



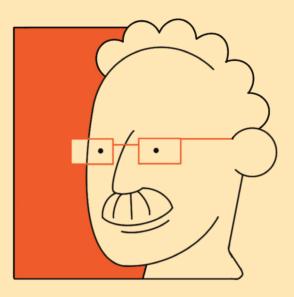
The Course on Wheels (CoW) is an innovative learning program introduced by the Department of Chemical Engineering at IIT Bombay to help students connect classroom concepts with real-world industrial applications. Launched in the 2016-17 academic year, CoW has been running successfully for over seven years, offering students first-hand exposure to various sectors of the chemical industry. Unlike traditional industrial visits, CoW is designed to be highly immersive and academically rigorous, with faculty members actively engaging with students through lectures, discussions, and structured coursework during the trip. The program aims to bridge the gap between academia and industry by providing direct insight into large-scale chemical operations.

Over the period of three weeks, students travel nearly 2000 km across India's Western Chemical Belt, visiting industries in oil and gas, power, fertilizers, pharmaceuticals, agrochemicals, and more. To ensure a structured learning experience, students undergo training sessions before the trip, preparing them to engage effectively during site visits. At each industrial site, students attend expert briefings, observe complex processes and machinery, and interact with practicing engineers. To successfully complete the course, students must submit detailed company reports, take an exam, and work on a simulation project based on their experiences.

Insight interviewed Prof. Sanjay Mahajani, the professor in charge of the Course on Wheels initiative. Additionally, Insight gathered reviews about the course from students who had taken it in the previous iterations.

## The Idea Behind Course on Wheels

Traditional courses on chemical processes often focused on descriptive content, which might not necessarily delve into the nuances involved in practical implementation. An actual chemical operation extends much more beyond chemical engineering theory, bringing in aspects like shop-floor management, reliability, inspection, safety control among others. On these lines, CoW aims to provide students with a holistic perspective on the technical aspects of chemical engineering, while also offering insight into the exciting challenges faced by professionals in the field.



Prof. Sanjay Mahajani, sharing his perspective on the origins of this program, said:

"About 15 years ago, I was teaching a course on chemical processes. At that time, I realized that the course was very theoretical and descriptive, lacking a practical aspect. Classroom learning is valuable. but unless students see applications in real life, they don't fully appreciate the subject. Although industrial tours had been conducted in the past, they only provided a glimpse of the chemical industry and lacked the depth of learning we aimed for. We wanted to focus on both immersion and meaningful

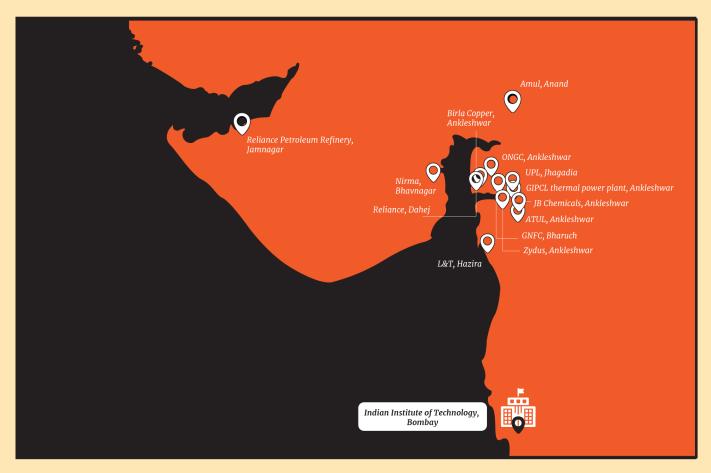
engagement, thus we designed the program from scratch and ensured active faculty participation."

"However, over time, another purpose evolved. Despite the many resources available on campus, students may often find themselves in a closed circle, disconnected from what's happening outside. Even though they engage in various positions of responsibility (PoRs) and activities, we needed something to ensure their dedicated engagement in core learning."

Today, the program has successfully integrated into the department's academic framework, allowing students to gain a clearer perspective on industry, making their academic journey more meaningful and direction-oriented.

# The 2024 Edition:

The 2024-25 edition of Course on Wheels (CoW) kicked off on 2nd December. The trip itinerary included a visit to the following facilities:



The above planned itinerary was designed to cover various aspects spanning the chemical industry landscape. The program covered equipment and operations, including mass transfer (distillation, absorption, extraction), heat transfer (heat exchangers, evaporators), process control via DCS (distributed control systems), power plants (turbines, generators, boilers), and diverse reactor types (catalytic, fluidized beds, stirred tanks). The course aimed to cover different sub-fields of chemical engineering such as petrochemicals (e.g., ethylene oxide, polyethylene), fertilizers (e.g., ammonia, urea), agrochemicals (e.g., mancozeb), inorganics (e.g., soda ash, chlorine), and specialty products (e.g., dyes, APIs). The experience also included technocommercial discussions with practicing engineers and managers, and a session with first-generation entrepreneurs in the chemical sector.

## **Implementation and Logistics**

The successful execution of the Course on Wheels (CoW) program relies on meticulous planning, dedicated faculty involvement, and sustainable funding strategies. Prof. Sanjay Mahajani outlined the key logistical and financial aspects that ensure CoW's continued success:

## **Faculty and TA Involvement**

Implementing a month-long intensive program like CoW demands significant commitment from faculty members and teaching assistants (TAs).

"Faculty commitment for a month is very tough. Many of my colleagues have their own teaching and research responsibilities, making it challenging to dedicate the necessary time.." - said Prof Mahajani. Dedicated faculty members such as Prof. Madhu Vinjamur, Prof. Rahul Nabar, and Prof. Vinay Juvekar have consistently supported the program over the years. PhD students working as TA's for this course have also played a crucial role, offering flexibility and direct involvement. Both the TAs and technical staff are required to be proficient, enthusiastic, and capable of managing the program's dynamic nature.

## **Funding and Financial Management**

Financial sustainability has been the primary challenge for CoW. Offering more perspective on this, Prof. Mahajani said:

"In the first year, CoW was entirely free, funded by the institute. However, as the program grew, it became necessary to introduce fees to cover expenses like accommodation, travel, and food. To alleviate the financial burden on students, we started seeking industry sponsorships, which significantly reduced the costs."

