



## PSG COLLEGE OF TECHNOLOGY DEPARTMENT OF PRODUCTION ENGINEERING

PRODUCTION ENGINEERING ASSOCIATION  
&  
SOCIETY OF MANUFACTURING ENGINEERS-STUDENTS' CHAPTER

*present a technical inter-collegiate event*



**February 27 & 28, 2026**

1  
Paper  
Presentation

6  
Events

2  
Workshop

**Prize Pool  
RS.50,000**

**Scan me !**



## ABOUT

The event is organized by Production Engineering Association and Society of Manufacturing Engineers - Students' Chapter. This is an intercollege event for the students of the Mechanical engineering stream. The event is organized for two days, the events consist of 8 events (6 technical events, a workshop and a panel discussion). The theme of each event will be in and around core subjects of manufacturing and Mechanical Engineering.

## GENERAL RULES AND GUIDELINES

1. Participants must wear their college ID card and the event tag inside the campus without fail.
2. Participants must maintain proper discipline and decorum within the campus. Any form of misconduct will result in immediate disqualification.
3. Participants are only allowed in designated event areas. Access to restricted zones like classrooms and laboratories is prohibited unless the organizers permit.
4. Accommodation is not provided by the institution. The participants shall find accommodation in PGs or hotels as of their wish. In case for any suggestions, you can contact the organizers prior to the event.
5. Participants should dress in a presentable and modest manner, adhering to the decorum of the institution.



6. Participants must cooperate with security personnel for ID checks and other necessary verifications while inside the campus.
7. Once payment is made, it will not be refunded in any case.
8. Volunteers are arranged to help the external participants navigate, and participants should be within the event premises only.
9. Any form of damage to college property, violation of rules, or inappropriate behavior will lead to immediate disqualification and possible disciplinary action.
10. On the day of the event, participants must confirm their registration at the registration desk located at the entry. They will not be allowed to participate in any of the events if they fail to confirm their registration.
11. The decision of the judges and event coordinators will be final and binding. No disputes are entertained.



# AGENDA

04

## Day 1 - 27/02/2026 (Friday)

Event Name	Event Time
Inauguration	8:30 AM – 9:00 AM
Panel Discussion	9:30 AM – 12:30 PM
The Production Meishu	
Lunch Break	12:30 PM – 1:30 PM
Workshop	1:30 PM – 4:30 PM
Paper Presentation	

## DAY 2 - 28/02/2026 (SATURDAY)

Event Name	Event Time
Cad Combat	9:00 AM – 12:30 PM
Auto Quest	
Lunch Break	12:30 PM – 1:30 PM
Stick it ! Structure it !	1:30 PM – 4:30 PM
Ladder rush	



## PANEL DISCUSSION ON SUSTAINABILITY IN MANUFACTURING

### EVENT DESCRIPTION

Panel Discussion on “Sustainability in Manufacturing” brings together renowned industry professionals, technical experts, and thought leaders from across the country to explore emerging approaches that are shaping the future of sustainable manufacturing. The discussion aims to provide students, researchers, and budding engineers with deep industry insights, real-world challenges, and practical perspectives on how sustainability can be effectively embedded into modern manufacturing environments. By engaging directly with accomplished professionals, participants will gain valuable exposure to industry expectations, evolving trends, and the skills required to contribute to a greener and more sustainable industrial landscape. This event serves as a bridge academia and industry, promote responsible engineering practices, and inspire the next generation of innovators.



**27/02/2026**



**9:30 AM to 12:30 PM**



**D BLOCK - Conference hall**

## PRODUCTION MEISHU

### EVENT DESCRIPTION

Production Meishu is a platform where participants demonstrate their skills in product design, manufacturing, cost estimation, and marketing through a comprehensive presentation before a panel of judges. A product or case study is provided during the event, and participants are required to analyze and present their solution on the same day. The presentation begins with an innovation-driven product design approach, followed by the selection of suitable manufacturing processes and materials with a focus on efficiency and cost-effectiveness. Participants address process planning and cost estimation while incorporating lean manufacturing principles to reduce waste and improve productivity. Quality control measures and sustainable manufacturing practices such as energy efficiency, recycling, and waste reduction are emphasized. The application of production, operations, and supply chain management principles is essential for optimizing manufacturing performance and logistics efficiency.



