



## WELCOME BACK!

After our summer break, TAU is back and bigger than ever. The team has welcomed a large number of people, with the 2023/24 season committee consisting of new and old faces. Although competition over the summer was not as successful as the team had hoped for, the hard work paid off with the team scoring a fantastic 13th in the Design Event and 38th in the Cost Event. Over this semester the new department heads have become accustomed to their roles, leading their departments successfully, with everyone very excited to start manufacturing in the new year for the upcoming competition in summer.

### NEW COMMITTEE ROLES:

This year we have welcomed not only a new committee and team members but we have also added two new roles to our team. The team have unanimously decided to add two new roles to the committee: Head of Electric Vehicle Research and Head of Competition Simulation.

The newly implemented Head of Competition Simulation will be tasked with overseeing the preparation and training for the simulation part of the competition. With the future of Formula Student heading towards sustainable fuels and EV, the team thought it important to begin research on electric vehicles, to lay the foundations for the team in the future.

## Sponsor Spotlight:

A heartfelt thank you to our sponsors and supporters who fuel our dreams! Without whom our work would not be possible; your belief in our team has not only provided us with the necessary resources but has also encouraged and motivated each team member to strive for excellence. Thank you once again for being an integral part of our journey, we are eager to share our progress with you in the following months.

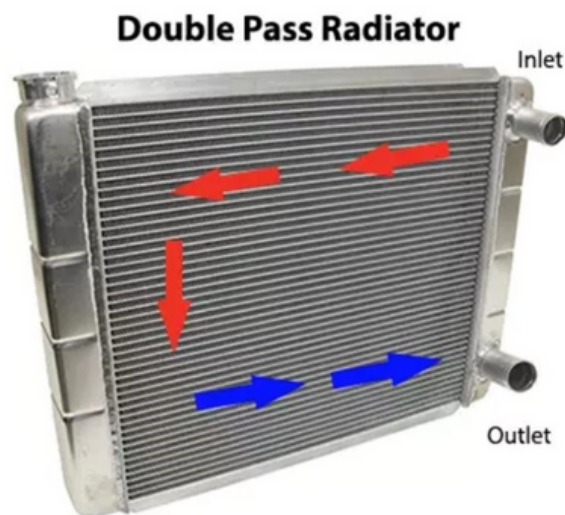


## Improved Radiator Design

This season marks a significant milestone in the evolution of our car's cooling system. We're excited to share the ongoing enhancements we're making to optimize performance and efficiency on the track.

Central to these improvements is a custom-built radiator featuring a new, flat shape. This change, primarily driven by manufacturing considerations, will be carefully implemented to ensure continued cooling effectiveness.

With the introduction of a more efficient double pass setup which allows the coolant to pass through the radiator twice, maximizing heat dissipation and resulting in better temperature regulation for the engine we aim to improve the system's efficiency and integration within our car's design.



Along with the improvements to the radiator is a new shroud design, a flat frame engineered to balance maximum airflow during high-speed moments whilst offering structural support.

Comparing the volumes and dimensions of the new and old radiators, the new iteration increases volume by  $20,000\text{mm}^3$ . Increasing the radiator volume will be beneficial because it also allows for greater heat dissipation. A larger radiator improves the cooling of the engine by providing more surface area for the exchange of heat, helping to maintain better operating temperatures and preventing overheating.

These developments represent our continuous commitment to improving all aspects of our car. As we prepare for the upcoming competition, we anticipate observing the practical impact these modifications have on-track performance.



In between designing and preparing for the manufacturing phase, the team managed to find some time to take the car to Grampian Kart Club for a very wet but successful testing. The current team is very invested in obtaining data in order to optimise their designs to implement them in manufacturing.



## Upcoming Events: Mark your Calendar

Be prepared for adrenaline-pumping action as we gear up for the upcoming events and competition. The team intend to work hard over the next year, with more testing to come and manufacturing commencing in the new year. Stay tuned for live updates, exclusive content, and opportunities to connect with TAU on and off the track.



Remember to follow us on social media for real-time updates, exclusive content, and a front-row seat to the thrilling world of TAU!

## Get Involved: Join the TAU Family

Whether you're a seasoned engineer, a marketing whiz, or a passionate racing enthusiast, there's a place for you in the TAU team. Discover how you can contribute to our journey and participate in something extraordinary.



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