia Mary - +91 84383 03204

ADVENTHON

Event Description:

Adventhon is a two-round challenge designed to engage participants in a fun and competitive environment. The event comprises a quiz competition, a maze navigation challenge, and a cup tower-building activity, each emphasizing problem-solving and collaboration. Teams of two participants compete to showcase their skills across the rounds, with prizes and certificates awarded to top performers.

3 Hrs 1:00PM - 4.00 PM



Maximum 2 per team





Date: 02/03/2025

G 302



Round	Objective	Rules	
Round 1: Quiz Games	Teams solve clues and connect images displayed on a projector, testing their intellectual abilities, creativity, and teamwork.	Team Size: 2 participants per team. Time Limit: 30 mins to 1 hr. Judging: Teams are judged based on scores, with top-scoring teams advancing to Round 2.	
Round 2: Navigate, Solve, and Construct	One participant is blindfolded while the other guides them through a maze using unique keywords.	Inarticinant must avoid touching the l	







PAYMENT GUIDELINES

- Prior registration to any event is required through the shared Google form. On-spot registrations are allowed.
- Registration fee must be paid to the below mentioned bank account.
- Once the registration fee is paid it is non-refundable.
- The transaction ID and the screenshot of the payment must be entered and uploaded in Google Forms simultaneously.
- · In the case of the team event, all the members of the team should register individually.
- A participant once registered can participate in a maximum of 4 events.
- A confirmation mail will be sent to the participant once he/she completes the payment and registration
- Refreshments will be provided twice a day.

REGISTRATION FEE	DETAILS	BANK DETAILS
PSG Tech	NIL	Name of the Account holder: PSG Center for Nonformal and
PSG I-Tech	₹100 per person	Continuing Education Account number: 1481267367
Other Colleges	₹200 per person	IFSC code: CBIN0280913 Bank name: Central Bank of India





ACCOMODATION DETAILS

GUIDELINES

- Participants who need hostel accommodation should inform us in advance
- Participants can pay their accommodation fees while lodging (only cash is accepted).
- All students must carry a valid government ID card.
- Participants should follow the Hostel rules and regulations (see page 17) strictly.

ACCOMODATION DETAILS (PER PERSON)

BOYS HOSTEL		GIRLS HOSTEL	
Food + 3 sharing room (common bath)	₹400 / day	Food + 2 sharing room (common bath)	₹400 / day
3 sharing room (common bath)	₹250 / day	Food + 3 sharing	₹750 / day
Dormitory room (8 sharing)	₹50 / day	room (attached bath)	





HOSTEL RULES AND REGULATIONS

- 1. Participants are not allowed to go outside after 6:30 pm (for girls) and 9:30 pm (for boys).
- Participants should not enter into other blocks apart from the allotted place.
- 3. Participants are asked to take food in their respective mess only.
- 4. Participants are asked to contact the volunteers for any sort of help. They should not take their own actions.
- 5. Participants are asked to cooperate with block/mess supervisors in any kind of ID check.
- 6. Participants should not make any noise during the sleeping hours.
- 7. Participants should not enter into the hostel without registration in the hostel office. They should contact the allotted volunteers at the time of arrival at the hostel.
- 8. Participants should not damage any property given to them.