27/02/2026



9:30 AM to 12:30 PM



Y 201



Team of 3



pea\_sme



PEA PSG Tech & SME Students' Chapter

Manjuswetha S V-6369777609



Harish N-7418760901

Logeshwaran M-7339506691

## EVENT RULES & GUIDELINES

1. The case study will be provided on the day of the event.
2. Participants must prepare and present on the same day in front of a panel of judges.
3. A maximum of 1.5 hours will be allotted for the preparation of the presentation.
4. The presentation must not exceed 6 slides; an official template will be provided.
5. The presentation duration shall be 6 minutes, followed by a Question and Answer (Q&A) session.
6. All submitted work must be original and must not be copied from any source.
7. The use of AI tools for content generation is discouraged.
8. Presentations must be submitted within the stipulated time; once submitted, no further modifications will be permitted.
9. Participants are required to bring their own laptops.
10. Mobile phones are strictly prohibited during the event.
11. Writing sheets will be provided to the participants for rough work.
12. Prizes will be awarded to the winners in each category (PSG and Non-PSG).

## JUDGING CRITERIA

1. Technical Content Quality & Clarity
2. Communication and Delivery
3. Visual Aids and Supporting Materials
4. Question Answering
5. Audience Engagement and Interaction
6. Time Management and Organization



## PRODOTHON 26- EVENTS

### PAPER / PROJECT PRESENTATION EVENT

#### EVENT DESCRIPTION

Paper / Project Presentation is an academic platform created to encourage students to showcase their innovative thinking, technical research and engineering problem- solving skills. This event aims to promote knowledge sharing, critical thinking, and collaborative learning through discussions on emerging trends in the industry.

Participants can present Technical Papers OR Project Models / Case Studies related to the previously mentioned domains.



**27/02/2026**



**1:30 PM to 4:30 PM**



**Y 201**



**Team of 2**

## SUGGESTED TECHNICAL DOMAINS

1. AI in Design & Manufacturing
2. Green Manufacturing & Carbon-Neutral Production
3. Additive Manufacturing & Rapid Prototyping (Metal / Composite AM)
4. Digital Manufacturing & Digital Twins
5. Industrial IoT and Cyber Physical Production Systems
6. Metrology, Quality Control & Inspection Systems
7. Sustainable Materials Engineering, Coatings & Surface Engineering
8. Factory Ergonomics, Lean Transformation & Human Factors Engineering
9. Additive Manufacturing and Rapid Prototyping of Biomedical Materials

## RULES & SUBMISSION GUIDELINES

1. Participants may present either individually or in a team of a maximum of two members.
2. The submitted paper must be original and free from plagiarism.
3. Topics should be technical or research-oriented and relevant to the event theme.
4. Abstract submission is mandatory prior to full paper submission.
5. Each presentation will be allotted 8–10 minutes, followed by a Question & Answer session.
6. Presentations must be prepared and delivered using Microsoft PowerPoint prior to the start of the event.



7. Participants are required to carry their presentation on a pen drive.
  8. College ID card must be presented at the time of participation.
  9. Evaluation will be based on content quality, innovation, clarity, and presentation skills.
  10. The decision of the judges shall be final and binding.
  11. Any form of misconduct or plagiarism will result in immediate disqualification.
- 12.E - Certificates will be issued to all participants.

## EVALUATION CRITERIA

1. Technical Content and Subject Knowledge
2. Originality and Innovation
3. Methodology and Analysis
4. Presentation Skills
5. Quality and Clarity of PowerPoint Slides
6. Response to Questions (Q&A Session)
7. Time Management



## WORKSHOP

(IN COLLABRATION WITH RADIANT GLOBAL TECHNOLOGY)



### Lean & Retail Driven Production Planning in Modern Supply Chain

#### DESCRIPTION

This workshop examines retail planning as a key driver of production systems, focusing on how retail demand influences production planning, inventory control, and supply chain flow. It covers Production Engineering fundamentals such as lean manufacturing, pull-based systems, and PPC, and explains the translation of demand into production schedules, capacity planning, and inventory decisions. The session highlights challenges like demand variability and lead-time reduction, introduces lean tools such as JIT and Kanban, and uses practical examples to show how customer demand directly governs manufacturing operations.



27/02/2026



1:30 PM to 4:30 PM



D BLOCK - Conference hall

## REQUIREMENT

A basic understanding of production systems, manufacturing processes, and supply chain flow.

Familiarity with Production Planning and Control (PPC) concepts such as demand forecasting, scheduling, and inventory control.