Over the past few years, securing sponsorships through strong industry contacts has allowed students to pay minimal fees, around 10-15k INR, compared to the initial years when the institute bore most expenses. Industry partners view their support as part of their Corporate Social Responsibility (CSR) initiatives, benefiting both the industry and the students.



## **Students' Perspectives on CoW:**

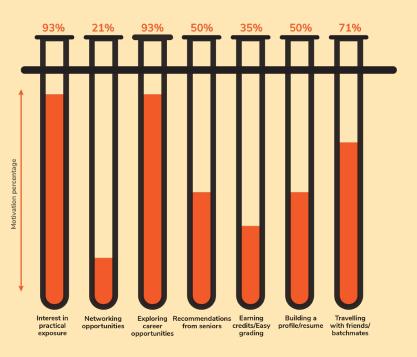
### Motivation, Learning, and Challenges

Insight conducted a survey among students who took part in the programme in the last 2 years, which was filled by 14 students. Following are some of the key insights derived from these responses.

## **Motivation to Participate**

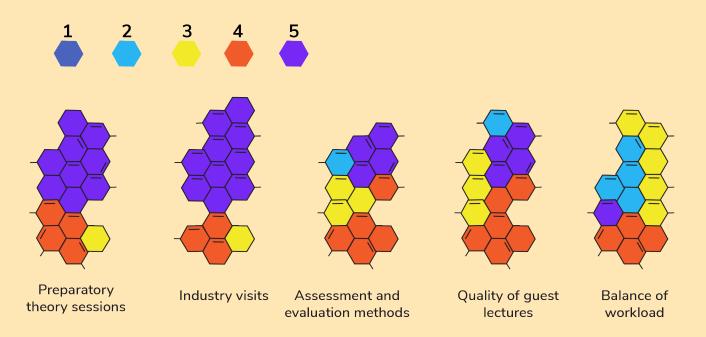
Practical exposure and exploring chemical opportunities in chemical engineering emerged as the most significant reason for students to join CoW. Other popular motivating factors included traveling with friends or batchmates and building a profile/resume.

One responder shared, "I wanted to understand how theoretical principles translate into real-world applications, and CoW seemed like the perfect platform for that."



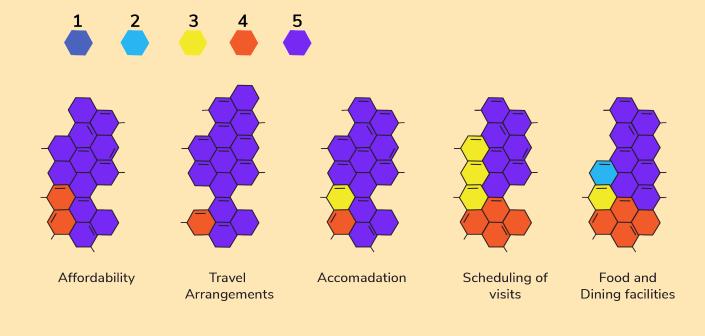
## **Learning and Academic Experience**

Students liked the academic structure of CoW, finding the industry visits and preparatory theory sessions particularly useful. While most found the lectures and quizzes to be helpful, some believed the assessment methods and workload could be improved.



The students widely appreciated the affordability and logistical arrangements of the course. They also highly praised the

travel, accommodation, and food services for ensuring their comfort and making the intense schedule manageable.



## **Most Rewarding Experiences**

When asked about the most rewarding aspects of the course, students highlighted the exposure to cutting-edge industrial processes and the opportunity to visit world-class facilities. Many found the visit to Reliance's Jamnagar Refinery particularly impactful, with one participant describing it as "an eye-opener to the scale and sophistication of operations in the chemical industry." Another student noted, "The multiday visit to Reliance Petroleum helped me truly appreciate the scale of petrochemical manufacturing and its global significance."

In addition to technical learning, several respondents cherished the bonds they formed with peers during the trip. Traveling together and engaging in discussions after each visit helped foster a sense of camaraderie, making the experience both professionally and personally enriching.

## **Pitfalls and Challenges**

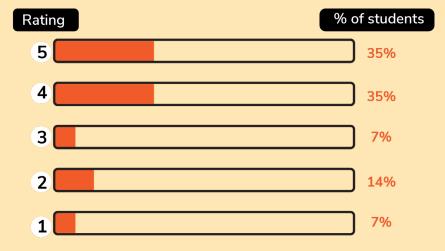
The demanding schedule of CoW presented significant challenges for participants. Many described the course as physically and mentally exhausting, with little time to rest or recover. A responder remarked, "The workload can be hectic with tight deadlines." Another noted, "It's busy from the start to the end of the day, and it doesn't let you rest."

Some students recommended including weekly rest days to address the issue of

fatigue, as the packed schedule often led to burnout. Despite these challenges, others reflected positively on the experience, noting how the intensity pushed them out of their comfort zones and helped them grow. One student shared, "Getting used to the packed schedule was difficult at first, but later we amazed ourselves by how hard we worked. It got us out of our comfort zones."

## **The Core Connection**

For many, CoW strengthened their interest in core chemical engineering by providing a clearer understanding of industrial practices and career possibilities. Several participants shared how the course clarified the scope and challenges of working in the chemical industry. However, some students felt the course did not drastically change their career outlook, though they still valued the exposure and experience it provided.



Adding to this, one participant reflected, "The course didn't just teach me about industry—it made me think differently about what I want from my career and the skills I need to develop."

## **Professor's Perspective:**

Insight asked Prof. Mahajani to share the common feedback received and how it influenced students' career choices.

"Learning new technical aspects is not the primary takeaway. Students describe the experience as eye-opening, helping them gain a broader perspective that benefits them in other courses as well. The course is designed to shift perspectives, and many students find that it clears up confusion they previously had.

