





SEASON 2024/2025



### **Cultivating Excellence**

At TUfast e.V., we foster a robust and resultoriented culture that empowers us to translate our theoretical insights and technical skills into real-world applications, pushing the boundaries of what's possible.



Our strong partnerships with industry leaders like Audi, Porsche, Capgemini, and Airbus exemplify our commitment to performance and collaboration.



Teams



20 years

Experien<u>ce</u>



Members



The entrepreneurial spirit within our association has created successful startups. With a record of achieving world records, our association stands as a beacon of excellence and innovation.





## **Building on Tradition**

As the newest team within TUfast, we break old habits while preserving the association's traditions. The Technical University of Munich is renowned for the **excellence** that we strive to maintain in our team.





Armed with a high-performance mindset, robust work culture, and **team spirit**, we **exceed existing standards** in our field. Focusing on achieving outstanding results, we are eager to make our mark within the association and continue contributing to its legacy.

#### **Our Supporters**





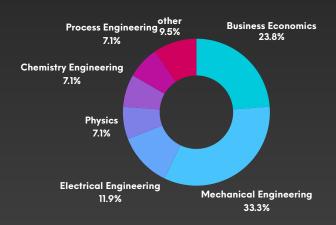
# Bike & Team

#### **Chassis**

With **cutting-edge materials** and precise FEM simulations, the chassis supports the overall vehicle concept concerning weight, safety, vehicle- and aerodynamics.

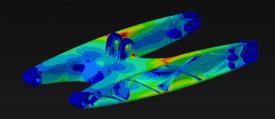
#### **Diversity**

This **dynamic team** comprises individuals with diverse interests, ranging from arts and humanities to STEM fields, fostering a comprehensive blend of perspectives and expertise.



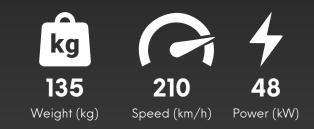
The student team represents a harmonious blend of diversity, characterized by its **strong international presence** and inclusive ethos. With members hailing from various corners of the globe, the team embodies a rich tapestry of cultures and perspectives, fostering a truly **global community**.





#### E-Powertrain

The energy storage is optimized to be as light as possible. Therefore, we build **detailed Simulations** to estimate the exact energy and cooling for multiple scenarios. The water-cooled inverter is designed to drive the electric motor for **precise power and torque** output.



#### **Vehicle Dynamics**

We design our vehicle kinematics with advanced multibody simulations to achieve **maximum performance** for all disciplines. The Fairing is optimized to reduce the aerodynamic resistance and enhance the downforce for braking and cornering.



# motostudent



A challenge between University Student teams among all over the world. The goal for students is to apply all the knowledge acquired during their university studies in a real industrial project, by designing, developing and manufacturing a **real racing motorbike** prototype, which will be evaluated and tested in MotorLand **Aragon FIM Circuit**.





#### **MS1 Phase**

The projects will be judged from the industrial point of view as a **real business project model** where to apply the knowledge acquired during their education, showing the aspects and difficulties that an industrial manufacturing project can entail.





380 University teams



**22**Countries represented



Directly involved
Students

#### MS2 Phase

Prior entering the MS2 phase, the motorbikes will be scrutineered in order to determine their **safety and functionality**, through various static and dynamic checks. Once the motorbikes are approved by the Organization, some scoring dynamic tests will be performed to demonstrate the performance of the motorbikes, which will end up in the only **FIM international university race** at the FIM Road Racing Circuit of MotorLand Aragon.



# Sponsorship Packages

Support us and benefit from one of the following packages.

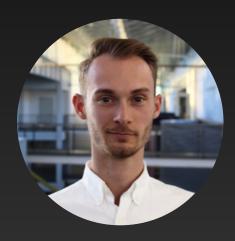








## **Contact Us**



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**Website** 



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