Interest in lean manufacturing principles including pull systems, Just-In-Time, Kanban, and waste reduction.

Willingness to engage in analytical discussions related to retail demand variability and its impact on manufacturing operations.

## OUTCOMES

By the end of this workshop, participants will understand how retail demand drives production planning and supply chain decisions in manufacturing systems. The session enables students to relate retail demand to master production scheduling, capacity planning, and inventory control, while addressing issues such as demand variability, overproduction, stock-outs, and lead-time reduction.

Participants will also be able to connect lean manufacturing tools—including pull systems, Just-In-Time, and Kanban to retail-linked production environments and recognise the role of data-driven planning in synchronising retail demand with shop-floor operations.



## CAD COMBAT

### EVENT DESCRIPTION

The CAD Combat is a technical design competition aimed at evaluating participants' proficiency in computer-aided design, part modeling, and mechanism animation. The event challenges students to apply their engineering knowledge, creativity, and time management skills in a simulated industrial design environment. Conducted in two competitive rounds within a fixed time duration, it offers hands-on exposure to real-world CAD applications commonly used in manufacturing, product development, and automation industries.



**28/02/2026**



**9:30 AM to 12:30 PM**



**Y BLOCK - 3<sup>rd</sup> FLOOR - CAD CAM  
LAB**



**INDIVIDUAL**

The competition focuses on enhancing skills in mechanism animation and motion simulation, enabling participants to visualize mechanical movements effectively. It encourages accurate and efficient design under time constraints, reflecting industry level project conditions. The event also strengthens problem solving and design thinking abilities through practical modeling and assembly tasks while bridging the gap between theoretical concepts and industrial practice. Participants' technical proficiency and creativity in designing, assembling, and animating mechanical systems are key aspects of evaluation.

**NOTE:**

Participants will be provided with systems with default Creo parametric software installed.

Participants interested in modelling software other than Creo should intimate the convenor at least 10 days prior and are required to bring their own laptop.



### ROUND 1 – PART MODELING

In Round 1, participants will be provided with a model or an assembly concept that is divided into individual components. The task is to create accurate 3D models of the given parts using CAD software within a time limit of 1 hour.

### RULES

1. Correct dimensions and geometry must be maintained
2. Proper use of modeling features is required
3. Appropriate constraints and references should be applied

### EVALUATION CRITERIA

1. Accuracy of part modeling
2. Proper application of modeling features
3. Minimal and optimized use of features (e.g., extrude, revolve)
4. Time management and overall efficiency

Participants who successfully design the maximum number of accurate components within the given time limit will qualify for Round 2.

### ROUND 2 – MECHANISM ASSEMBLY & ANIMATION

In Round 2, qualified participants will be provided with a complete set of components or a predefined assembly. The task is to create a working animated mechanism that clearly demonstrates the motion, functionality, and working principle of the given system.



## AUTOQUEST

### EVENT DESCRIPTION

The Autonomous Parking Challenge is a robotics competition designed to test participants' skills in autonomous navigation, path planning, and precision parking. The event simulates real-world parking lot scenarios, challenging teams to develop intelligent robotic systems capable of identifying parking spaces and parking accurately without human intervention. This event provides participants with hands-on experience in autonomous systems, sensor integration, and real-time decision-making, making it an exciting and challenging platform for innovation in robotics and automation.



**28/02/2026**



**9:00 AM – 12:30 PM**



**G 301**



**Team of 2 to 3**

## ROUND 1 – AUTONOMOUS NAVIGATION AND PARKING

The arena simulates a real-world parking lot environment and includes clearly marked lanes, parking slots, and entry points. Once the task begins, the robot must independently perform path planning and navigation without external intervention.

The arena will contain both static and dynamic obstacles. The robot is required to identify an available parking slot and park within it with proper alignment and positional accuracy.

## ROUND 2 – PRECISION AUTONOMOUS PARKING

In Round 2, participants must program their robots to autonomously park in predefined parking slots. The arena will feature parking slots of varying sizes, with the available parking space determining the difficulty level of the task.

Smaller parking slots require higher precision and will carry higher scores, while larger parking slots are easier to navigate and will carry lower scores. The robot must correctly align itself and park completely within the designated slot.