In terms of career choices, the overall landscape is increasingly interdisciplinary. While I don't believe CoW alone determines their career paths, it certainly plays a role. If we want more students to get interested in core chemical engineering, we need to do more than what is currently happening, to spark their interest." Furthermore, while reviewing the responses to the survey floated among students who had previously taken the course, we found that some students felt overwhelmed by the course's workload and travelling component. We asked Prof. Mahajani for his thoughts on this, to which he responded:

"As the duration of the journey is only one month, we are bound to keep it slightly hectic. For students, a lot depends on their mindset. I am glad that, physically, they manage well. However, I do agree that, mentally, it can be challenging. Students are not used to such an intense influx of information—industry visits, reports, and quizzes—all within a month. To deal with this, earlier, we used to allocate one free day every week, but it turned out to be economically infeasible." Even though the trips were extensive and some days became tiring, students gave a largely positive feedback to the overall experience, through the survey. Sharing his observations on how the program has impacted students, Prof. Mahajani said:

The same student in a classroom and the Course on Wheels (CoW) program shows a significant difference in their enthusiasm for learning and overall engagement. I see that as a success. Initially, when I started, I thought it would be the first and last time, but every year, students keep coming back. Even if the benefits are not immediately apparent, in the long run, it has proven to be a successful initiative."

CoW has been a rewarding experience for professors as well. It has also brought recognition to the department, with officials from other universities reaching out to Prof. Mahajani after being inspired by the initiative. Elaborating on this perspective, he said:

"From the teachers' point of view, they say they enjoy interacting with students. The questions students ask and their responses make the experience fulfilling for teachers as well. Even for me, every time I visit the same company, I learn something new. Even faculty members do not get frequent opportunities to visit industries, and I did not expect how valuable this exposure would be. This experience has also enriched my teaching.

When I shared details with the University of Stuttgart in Germany, a professor was interested enough to visit and understand the program firsthand. Similarly, BITS Dubai Campus approached me, and I gave them an online presentation on how we run the course. Overall, it is gratifying to see the initiative gaining recognition."

## Conclusion

The Course on Wheels (CoW) program has emerged as a revitalizing force for aspiring chemical engineers, bridging the gap between theoretical learning and realworld industrial applications. By immersing students in large-scale operations, CoW enhances their technical understanding and fosters a renewed appreciation for core engineering disciplines. While the program presents challenges such as an intense schedule, extensive travel, and

logistical hurdles, its impact is undeniable. The first hand exposure to industry processes, coupled with faculty guidance and structured coursework, equips students with valuable insights that extend beyond academics. Despite the demanding nature of the program, the overwhelmingly positive feedback highlights its success in inspiring students and strengthening their connection to core chemical engineering, ensuring the discipline remains vibrant and relevant.



IIT Bombay participated in the 7th edition of the Inter IIT Cultural meet that took place between the 26th to 29th December in IIT Patna. One of the contingent leaders, Sarthak Saxena, informed us that the contingent is set to clinch the overall cup for the third time ever, the last being in 2018. The overall standings have now been announced, and IIT Bombay has secured the first position, leading by 276.5 points. Through the article, we walk through the journey of the contingent and the preparation of the genres that led to this stellar performance.

The position of contingent leader (CL) is required for all external competitions that IIT Bombay students participate in. The CLs for Inter IIT Cult Meets are nominated by the current Institute Cultural Council (ICC) after due groundworks and interviews, and this year, the responsibility fell upon Aryan Shah and Sarthak Saxena who were selected in September. In our interview with Sarthak, he told us that having been Cultural Councillors in their respective hostel councils for the previous year, they had sufficient experience in the domain to carry out their duties. "We hadn't gotten gold (in overall standings) in the past 6 years, so that was the goal this time," he added. CLs ensured that each genre's selections and practices happened in a timely manner, all the while making arrangements for food, travel, lodging, and registration for the competition for the entire contingent.

Genre-specific decisions were made by Genre Captains who are experienced and active seniors in that cultural event. After taking auditions and forming a team, the genre captains ensure that their team is well prepared for the event and that the budget is efficiently utilised for this purpose. According to the CL and Comedic Arts Genre Captain, auditions were held more fairly than last year, and even students from last year's Inter IIT contingent had to audition again. Furthermore, some students who were not taking practice seriously were removed from the team just a few days before the event. We ensured that only the people who would win gold for us went [to Patna]. I have noticed that sometimes people go to Inter IIT for travelling and sightseeing, and don't practice. Thus, we were stricter with the screening process."

- Sarthak, Contingent Leader



The months of November and December were bustling with the *#thegrindneverstops* mentality. Practices were often scheduled at night so as not to clash with the students' classes, and they were paused during mid-semester/end-semester exams. Alums and seniors of the club were also helpful in giving feedback about each genre's teams, further refining the contingent's preparation. "We got sewing machines, as fashion design was also introduced (for this year's Inter IIT). Our team sewed their own dresses for the competition," said one of the CLs. There were fortnightly review meets as well to track the contingent's preparation.

The contingent leaders and genre captains ensured all contingent members traveled safely and comfortably to Patna and had access to food and lodging at the host IIT. Train berths were ensured for all students, and adequate space was provided to carry their paraphernalia during the journey. The contingent reached the host IIT 2 days in advance to give contingent members enough time to adapt to the weather conditions in Patna. This was done keeping in mind the experience at the inter IIT cult meet 6.0 last year, where many students had reached Kharagpur on the day of the competitions and fallen sick.

When asked about the stay at IIT Patna, the CL told us that it had been his best Inter-IIT experience yet:



"The hospitality and food were of top quality, and the management ensured that the judgments were unbiased. There were fewer delays in the competitions, and for the first time, an inter-IIT cult meet had concerts with performances by The Yellow Diary and Nakash Aziz on the final day of the meet. All contingent members also received t-shirts, cups, hoodies, and welcome kits. I believe that newer IITs should be given an opportunity to host. Even though many students were apprehensive about inter IIT being held at Patna and having to travel to Bihar, their management was the best I have seen yet. The competitions continued even after the demise of Dr. Manmohan Singh on 26 December 2024; the Director of IIT Patna decided that there would be mourning before events and no cheering was allowed during competitions."

