

After our exceptional success in the 2017 IMechE Formula Student Competition at Silverstone Circuit, the TAU Racing team had a busy start to the new semester, welcoming new members on board and implementing the FSUK 2017 feedback. The team has made remarkable progress with TAU-18's design, and are working hard to finalise designs in preparation for the manufacturing phase to commence in the next semester.



TAU-18 Committee

TAU Racing are proud to introduce the TAU-18 Committee, composed of new and previous committee members to ensure the right balance between knowledge transfer and fresh ideas. This year's committee has been enlarged, now consisting of 19 members which will smooth out the flow of the project's operations. It is composed of the management tier, co-ordinators and team leaders who are all responsible for the development of new members.

The departure of team members after graduation last summer made it vital for TAU Racing to have a successful recruitment. We were delighted to see more than 60 undergraduate students attend our freshers introduction. Initially, they were set design challenges to gain experience working in various departments, allowing them to determine their area of interest, as well as gaining general knowledge which is essential for future progression within the team.



New members during a design challenge

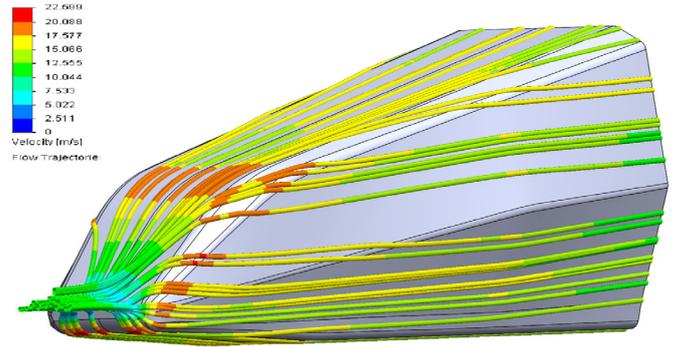


TAU-17 at competition

Last year's success came from the speed and reliability of the TAU-17 car, thanks to the development of the powertrain package sponsored by Nexen. The powertrain department will be further improved through the design of a pneumatically-operated paddle shift system. This will improve the car's performance during acceleration by decreasing shifting times and improving the driver's ease of gear changes. This process of proactive research and development will also help provide a stronger validation of the design at the competition.



This year's biggest development on the TAU-18 car will be the addition of a new aerodynamic package. As a two year strategic plan this year will see the redesign of the nosecone and implementation of an under tray and diffuser system. This new addition to the car will help during cornering by producing downforce. The Composites and Aerodynamics department are working hard to finalise the flow simulations on conceptual designs, before starting manufacturing.



CFD simulation on TAU-18's nosecone



A recent development in Sponsorship marks a milestone for TAU Racing. On the back of the success of TAU-17, TAU Racing are delighted to welcome Triumph Motorcycles to our sponsor network. As the manufacturer of the Daytona 675cc block at the heart of TAU-17 and -18, this partnership presents an excellent opportunity for sustained development of the powertrain package, and further performance enhancements. Furthermore, this represents the first automotive manufacturer the team has brought on board, highlighting the team's growing presence at the competition.

Testing is crucial for the team as it provides important data which will be used for further development of the TAU cars. This month, TAU-17's spare engine was taken for a shake down whilst the primary engine was being checked post-competition, undergoing maintenance to ensure that it can perform reliably during forthcoming testing sessions. Additionally, sensors will be incorporated to measure brake temperatures and suspension displacement, helping technical department heads with the TAU-18 car's design. A GPS will also be added for improving drivers' skills by analysing the speed, position, and telemetry data from the car around the track.



TAU-17 undergoing shakedown



TAU Racing's aspirations for the TAU-18 car are exceptionally high after the success at the competition at Silverstone last summer. After firming up designs to begin initial manufacture, the TAU Racing team will be closing up before the project is paused for the exam break. Stay updated on TAU-18's progress by visiting TAU Racing [website](#), [Facebook](#) and [Twitter](#). Also take a look at the team's Silverstone [video](#)!