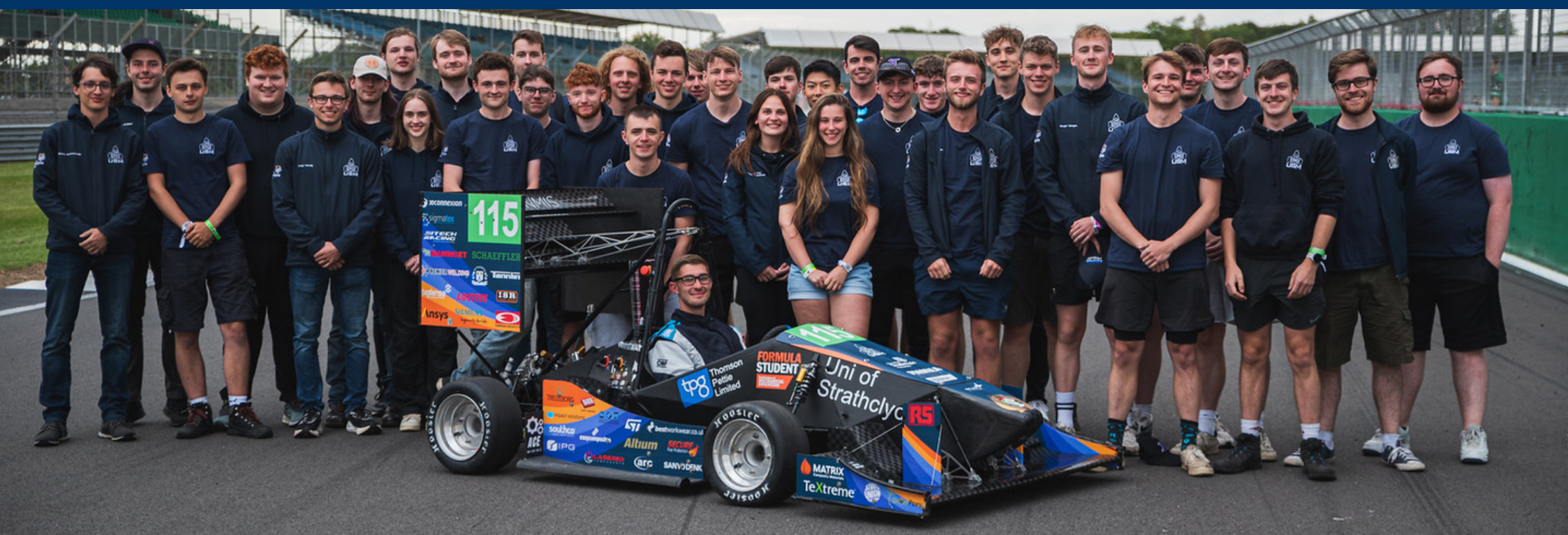




UNIVERSITY OF  
STRATHCLYDE MOTORSPORT  
WINTER NEWSLETTER



Following another record-breaking recruitment drive, we have been hard at work at USM, designing our next iteration of our single-seater electric race car USM24. Our team have been busy, and we are now ready to turn our concepts into a reality. After a well-deserved break, we have hit the ground running and started the manufacture phase.



Led by Technical Director Matthew Wheeler, Head of Powertrain Ellis Burnett, and 14 system heads, USM have been working tirelessly over the last couple of months to lay the foundations for USM24.

This year will see a complete overhaul of the mechanical systems with the implementation of a decoupled heave-roll suspension system and a new aerodynamic package. The powertrain systems are working hard to improve the efficiency and reliability of our existing powertrain package which has already proven itself in competition.

With the design of the vehicle being completed before Christmas the technical team is now working hard to manufacture the vehicle and are excited to test its performance prior to competing at Silverstone in July.