## **Contentions raised during the competition**

Usually, during Inter-IIT cult meets, contentions are raised and resolved during Contingent Leaders' (CL) meets before results are announced. The CLs and GCs of all IITs look out for foul play by other IITs to raise contentions against them in order to get penalties awarded to them and defend contentions against their own contingents during these meets.

Our interview with the Comedic Arts Genre Captain shed more light on this:

\*CLs get genre captains to defend genre-specific points. These meets started at 10 pm and continued till 5-6 am in the morning - so I only managed to get a total of 7 hours of sleep in those 4 days of Inter IIT."

This year, tentative results were announced before contentions were resolved completely. The CL told us that all contentions couldn't be resolved completely during the meet due to the large number of competitions this year, which led to delays in finalizing the inter IIT cult meet results. It was announced that IIT Bombay was the winner of the overall cup, but contentions

## **Moving Forward**

To do even better next year, a few things can be improved according to our interviewees. Selecting the team earlier and starting practices sooner will give more time to prepare. Building good relationships with newer IITs, like this year, can also help during important votings regarding any changes to be made in the rulebook before Inter IIT. Keeping proper records, focusing on genres have to be defended before the results can be frozen. The CL also mentioned that the culture of General Championships (GCs) within the institute is much more competitive and intense and that defending contentions at Inter-IIT was comparatively easier.

The contingent also ensured that the performances of competing IITs were videographed as proof for raising contentions. The CL also mentioned that some other IITs, such as IIT Kharagpur had brought a team of people specifically for this task, but we couldn't record as extensively because of our smaller team size.

When asked about learnings from other participating IITs, the genre captain for photography, told us that teams from other IITs see more shared responsibility as compared to our teams, where GCs shoulder more workload. He also suggested that people performing well in institute-level competitions should be given a direct pass into the inter-IIT team.



where we have had weaker performances, and making sure all arrangements for the contingent are smooth are important. Having approachable and friendly Contingent Leaders, and regular feedback sessions help keep everyone motivated and finetune the team's performances. We hope this victory inspires more people to participate in culturals and take the momentum forward.

# HOSTEL COUNCILS AND STUDENT VOICES THE NEED FOR (LARITY AND ACCOUNTABILITY

## Introduction

Student life at IIT Bombay is deeply influenced by one's allotted hostels. Every hostel is unique in its own sense, from structure and room sizes to culture and sentiment. While these differences have enriched a thriving competitive spirit between the hostels, they have also manifested some undesirable consequences of incongruity.

There is a lot of ambiguity in how hostel funds are allocated to the different verticals. Very often, hostel residents have little role to play in the amount of money verticals (sports, cultural, tech) get from the hostel amenities fund. There is also little transparency regarding where the money goes.



A notable problem is that council budget estimates are not made public despite undergoing multiple layers of approval. On the condition of anonymity, a hostel council member justified this by saying, "If residents see the allocated budget and something is not there, then the people will be after the hostel council, irrespective of delay from other parties." Insight however believes that there should be, more communication from the hostel council about what allocations have been made to the budget for that semester

This article aims to highlight the discrepancies between the workings of the various hostel councils with a few case studies. These examples are just a few reflections of the broader issue of a lack of transparency observed in the affairs of the hostel councils. In a lot of these, it was evident that there is a lack of clarity on how much say residents have in the decisions of the hostel councils. More concerningly, the inconsistency between the decisions of these councils suggests that there is a lack of coherence in their reasoning.

We investigate this by looking at gala dinners this past autumn semester.

## **The Great Galas**

The Gala dinner is an event that takes place once every semester and is characterised by decorations of fountains and statues, as well as a meal of many courses, the fire paan being the staple making it to Instagram stories. It costs ~10 times more than the average dinner, and historically, a lot of residents from each hostel don't want to pay that price. Instead, they want the SMA (Semester Mess Advance) that would go into the gala dinner funds, to be refunded to them.

Knowing this, some hostel councils do not allow "opting out" of the gala. They reason this with the price of gala per person becoming unaffordable if more than a certain fraction of residents decide to opt out.

In the 2024 autumn semester, this is how galas panned out in the following hostels:



## **Hostel 2, 5** Opt-out was not allowed

### Hostel 11, 17, 18

Gala has not yet taken place

#### Hostel 6

A resident mentioned: "Opt out was allowed but it was really hard to get. You had to be off campus on the day of the gala to get it. Some people from our hostel made the excuse of going home for Chhath Puja if I remember correctly to get the opt-out"

### Hostel 3

Opt-out was only allowed after a lot of requests and complaints were made to the warden. The initial cost was 700 Rs per head, but the gala was cancelled later due to a major fraction of residents opting out. Residents of H3 also informed Insight that during the H3 Mid-Term GBM, it was declared that an opt-out form would be released. Finally, opt-out was allowed only for travel and medical reasons.

### Hostel 10

The gala took place without any extra charge, but it was conducted in December when a lot of undergraduate students were not present.

#### **Hostel 9**

Gala dinner intimation form was shared in the afternoon of 30 Oct. and the deadline for the opt-out form was noon of the next day. However, many people complained that the deadline was very short, and it was shared on the day of Diwali when many people were busy with the festivities and/or travelling. Subsequently, the gala dinner was postponed, and some people demanded the opt-out form again. There was no official communication about the status of the gala dinner henceforth. Hostel 9 also faced significant hygiene problems this academic year, and the residents were assured that the fines to the caterer would be used to negotiate for a lower price for the Gala. Insight however confirmed with a member of the council that no fine has been levied yet. As a substitute, a special lunch was organized at a later date, with no extra charge visible.



In the new contract with the caterers, the daily charge for food (and subsequently the mess opt-out) has been increased in Hostels 9, 10, 12, 13 and 14, however, the Gala dinner has been made free. An ISHA informed us that in the new mess tenders, the daily mess charges have been hiked by Rs. 7 - of which Rs. 2 accounts for inflation indexing, and the remaining Rs. 5 will be used to make Gala dinners, one each semester, free of cost.

