



Chandigarh College of Engineering and Technology (Degree Wing)

Date and Time: 10 April, 2026 to 14 April, 2026

1. Executive Summary

The Roboknox club successfully participated in APOGEE 2026, the international technical festival hosted at the BITS Pilani campus under the theme "Under Steel Skies". The festival provided a highly competitive platform, exhibiting over 550 projects across 17 different scientific and engineering categories. The delegation engaged in a comprehensive series of hardware, embedded systems, and interdisciplinary challenges, securing podium finishes in key strategic events.

2. Delegation Roster

A team of 15 students represented the Roboknox club at the festival. The participating members:

- Advay Gandhi
- Drishya Singla
- Eknoor Kaur
- Rishabh
- Varun Goel
- Amritjot Singh
- Sahibjot Singh
- Sahibjit Singh Sandhu
- Sahibjot Singh Bhamra
- Aashish Atwal
- Sahil Patel
- Lakshya Bansal
- Gurkirat Singh
- Abhijit Singh
- Deepanshu Bhardwaj

3. Technical Event Participation

The club demonstrated its engineering capabilities by actively competing in the following technical events:

- **Robosoccer:** The team successfully progressed through the tournament brackets to reach the Quarter-finals.
- **Robowars:** The team participated in friendly matches to test their builds. The official competition featured matches between remote-controlled robots divided into 8kg and 15kg weight categories.
- **Micromouse:** Students competed in this autonomous navigation challenge. The objective



was to design and program autonomous robots capable of navigating the quickest route to the center.

- **Analog Electronics:** The team engaged in a rigorous electronics design challenge. This event required students to complete simulation rounds on LtSpice/Cadence before physically assembling their designs on breadboards in the Analog Electronics lab.

4. Workshops and Exhibitions

To broaden their technical exposure, members of the delegation attended several specialized workshops and exhibits:

- **3D Printing Workshop:** Provided hands-on experience with modern additive manufacturing techniques.
- **T-Minus 10:** Explored specialized aerospace topics.
- **Exhibitions:** The team reviewed mechanical and robotics systems at the IRC Rover Demonstration and the Gokart Expo.

5. Non-Technical and Strategic Achievements

In addition to core engineering events, the delegation showcased strong analytical and problem-solving skills in various interdisciplinary competitions:

- **Moneyball Auction:** The team successfully secured the position of **1st Runner Up**.
- **Riot Story:** The team achieved the position of **1st Runner Up** in this scenario-based event.
- **Lab Lockdown:** The team successfully participated in this escape room-style event, which involved solving puzzles placed across a room to find a way out.
- **Additional Participation:** Members also actively engaged in the Mystery Box, Tower Toss, Bits Got Latent, Night Watch Astro club, F1 Quiz, Scavenger Hunt, and Room of Wonders events.



6. Keynote Sessions and Industry Exposure

The festival featured several notable guest speakers, providing valuable industry insights to the attendees:



- **Aerospace:** NASA Astronaut Anil Menon delivered a talk sharing his experience in space, drawing on his background as a US Air Force lieutenant colonel and emergency medicine physician.
- **Technology and Finance:** Additional perspectives were shared by prominent professionals including Nidhi Bansal, Director of the Directorate of Technology Fund at DRDO, and Tirthankar Patnaik, Chief Economist at the National Stock Exchange of India.

7. Conclusion

The participation in APOGEE 2026 was highly productive for the Roboknox club. The members gained practical experience in autonomous robotics, analog circuit design, and strategic resource management. The exposure to advanced technologies and industry leaders will significantly benefit the team's upcoming hardware development projects and embedded system designs.