## POST SEASON TESTING

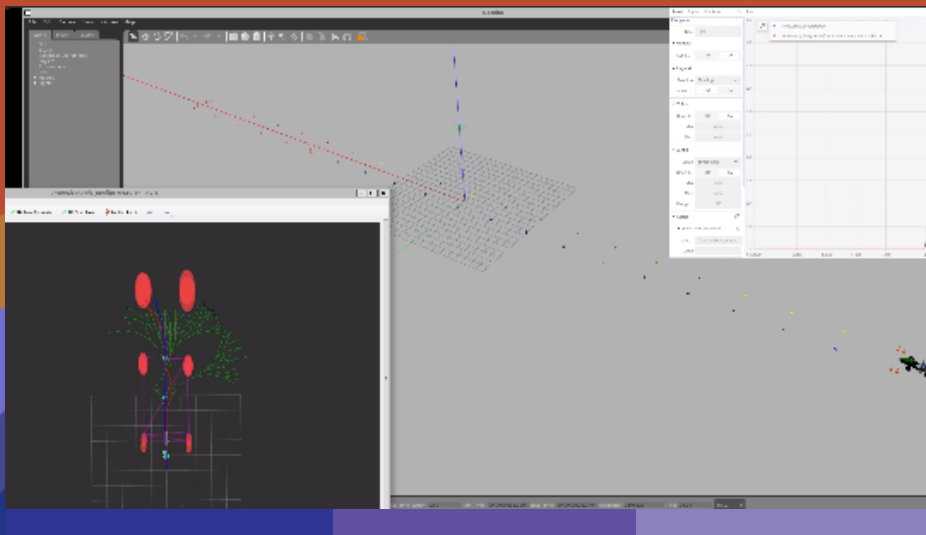
After our competition season was over, USM23 had its final hurrah, completing a post-season test plan. We had a couple of goals for these sessions, one being investigating key parameters for USM24, with data being collected through a series of test runs. These were organised by our Vehicle Dynamics team and involved a recreation of events seen at competition such as the Acceleration, and Skidpad events.

A real highlight of post-season testing was installing and testing a full corner of composite suspension wishbones. This was a major development for the team, and the culmination of years of composite research and design.



## UNIVERSITY OF STRATHCLYDE ENGINEERING GALA DINNER

In October, the team were invited to display USM23 to the University of Strathclyde Engineering Gala Dinner held at the Hilton in Glasgow. The dinner hosted many local engineering companies and provided an excellent opportunity to showcase the benefits and development opportunities of Formula Student. The event proved to be a fun night for all involved!



## FS-AI DEVELOPMENTS

Our FS-AI team have also been working hard, developing our tools for our FS-AI debut this year. Things are looking bright, and we are excited to show more of this when the time comes.

"As this is our first season entering FS-AI we have the exciting challenge of architecting our system without experience from previous years. Our focus is to create a reliable driverless system that is able to finish dynamic events at FS-AI 24, while providing a strong foundation for the future." - Ben Swaffield (Head of Driverless)



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## ALUMNI SUCCESS

Over the last couple of years, we have had many team members move on from USM and begin working within industry. We thought it would be good to allow our sponsors to see how their support has shaped some of their careers, and how USM and the Formula Student competition support students in reaching their career goals.



“I have learned so many invaluable skills when it comes to engineering and working in a team. Many of these skills I would not be able to learn from my studies alone and I think that USM is the perfect place for people to expand on the basics and apply it to such an exciting and unique project. All my knowledge on race car aerodynamics and structural composites came from USM in the form of my own research working towards a project or knowledge and experiences passed down from alumni.” Adrian Turski - Engineering Intern at McLaren Racing and Ex Head of Structures at USM

“USM was fundamental in helping me decide to pursue a career in motorsports and aerodynamics. The team enabled me to grow my engineering knowledge and to build experiences that allowed me to showcase my skills to potential employers, ultimately leading to my role at McLaren.” Harrison Kurtya - Aerodynamicist at McLaren Racing and Ex Head of Aerodynamics at USM



Finally, we would like to take this opportunity to say a massive thank you to all of our incredible sponsors throughout the season so far! Without your help and expertise, the teams development would not be possible. We, as a team, hugely appreciate the help that each of our sponsors provide each year in developing the next generations of engineers and professionals.