Insight spoke to the mess councillor of Hostel 3 and Hostel 15 to get their perspective on the problem. They insisted that the gala dinner is an important event for a hostel as it helps instil hostel sentiments in the residents, which is why it is important to conduct it. The Hostel 15 Mess Councillor mentioned that it's a tradition, and residents

#### Hostel 15

After the announcement of the gala, a lot of people wanted to opt-out. To accommodate this, the mess council opened a Google form to gauge opinions on why the residents did not want the gala. Interestingly, this form was closed after receiving only 150 responses, which were then considered for the optout. According to the mess council, this was because they didn't want to drive up the cost of the gala (Rs 490) per person, and negotiating 150 opt-outs with the caterers was very tough.

After the gala, though, the mess feedback group was filled with messages appreciating the food and arrangements.

#### Hostel 12, 13, 14

The last gala dinner took place at the end of December and opt-out was allowed.

tend to complain if there's no gala too. The problem Insight wants to highlight is not the existence of Gala Dinners but rather the discrepancy and variability in the functioning of various hostel councils. as exemplified by Galas. Concerns about the cost to the student, the vanity of decorations, and, subsequently, the value for money are raised yearly by many hostel residents on WhatsApp groups. With regards to the cost of decorations, a mess councillor informed us that this is paid for by the hostel council separately and not included in the cost of the Gala dinner. Still. these concerns point to a trend of some students not wanting gala dinners anymore as they feel it is unfair to expect such a hefty amount from them when they don't want to be a part of it.

## Fines in Freshers' Hostels

A common trend towards the end of academic years is that freshers report cases of blanket fines for damages to infrastructure. Recent cases highlight the consequences of the lack of a well-defined fine system with clear policies and how shared responsibility for damages places undue moral and financial burdens on students who may not be at fault.

Insight found that in some room wall defacement issues in Hostel 16, despite the culprit taking full accountability, the other students were offered a disconcerting choice, forcing them to either implicate their roommate entirely or bear an unjust penalty themselves. The management justified this decision with the rationale that "someone has to pay" because the procedure is to repaint the entire room, irrespective of the amount of damage. A similar reasoning was used to justify penalising all the students in Hostel 16 Wings A and B for damages to the elevators.

In a conversation with Insight, one of the ISHAs shared some details about the issue. After a flurry of complaints against the fines, a meeting with the Warden was held, wherein it was made clear that the hefty fines were not just to cover the damages but also to set an example.

This incident is also reminiscent of one in the summer of 2023 when residents of

Hostel 1, whose rooms were marked by wall defacement, were fined Rs 1000 each. Insight spoke to the then Maintenance Councillor of H1, and they verified that the fine was imposed on both the residents of the room, irrespective of the perpetrator. According to them, the Warden of H1 remarked that the defacement and defiling of hostel properties had been noted on such a scale for the first time and that the fine intended to spread the message that property damage was not acceptable in the spirit of hostel life and the onus of maintenance of the property lies on the residents themselves.

However, students in H16 were unable to come to terms with the amounts running into the thousands, which according to them, were unreasonably high. This was especially frustrating for those who complained that they had been fined despite 'no visible damage'.

In both these incidents, the onus of proving their innocence in the damages caused was left to the students, with the reasoning relying on the pushback against CCTVs in the interest of privacy. While we understand the necessity of levying fines when there are damages, and that often there is a lack of clarity as to how to go about levying fines in the most fair manner, these incidents highlight problems in the process.



## All Blame No Game?

While we recognise the responsibility of the administration has fallen short in some places, we must also acknowledge that the students have not put down their best foot in these situations either. People opting out of Galas and then eating out of others' plates is so common that no one even bats an eye anymore. Similarly, while many of the older hostels at IIT Bombay are showing signs of age, students too have been haphazard with the amenities, with notable cases of damage coming up in the freshmen hostels.

The evolution of hostel culture and the lack thereof in the infrastructure have been among the most pressing topics in the student community. Nostalgia and reminiscence have been the foundation of a lot of hostel activities, especially in the 'parent' hostels. As an ISHA commented,

"Gala dinners are not just about the 600 rupees or a fancy menu, they are about upholding and ingraining a certain aspect of culture and values into the hostel life at IITB".

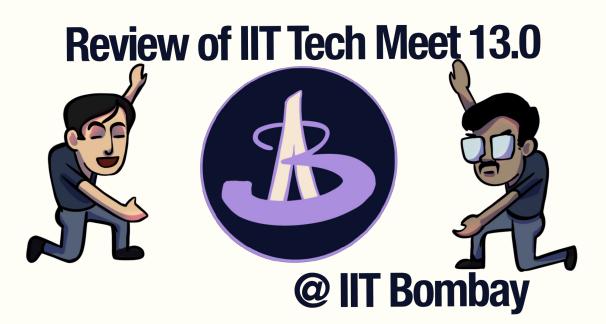
However, recent events point to a growing student sentiment that stands at odds with

this stance. It will be interesting to see how these changes will pan out as we transition from the older parent hostels to the newer hostels that are coming up.

The plot may not be fully lost, though. Insight believes that solutions can be deduced through effective communication and better transparency between the hostel councils and the stakeholders. The ISHA we approached admitted that the system of fines has space for improvement, stating that not levying fines at all is not feasible, but imposing them on all students is not reasonable either. CCTVs are a possible solution, but how the students weigh privacy against false accountability is another question that needs to be probed, and the same has been a matter of discussion for the past two years.

As the hostel infrastructure is due for a massive change with the influx of new buildings, it is essential that we also rethink and rework the way these councils operate to accommodate the needs of students better, while also accounting for changing student attitudes towards legacy events. After all, the essence of forming a hostel council is ensuring student voices are heard and the democratic foundation is maintained.





The Inter IIT Tech Meet 13.0 took place from 11th to 14th December 2024 and was hosted by IIT Bombay. It is a contest between IITs to prove technical prowess, justifying the T in IITs and above all, acting as a platform for students to solve industry-relevant problems from companies using technical skills. This article covers the organisational aspect of Inter IIT Tech along with the preparation and participation aspect of IIT Bombay's contingent based on extensive interviews with the Overall Coordinators, Manas Agrawal and Kushal Agarwal and the Contingent Leaders, Arhaan Ahmed and Aryan Mishra of this Meet.

