

Welcome to UCM16

Thank you for your support of the 2016 UCM team. We hope you look forward to being involved in another successful year. After last year's success at FSAE Australasia Competition, we have set our sights higher for 2016. This is the first newsletter for 2016 aimed to keep you updated on the design, manufacture, events and other important dates as the year progresses. Feel free to arrange a time for a tour of the workshop and facilities and to meet some of the students on the team. A launch night to unveil the car to the public will be organised before the car is shipped to Melbourne, details of this will be provided at a later date.



UCM15 at the Leadfoot Festival. On the wet track UCM15's fastest time was 57.87s with Jacob Ewing as driver.

From the Team Principal:

I would like to take the opportunity to personally thank you for supporting University of Canterbury Motorsport. Being a part of UCM and the Formula SAE competition is intensely rewarding for all members and we appreciate your investment towards producing innovative graduates. Our first recruitment for 2016 was successful with 30 new team members from both Engineering and Commerce. We have set some team goals for 2016 which aim to motivate and encourage the team towards producing a car capable of winning the 2016 Australasian FSAE Competition. I look forward to your company's involvement with the team this year.

Dominic Stulen



Your opportunity:

As a sponsor you will have the opportunity to meet, work alongside and build relationships with some of the top graduate engineers University of Canterbury has to offer. The first event where your brand will be promoted is the Christchurch Careers Expo from the 12-14 May.

From our Team Leaders:

Chassis



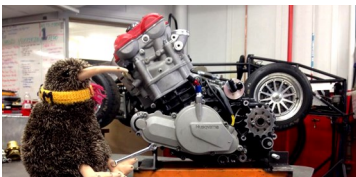
The chassis team spent a solid 5 weeks manufacturing this year's carbon fibre monocoque chassis. We stuck to an aggressive timeline and can proudly say we managed to pull it off, with a chassis now sitting in the workshop awaiting the remaining components on the car to be manufactured. We would like to extend a huge thankyou to Rivers Carbon in Auckland for their continued support, we spent two weeks using their workshop space and autoclave to successfully construct our chassis.

Having won skidpad at FSAE-A 2015, the suspension team is aiming to build on the dynamic properties of UCM15 to create the fastest car this year. The suspension team has expanded beyond the traditional design, manufacture and on-track testing divisions with the introduction of an advanced vehicle dynamics and analysis division. Aided by industry leading simulation software, this new division will provide the team with valuable information facilitating smarter design and finer tuning. The design of UCM16's suspension package is now complete and manufacture is well underway.

Suspension



Powertrain



The Powertrain team have been working hard to ensure that design and manufacture of new parts meets the tight schedule outlined at the beginning of the year. The complex components such as drivetrain and cooling are entering the prototype phase with rigorous testing schemes being utilised to highlight any weaknesses. In the upcoming month the powertrain team will be entering the manufacture phase of the year and would like to thank Autobend for the sponsorship that will make this transition easier.

The UCM15 aerodynamics package was a massive success and a favourite of the aerodynamics design judges at FSAE-A. UCM16 will be equipped with a more extensive, thoroughly developed and cohesive iteration of this proven platform. Early computational fluid dynamics models have shown that the team's initial designs are already improvements on last years package. The team is now looking to validate these computational findings with on track and wind tunnel testing.

Aerodynamics

