

JCU Motorsports

Sponsorship Prospectus



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JCU Motorsport

James Cook University Motorsports Team (JCM) is a student driven team managing the design, fabrication and racing of an open-wheel FSAE (Formula Society of Automotive Engineers) competition racecar. JCM strives to provide young engineers and other students experience and development outside of the standard curriculum. Through involvement in planning, management and hands on experience in demanding and dynamic tasks, students develop skills that are directly relevant to future careers.



The team provides an extension of classroom learning, where engineering students apply design principles to projects for the car. The projects are a self-directed process from design through to manufacture and testing, which gives the students a sense of ownership and expertise for the racecar componentry.

Students are given the unique opportunity to build team work and leadership skills in situations otherwise unavailable throughout the university course. These skills are not limited to a motorsport specific area, or to a specific degree, but rather encompass public relations, marketing, budget management, community development, business liaison, sponsorship management, event planning and logistics. The team is open to students of all disciplines and degrees willing to actively participate in an extra-curricular activity.



JCM first generation car, Roxanne, will be taken to competition in the 2014 racing year. In preparation for competition students will have to submit documentation to FSAE for evaluation. This includes a business logic plan for the team, structural reports and cost reports. This process develops student's communication, organisational and technical skills, which can be applied directly to a professional role in the workforce.

Formula SAE

The Formula Society of Automotive Engineers (FSAE) is an international engineering student design and build competition. The design, fabrication and racing of the open-wheeled track car is completed by the students on the team. JCM will be entering the Australasian sector of the competition, which is hosted at the driver training facility in Werribee, Melbourne. The competition consists of points allocated for performance in both static and dynamic events.



At competition, cars are subject to technical scrutineering by FSAE officials before being allowed to participate in dynamic events. These include the acceleration, skid pad, autocross and endurance tests. Allocation of points in these events focuses on the handling and efficiency of the car, with less importance placed on the straight-line acceleration. The business logic plan, structural reports and cost reports are assessed and included in the team scoring for the static events.

About the Car: Introducing Roxanne

The JCM first generation car is powered by a Honda CBR600 F2 engine with an electronic fuel injection conversion and custom intake manifold. Competition rules dictate that the engine be equipped with a restricted air intake, to encourage power to weight prioritisation and emphasis on handling. It is estimated that Roxanne is capable of reaching 100km/hr within 4 to 4.5 seconds. The car features a chain driven rear axle and independent double-wishbone pushrod actuated suspension.

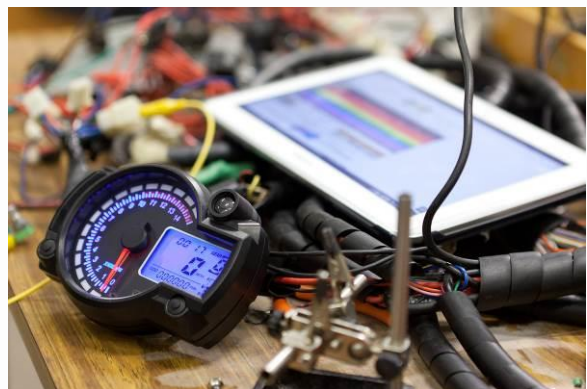


In the workshop, students develop practical experience with manufacturing techniques using a variety of tools. This equips students with the ability to effectively communicate with tradesmen to ensure that engineering designs can be manufactured to an excellent standard. In addition, students gain exposure to common workplace safety practices such as risk evaluation, safe work method statements, personal protective equipment and incident reporting.

Engine	Honda CBR600 F2
Configuration	4 cylinder inline DOHC
Displacement	600cc
Fuel delivery	Custom fuel injection system
Exhaust	Custom 4-1 system
ECU	Adaptronic 440 Universal
Power output	90hp (67kW) [unrestricted]

Additional Specifications

- Wheelbase – 1.7m
- Competition Top speed – 105 km/hr
- Max Designed Lateral G-force – 1.7g
- Final drive ratio: 3.33
- Tube chassis
- Carbon fibre dash, body, seat
- Fully braided DOT standard brake lines
- Nissin 4 piston calipers all round
- 190mm hardened steel custom brake discs
- Custom high strength alumec aluminium uprights
- Quick release steering
- Double wishbone fully adjustable suspension







Supporting the Team

By providing support to the team, you are furthering the development of young engineering students. JCM gives students an opportunity to liaise with tradesmen and machinists, and develop manufacturing skills not available in the classroom. The team has relied on the generous support provided to us, through supply of materials, services and in-kind donations. When you become involved with the JCM, you will become the preferred supplier for the team.



By sponsoring the team, your brand will be on display when we showcase the car. The FSAE-Australasia competition will be an opportunity to expose your company on a national stage. The car will be displayed at local events, such as car shows and university open days. The car, Roxanne, will also be participating in local competition events, which will promote your organisation in the region.