The Inter IIT Tech Meet 2024 was particularly special, as all 23 IITs united for the first time in its 13th edition, overcoming past administrative hurdles that had led to absences in previous years. This year's winners included IIT Kharagpur, which secured the first position, followed by IIT Bombay and IIT Guwahati. The Closing Ceremony took place in the Convocation Hall on December 14th.

- One of the Overall Coordinators reflected saying,

"I'm incredibly proud of what we have achieved. Organising Inter IIT Tech Meet 13.0 was an honor and a challenge. It's not just about hosting a competition; it's about creating a platform where the brightest minds come together to solve real-world problems."

When asked about this year's Inter IIT result, the CLs said:

"We came overall second this year, which is amazing. There has been a consistent improvement in our overall position second place this year, third place last year, and fourth place the year before that. Both of us had participated in previous years", and this year as well, and we noticed increasing excitement among participants each year. That's definitely something to look forward to."

## Behind the Scenes: Organising the Inter IIT Tech Meet 13.0

### How does the process begin, and how is the baton of organisers passed to another IIT?

The process began back in May–June last year, during the closing board meet of Inter IIT 12.0, hosted by IIT Madras. Convened by the General Secretary of Technical Affairs of the host institute, this meeting marked the formal handover of responsibilities for the next edition of the Tech Meet. When the floor was opened for bids, IIT Bombay was the only institute to step forward to host Inter IIT 13.0. The bidding process involves submitting a detailed proposal, which includes the event dates, competition domains, logistical arrangements, and networking events. The proposal is first evaluated by the DoSA of the bidding IIT and then the General Secretaries of all IITs. \* To learn more about previous year's Inter IIT Tech 12.0 results, refer to our article <u>here</u>.



### How long has the discussion about hosting Inter IIT Tech at IIT Bombay been going on?

The decision for IIT Bombay to host this year's event wasn't spontaneous. It had been in discussion for two to three years within the Institute Technical Council (ITC) particularly after conducting the 7.0 edition. When the new General Secretary took charge this year, the groundwork for this decision had been laid.

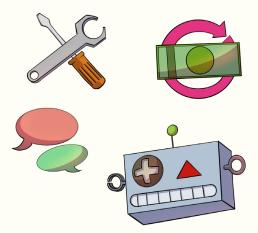
### What does the Organising Team Structure look like?

The organising team formation begins with the selection of two Overall Coordinators (OCs) leading the team and managers overseeing various portfolios. These portfolios included Corporate Relations for the Pan IIT Tech & R&D Expo, Hospitality, Operations, Creatives, Media, and Discord. The OCs explained that to secure Problem Statements (PS) from companies, a dedicated portfolio called Industrial Outreach was established. However, the responsibility for finalising Problem Statements largely rested with the Overall Coordinators due to the need for strict confidentiality.

### What were the different events in the Inter IIT Tech Meet?

The Tech Meet officially began on December 11th with an Opening Ceremony, held in the presence of the Dean SA and the Director of IIT Bombay.

The tech meet comprises various Problem Statements (PS), that fall into four main categories: High-Prep, Mid-Prep, Low-Prep and No-Prep events, depending on their rigour and duration. The problem statements this year revolved around diverse areas such as product development, quantitative finance, consulting, robotics, and more. Along with this, there were also competitions like



the Students' Academic Conference and Engineers' Conclave.

The No Prep challenges require no prior preparation and were conducted offline at the IIT Bombay campus. The No Prep category this year included three challenges in the domains of Mathematics, Astrophysics, and Robotics. While these problems demand less preparatory work, they are just as intense because of the short timeline.

When asked about the preparation for the Tech Meet, the OCs mentioned that it

begins months in advance. During the event, daily presentations are scheduled, where teams showcase their solutions. These presentations are judged by representatives from the companies that provided the PS. Throughout the process, Overall Coordinators maintain strict confidentiality of team identities and IIT affiliations, providing clear guidelines for companies.

### What was the highlight of this year's Tech Meet?

According to the Overall Coordinators, a highlight of this year's meet was the Pan IIT Tech R&D Expo, which went beyond its 10year tradition by inviting tech teams from all IITs, not just IIT Bombay. Hosted at the Old Swimming Pool, it showcased innovations like motorsports cars, drone technology, etc. and offered a platform for networking and collaboration. This year's event saw strong participation from junior team members, sparking technical discussions and problemsolving sessions beyond just competition. With 37 displays, it successfully brought students, professors and representatives from industries together and encouraged collaboration across campuses.

### **Budget and Logistics**

When the OCs were asked about expenditure on problem statements to be put in by IITs, they explained that the meet's budget was sourced primarily from three avenues:

- 1. Registration fees, covered by participating IITs.
- 2. Problem statement sponsorships by companies
- 3. Institute allocated budget via Dean SA.

Expenditures revolved around logistics, including hospitality, ambience, and expo setups.

The OCs also talked about some events that were organised post the three days of rigorous presentations. On 13th December, there was a concert by Dream Note. On 14th December, after the end of the tech board meet and release of results, the Inter IIT closing ceremony happened for the first time post-COVID in the presence of the company officials, Deans, and FacAds, in the convocation hall. After that, a networking dinner in old SAC brought 1600+ attendees from 23 IITs to one place to interact, share knowledge, and create networks for future collaborations.



Similarly, when the contingent leaders were asked about the fund allocations, they said that each team was encouraged to use the best resources and consequently come up with the best solutions. Only a few problem statements that were hardware-oriented required major funding. The rest of the problem statements were software-oriented and required funds for servers, premium versions of softwares, and more.

