

Team Techno: A Passionate Journey in Robotics

Origins and Inspiration:

Team Techno's story began in 2015, fueled by the collective passion of a group of undergraduate students at Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI). Inspired by the burgeoning automation wave of the 4th Industrial Revolution, they envisioned a team dedicated to advancing robotics and pushing the boundaries of innovation. Their dedication and determination culminated in the formation of Team Techno, marking the beginning of a remarkable journey.

From Humble Beginnings to a Thriving Force:

Team Techno started small, with just a handful of enthusiastic students. However, their dedication and collaborative spirit fostered rapid growth. Today, the team boasts a vibrant network of over 30 alumni contributing their expertise from across different continents. Furthermore, over 50 active members are passionately engaged in various technical and non-technical domains, ensuring Team Techno's continued progress.

Technical Expertise and Innovation:

At the heart of Team Techno lies a strong foundation in various technical domains. These include:

- **Electrical Engineering:** This domain focuses on the robots' hardware, encompassing integrated circuits, Arduino boards, ESP32 microcontrollers, and other crucial components. Led by Director Hassan Khan, the electrical team is responsible for the design, selection, and implementation of the robots' electrical systems.
- **Mechanical Engineering:** Spearheaded by Director Anees Shehbaz, this domain delves into the design and manufacturing aspects of the robots. From conceptualizing the robots' structure to meticulously crafting each component, the mechanical team ensures the robots are robust and functional.
- **Autonomy and Robotics Integration:** Led by Director Maham Shehzadi, this domain tackles the complexities of robot control and decision-making. The team focuses on developing efficient path planning algorithms, maze solvers, line-following techniques, and RC car control systems, ultimately enabling the robots to navigate their environments autonomously.

Beyond the Technical: Supporting Infrastructure

Team Techno recognizes the importance of a strong support system beyond the technical realm. The team thrives on the dedication of members contributing to these key non-technical domains:

- **Sponsorship:** Managed by Abdur Rehman (Team Manager), this domain establishes partnerships with companies aligned with Team Techno's goals. The sponsorship team

tailors sponsorship packages to meet the needs of various companies, fostering mutually beneficial collaborations.

- **Marketing:** This domain, led by a dedicated team, focuses on creating engaging social media content and marketing strategies to attract sponsorships and raise public awareness of Team Techno's achievements.
- **Documentation:** Headed by Director Haris Cheema, this domain ensures meticulous documentation of every aspect of the robots. From detailed electrical schematics to comprehensive algorithm explanations and design specifications, the documentation team maintains a valuable knowledge base for future projects and team members.

Showcasing Excellence: A Legacy of Competition Success

Throughout its journey, Team Techno has actively participated in numerous national robotics competitions, consistently demonstrating its prowess. These include prestigious events like:

- IEEE-GIKI Chapter's NEO (National Electronics Olympiad)
- NUST-Islamabad's NERC (National Engineering Robotics Contest)
- UET Peshawar YRT (Youth Robotics Competition)
- Kalam Robo Tech

Team Techno proudly holds the distinction of being the recent winners of the National Electronics Olympiad, a testament to their dedication and innovative spirit.

Setting Sights High: International Ambitions in 2025

Team Techno is taking a bold step towards international recognition by gearing up for participation in two prestigious international competitions in 2025:

- **University Rover Challenge (URC):** Held in the USA, the URC is a premier competition designed to challenge university teams in building rovers capable of navigating the harsh Martian terrain. Participating in the URC will offer Team Techno an invaluable opportunity to:
 - Benchmark their skills against top robotics minds from around the world.
 - Gain valuable experience in competition strategy, rover design optimization, and adapting to simulated Martian environments.
 - Potentially secure recognition and open doors for future collaborations or sponsorships due to a strong performance.
- **European Rover Challenge (ERC):** Taking place in Poland, the ERC is another leading competition for university robotics teams. Similar to the URC, the ERC challenges teams to design and build autonomous rovers capable of overcoming obstacles and performing simulated scientific tasks. Participating in the ERC will allow Team Techno to:
 - Showcase their skills on a European stage, potentially competing against teams from across the continent.
 - Gain recognition and potentially attract new members, sponsors, and research opportunities through a successful showing.

This pursuit of international competition represents a significant milestone in Team Techno's journey. Their dedication to continuous learning, innovation, and collaboration positions them for continued success in the exciting world of robotics.

Executive Council for Tenure 2024-25:

- **Captain:** Ali Ahmed Mir
- **Manager:** Abdur Rehman
- **Technical Lead:** Saud Ahmed
- **Director Mechanical:** Anees Shahbaz
- **Director Electrical:** Hassan Khan
- **Director Autonomy & Robotics Integration:** Maham Shehzadi
- **Director Documentation:** Haris Cheema
- **Executive Member:** M. Ibrahim

Sponsorship packages

Team Techno is proud to offer a range of sponsorship packages, allowing companies to become valued partners in our journey of robotics exploration. These partnerships fuel our passion for innovation while offering significant benefits to our esteemed sponsors.

Invest in the Cutting Edge:

- **Title Sponsorship (3.5 Million):** As our most prestigious partner, the Title sponsorship elevates your company to the forefront of cutting-edge robotics. Imagine your brand prominently displayed as "[Your Company Name] Title Sponsor of Team Techno" across all our platforms and materials. This unparalleled visibility extends to extensive promotion on our social media channels, with your logo taking center stage on all team posters, standees, and merchandise (shirts and jackets). Furthermore, you'll receive exclusive advertising opportunities during our workshops, fostering direct engagement with our team members, potential recruits, and a wider audience. For maximum media impact, your company logo will be prominently featured on our competition rover, guaranteeing high visibility during events and media coverage. Beyond branding, the Title sponsorship unlocks exclusive perks, including an invitation to a prestigious international event (details to be confirmed) and priority access to exclusive recruitment opportunities within Team Techno.
- **Diamond Sponsorship (2.5 Million):** The Diamond sponsorship offers a comprehensive package designed to maximize your brand association with Team Techno. In addition to extensive promotion on our social media channels, your company logo will be prominently displayed on our team posters, standees, and merchandise (shirts and jackets). Furthermore, you'll receive exclusive advertising during our workshops, ensuring direct engagement with our team members and potential future recruits. For extensive media coverage, your company logo will also be featured on our competition rover. Beyond branding, the Diamond package grants exclusive perks, including an

invitation to a prestigious international event (details to be confirmed) and exclusive recruitment opportunities within Team Techno.

- **Gold Sponsorship (1 Million):** The Gold sponsorship provides a comprehensive package of benefits to elevate your brand association with Team Techno. Your company logo will gain significant exposure through promotion on our social media platforms, inclusion on team posters and standees, and placement on our team merchandise. Furthermore, you'll receive advertisement during our workshops, allowing you to connect directly with our team and potential recruits. The Gold package also includes prominent logo placement on our competition rover, ensuring high visibility during events and media coverage.
- **Silver Sponsorship (0.5 Million):** Our Silver sponsorship offers a solid foundation for building brand awareness and supporting Team Techno's endeavors. This package includes promotion of your company logo on our social media channels, as well as placement on a selection of team posters and standees. Additionally, your company logo will be included on some of our team merchandise (details to be confirmed), ensuring increased brand recognition.