JCM uses social media to promote the activities of the car and the team. These social media channels are used to advocate your brand as part of your support package. Print media coverage is sought for the car at showcase events, which by association will increase the reach of your brand.



There are many opportunities to become supporters of the JCM team. These can include the in-kind provision of goods and services such as race consumables and manufacturing for the team.



How you can help JCM in-kind:

- Workshop consumables such as welding rods, cutting discs, raw materials
- Safety equipment, such as PPE and discount on work clothing and boots
- Race consumables such as tires, brake pads, filters, consumable fluids such as engine oil, lubricants and hydraulic fluid, race tape and zip ties
- Tools for the workshop, including tool box and power tools such as welders
- Manufacturing services such as laser cutting, CNC, metal fabrication and machining
- Component supply such as bearings, bolts and fasteners, rod ends
- Equipment supply such as tools, office supplies, printing, software
- Specialist services such as Dyno access
- Supply of trailer to the team for taking the racecar to local events
- Transport services such as freighting the racecar to competition in Melbourne

In addition, JCM offers numerous levels of monetary sponsorship packages.

	Platinum	Gold	Silver	Bronze
Value	\$10 000	\$5000	\$2500	\$1000
Logo on car	Premium	Large	Medium	Small
Logo on trailer	Premium	Large	Medium	Small
Framed Team Photo with your business	✓	✓	✓	✓
Company Name on Team Uniform	✓	✓	✓	✓
Complimentary Team Shirt	10	5	3	2
Logo on Posters at Events and Displays	✓	✓	✓	✓
Logo on Website	✓	✓	✓	✓
Logo on Business Cards	✓	✓	✓	
Logo on Team Uniform	✓	✓		
Access to the Car for Promotional Purposes	2 events	1 event		
*Conditions apply				
Team Presence at Company Events	✓	✓		
Logo and Promotion in Social Media	✓			
JCM Event Naming Rights	Premium Event			
Custom Marketing Strategies	Yes			

Current Sponsors

The James Cook University Motorsports Team would like to thank the current sponsors of the team. The progress of the car would not have been possible without the generous support provided to the team.



Conclusion

Development of the FSAE racecar at JCU has become an integral part of the Mechanical Engineering degree. The benefits students get when designing, analysing, and implementing a racecar can't be underestimated. The car requires specific targets for functional performance to be met (to be competitive), as well as placing significant bounds on schedule, manufacturing techniques and especially budget. Modelling, production of manufacturing drawings and extensive communication with trades people and manufacturers is necessary. Additional testing and improvement of finished designs are also critical (bench testing, track testing, extensive sensor and data acquisition etc). The car represents a complete mechanical design lifecycle and equips graduates with skills ready for professional practice that wouldn't be possible otherwise. The students that have had heavy involvement with the Motorsports team are, in my opinion, some of the best, most effective engineers that JCU has produced. This is as a direct result of the effective contextualization of learnt theories that the car provides.

Importantly, the car is also used extensively for JCU marketing, as it is an excellent example to school students and the community in general of what engineering (particularly Mechanical Engineering) involves, and what JCU students are capable of. The car has shown at the Townsville 400 V8 Supercar event, the JapNQ car show and all recent JCU events. Taking the car to our maiden competition in 2014 will be a huge achievement for JCU and North Queensland and is expected to get significant media coverage as well. Interest in the car is extensive and the exposure for any potential sponsors is excellent. The School of Engineering and Physical Sciences and the Faculty of Science and Engineering both support the team going forward, and designs for the second generation car have already begun (each car is allowed to compete for 2 years before a new car must be produced). The culture of support in the team between the year groups and passing down of skills, knowledge and the coherent management structure and succession, I'm pleased to say, sets the team up to be competitive long into the future. As supervisor of the team, one of the key aspects I've emphasized since assuming the role several years ago has been coherence so as to maintain success in the face of changing student cohorts. I believe this is now fully established and representation of all four year groups in active participation in the team makes us poised for a very bright future.

By sponsoring the JCU Motorsports team, you're enabling the team to go to competition and match it with the best in Australia. You're allowing the Motorsports team to continue operating into the future and continue to enhance the quality and job readiness of JCU graduates, and particularly the exceptional students that are involved in the team. These students are the engineers of the future and will carry what they have learnt with them in their careers, so enhancing the companies they work for. Finally, through the many brand placement opportunities associated with sponsorship, involvement with the team will provide any sponsor with significant local and national exposure, with all the associated commercial benefits. I hope that you'll consider supporting the team, and I thank you for taking the time to read this prospectus.

Best regards,

Dr David Holmes
Team Supervisor

Team Contact Details

James Cook University Motorsports website:

<http://www.jcu.edu.au/jcumotorsports/>

James Cook University Motorsports Facebook page:

<https://www.facebook.com/JcuMotorsports>

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