### What are Contentions and how are they addressed?

A lesser-known aspect of the Tech Meet is contentions—challenges raised by the audience during presentations. Technical contentions, questioning the validity of solutions, are addressed immediately by judges via a tech-contention portal. Non-

Preparation and Performance of the IITB Contingent at Inter IIT Tech Meet 13.0

After a commendable performance by IIT Bombay at the Inter IIT Tech Meet 13.0, Insight interviewed the Contingent Leaders Arhaan Ahmad and Aryan Mishra about the performance, strategies and preparation levels from this edition.

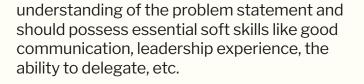
### **Team Selection:**

The team selection for each problem statement starts by selecting the Problem Statement leads. They are responsible for managing their team and making sure their team performs well in that PS. The Contingent Leaders (CLs) release a google form for each PS, inviting applications for team members. To select the PS leads, the CLs consider the Google form responses. The CLs also ask people, who they think would be suited for a particular PS to fill out the Google form.

No assignments or tasks are conducted for selecting the PS leads because of the limited time between the release of the problem statement and the team submission. Hence the CLs tend to prioritise professional/academic experience through projects/internships in dealing with similar problem statements, though they conduct thorough interviews to select the PS leads. The PS leads are expected to have a deep

### **Team Preparation:**

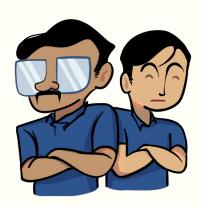
Preparations commence as soon as the team is selected. The CLs start looking for rooms in the academic area and department buildings, where the team can sit and work together. technical contentions, like anonymity breaches or late submissions, are resolved in the 10+ hour Closing Tech Board Meet, where representatives from each IIT debate penalties and try to reach a consensus on fair resolutions.



After the selection of the PS leads, they are responsible for the selection of the rest of the team. This is done by considering the same Google form responses and subsequently conducting interviews. They seek individuals with a solid grasp of the problem and the requisite technical and soft skills.



Students dedicated a significant amount of time, around 3 hours everyday during the semester and even more after that leading up to the Meet.



Before work begins, the PS leads create a timeline with deadlines for the entire team. The CLs ensure that the team adheres to these guidelines for smooth functioning. Moreover, the CLs connect them to alumni and other participants that can provide regular feedback on the solutions.

A final presentation has to be submitted by each team around three to four days before the actual presentation. This is because teams need time to travel to the host location, and these four days are reserved for transit.



The CLs shared their thoughts on this year's preparations:

"We spent significant time refining our pitches. Multiple mock presentations were conducted for each problem statement, and we invited seniors to provide feedback. This helped ensure we were comfortable and well-prepared for our presentations."

#### Role of the GSTA, CM (Contingent Manager) and CLs:

This year's contingent did not have a Contingent Manager. While most logistical requirements were managed by students from the Institute Technical Council, other administrative tasks, such as room bookings and payments, were handled by the GSTA. In addition to overseeing team selection and preparation, CLs attended the final day presentations for each PS and ensured that teams had all necessary resources to perform at their best.

## What strategies did the CLs use to encourage better participation and achieve a better rank?

We asked the CLs in our interviews with them, if they had any strategies to encourage participation and achieve a better rank.

The team selection began early this year, right after the mid-semester exams of the Autumn semester.

The CLs reached out to people who had participated in similar events earlier or had internships in relevant domains, explaining to them how Inter IIT works and encouraging participation. They also organized open houses, both for the entire institute and specific hostels, to clarify the Inter IIT process and address any doubts.

These sessions helped foster a transparent relationship between the contingent leaders and participants, ensuring that students knew whom to approach for queries.

Additionally, five former Inter IIT participants were invited to share their experiences, providing valuable insights to potential participants.

### Did hosting Inter IIT give us any home-field advantage?

When asked whether hosting Inter IIT on campus provided a home-field advantage or disadvantage, the contingent leaders stated that it had little impact. They acknowledged that the organizing team did an excellent job in ensuring fairness and equal opportunities for all participants. The resources provided were the same for every team, and no unfair advantage was given. The only advantage the host team had was the lack of travel, which allowed them to use that time to refine their presentations.



#### Can ITC adopt initiatives to foster a better tech culture within the institute?

According to the contingent leaders, the nature of work in any problem statement closely resembles how tech teams function in competitions—operating in a highpaced environment with strict deadlines. Students with prior tech team experience tend to perform better in the Inter IIT Tech Meet. However, they stressed that such opportunities should not be limited to tech team members. By maintaining the culture of the Inter IIT Tech Meet throughout the year through various contests and initiatives, the institute could foster a more robust technical atmosphere.

#### Why did IIT Kharagpur finish at the top, and what can be learned from them?

The CLs attributed IIT Kharagpur's success to their rich and immaculate tech culture. They went on to mention that participation in Inter IIT is a priority for most students at IIT Kgp and students specifically dedicate time for it. The CLs also highlighted that IIT Bombay has a lot of potential and can perform extremely well, but we can improve the problem solving outlook that we have.

" It's about putting in consistent effort throughout the process. Make sure that you know, you're working towards the goal with 120% of everything you've got till the last day."

We at Insight extend our heartfelt congratulations to both the organising team and the entire IITB contingent for a successful Inter IIT Tech Meet. While the Inter IIT Tech Meet holds great significance, it often doesn't receive the recognition it deserves. However, observing the participants' impactful problem-solving contributions to companies is truly educational.

Securing a second-place finish, after years of steady progress, is a promising sign for the institute's growing tech culture perhaps even paving the way for a Gold in the next edition.



The Inter IIT sports meet is the most awaited sports competition at IITs, where students from 23 IITs compete in 13 sports events, 2 of which (aquatics and water polo) are conducted during the autumn semester. Students compete with high enthusiasm to win the coveted overall general championship. The 57th Inter IIT sports meet was jointly hosted by IIT Kanpur and IIT Indore from Dec 10th to 17th. IIT Bombay made its mark and emerged as the overall champion for the 14th time after 7 years.

To understand IIT Bombay's sporting culture, preparation strategies, and selections, we spoke to various captains and contingent leaders who shared insights into their journey to the championship.