### EVENT RULES AND GUIDELINES

1. The robot must operate fully autonomously throughout the event.
2. Manual control, remote operation, or any form of external assistance is strictly prohibited.
3. The robot must comply with the specified dimension and weight limits.
4. The robot must operate safely and avoid collisions at all times.
5. Scores will be reduced for collisions and incomplete or partial parking.
6. Any form of human intervention after the start of the task will result in penalties and corresponding score reductions.



## STICK IT ! STRUCTURE IT!

### EVENT DESCRIPTION

Inspired by sustainable engineering practices, this event challenges participants to design and fabricate a miniature truss-based simply supported structure using renewable materials. Teams must construct a beam or bridge model using wooden sticks, adhesive, elastic thread, and basic tools, supported at both ends and capable of carrying maximum load at mid-span. The minimum span will be announced on the event day. The structure must clearly demonstrate truss action through triangular arrangements for effective load distribution and stability. Loads will be applied incrementally at the center until failure to evaluate strength, stiffness, material efficiency, and overall design, promoting sustainable innovation aligned with SDG 12.



**28/02/2026**



**1:30 PM to 4:30 PM**



**Y 201**



**Team of 2 to 4**

## SCORING CRITERIA

- **Maximum Load Capacity:** The maximum central point load that the simply supported beam can withstand before structural failure. Higher load-bearing capacity will receive higher scores.
- **Time to Failure:** The duration for which the structure can sustain the applied central load before failure occurs. A longer time to failure indicates better structural stability and load resistance and will be awarded higher scores.
- **Creative and Efficient Design:** Evaluation will be based on effective load distribution, structural form, creativity, and optimal use of materials with minimal complexity.
- **Material Consumption:** Scores will be awarded for achieving higher load capacity using the least amount of material, reflecting a high strength-to-weight ratio.

## RULES AND EVENT GUIDELINES

- All required materials (sticks, glue, cutters) will be provided by the organizers.
- Stick usage must not exceed the announced limit.
- Participants must complete the truss within the allotted time.
- The use of mobile phones and electronic gadgets is strictly prohibited.
- Participants may bring basic tools such as rulers and markers; however, sticks and glue are not permitted.
- The truss must be self-supporting and must adhere to the specified dimensions.
- The judges' decisions shall be final and binding.

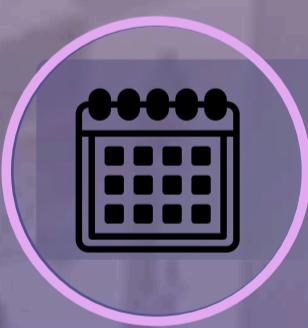


# PRODOTHON 26- EVENTS

## LADDER RUSH

### EVENT DESCRIPTION

This event adds a creative and engaging dimension to the traditional Snakes and Ladders game by integrating engineering knowledge, teamwork, and quick decision-making. Each team comprises two participants, and the game commences only when a team rolls a one on the dice. Teams are permitted to advance on the board only after correctly answering the assigned question. The event is conducted within a fixed time limit, and winners are determined based on the highest board position achieved within the allotted duration. Depending on the number of participants, the competition may be organized across multiple rounds. By combining elements of chance, knowledge, and strategy, the event offers an exciting and interactive experience. Its objective is to promote active participation, enhance camaraderie within the engineering community, and reinforce fundamental concepts in a fun and relaxed setting.



**28/02/2026**



**1:30 PM to 4:30 PM**



**G 301**



**Team of 2**

## RULES AND EVENT GUIDELINES

- Each team shall consist of two members.
- The game shall commence only after a team rolls a one (1) on the dice.
- Within each team, one member shall roll the dice, while the other shall move the token on the board.
- A team shall be permitted to move on the board only upon answering a question correctly.
- Team members must answer questions alternately one member will answer the first question, the other the next, and this sequence shall continue throughout the game.
- Each question must be answered within 5 seconds.
- If a team fails to answer within the allotted time or answers incorrectly, the question shall not be repeated.
- In such cases, the same question shall not be carried forward, and a new question shall be posed to the next team.
- The event is time-bound, with each round lasting 20 minutes.
- Five teams shall participate in the first round.
- The winning teams of the first round shall advance to the second round, where all first-round winners will compete.
- The final winner shall be determined based on the board position achieved within the allotted time.
- The game shall be conducted in multiple rounds, depending on the total number of participating teams.



## **CONTACT US**



**Lakshman Raghav-9843306391  
Balaji C-8838892817**



**PSG College of Technology,  
Avinashi Rd., Peelamedu**



**prodothon@psgtech.ac.in**