## **Preparation journey** Beginning of the Autumn Semester

The institute has a vibrant sports culture and activities that encourage players of all levels to participate and the opportunity to try out for the team. Through NSO trials, freshers are often given a chance to be part of the inter-IIT team's practice.

Preparation for some sports begins even earlier, with even-semester practice sessions and summer camps. Dhruv, the athletics captain, emphasized the importance of starting practice early, stating,



In athletics, timing is crucial—it's both the measure of performance and a key selection criterion. Summer camp helps combine technical training with fitness preparation. During the competitive season, we focus on recruiting new members and teaching technical details. However, by then, performance is mostly set, and significant improvement is difficult to achieve." Monsoons often pose a challenge, with the gymkhana grounds being closed and limited space available for teams to practice. This academic year, by dedicating slots for different sports in the indoor courts, players could practice regularly and not lose touch.



Srikant, the captain of the hockey team, mentioned that from August to September, they didn't have their field for practice due to the monsoon season, so they practiced alternatively with the cricket team on the indoor court and went to external indoor courts for practices. Once the ground was open, they geared up for 2 practice sessions a day and focused on the coordination of the players.

## **Selection Process**

The selection process for the Inter IIT teams generally involves 3 stages: Precamp trials, Inter IIT Camp trials, and the final Inter IIT selections, with pre camp trials being conducted between September and November, the Inter IIT Camp being held for 2 weeks after the endsems in December which then leads to final team selections.

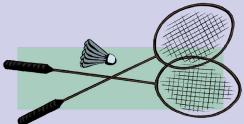
Dinesh, one of the table tennis team players explained, "The pre-camp focuses on regularity and is open to everyone. The main team selection considers performance in round-robin matches within the team, regularity, and the coaches' decisions to select the best players."



## Strategic Improvements

Several teams adapted their strategies based on past performances. For instance:

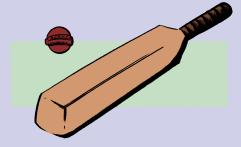




Aadish, the badminton captain, shared, "We emphasized strength training and focused on doubles team coordination, incorporating practice matches with external players every weekend."

Nitish Bhatt, the chess captain, noted, "This year, we strategized for two players to push for wins while others aim for stability or draws."





Ashwin, the cricket captain, highlighted that they focused on building a team of all-rounders, ensuring broader options and reduced dependence on individual players.

Jasmine, the squash captain, shared their challenge of limited experienced players, saying, "We focused on preparing players to compete at a higher level rather than just skill development."





The Inter-IIT camp witnesses teams practicing throughout the day. The contingent leaders and sports council worked to ensure the camp ran smoothly. Tanvi the lawn tennis captain told us, "This year we had regular fitness sessions and did various drills, this helped us when we got to start playing on the court"

Dhritiman, the contingent leader added, "We had regular meetings with the sports captains and introduced intra-contingent fitness sessions. This increased the contingent bonding which increased the support during everyone's matches."

# The Tournament

The tournament ran from 10th to 17th December with the contingent showing their mettle in Indore and Kanpur. Players fought hard in every match and, when off the court, cheered on their fellow Blackcats.

Many moments highlighted true sportsmanship and the spirit of the game.

Samiksha shared that after winning gold in the 100m finals, she sustained an injury on the synthetic track. "Both my knees were bandaged, but my coach and teammates had faith in me and motivated me throughout which helped me win another gold in 200m and bronze in 400m in the next few days."



Squash girls captain, Jasmine recalled their gold medal match "The finals was with IIT Delhi, whom we had lost to for 2 years. Having our coach on the court to guide us made a lot of difference in crucial points."



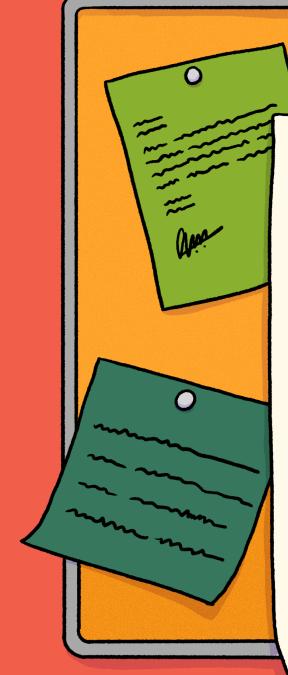
Ashwin, the captain of the cricket team reflected on the high-pressure match against the home team Kanpur. "We were down 2/2 but keeping calm and maintaining the required pace helped us push till the end and win with 9 balls to spare."





Anshu, the girl's basketball team captain mentioned that after every match, the team had a session to discuss mistakes, watch clippings of last year's matches with the same opponent team and strategise for the next match. "Instead of pointing out mistakes and blaming each other, we tried to encourage the other person and cover up the mistake as a team."

Winning the overall general championship has displayed the grit and perseverance of the players and teams. With the cycle of senior players leaving and junior players rising, it is important for the tactics, strategies and team spirit to be passed on. Utkarsh, the contingent leader mentioned, "Workshops, Aavhan, and external tournaments help players be in touch with the sport in the odd sem as well, and it gives a chance to scout new talent also". The sports officer informed us that they plan to have scheduled training in the even semester as well as scout for players through various competitions and general championships. We hope that this General Championship win inspires more people to come forward and play to carry the spirit of the Bombay Blackcats and Bombay Stingrays ahead.



#### **Greetings!**

As one of Insight's new initiatives this year, we bring to you the second edition of the digital newsletter that covers various facets of institute life with a set of 5 articles, created and designed by our team with hard work and consideration. The idea for this newsletter was to bring interesting stories and parts of insti life to paper. This edition explores IITB's commendable performances at the three Inter IIT Meets (Cultural, Sports and Tech) that happened in December including the organizational aspects of the Inter IIT Tech Meet hosted by IIT Bombay. Also covered are articles about the Chemical Engineering Course on Wheels and how various hostel councils and residents can work together to enhance the overall student experience and hostel culture. We hope you enjoy perusing this newsletter as much as we enjoyed creating it.

Feel free to reach out to us with feedback about this edition and suggestions for future ones!

Best regards, Ayush and Ishita Chief Editors, Insight 2024-25

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