

## Combining Societies with Studies

SAE

[www.aeromech.usyd.edu.au/sae/](http://www.aeromech.usyd.edu.au/sae/)

Adam Austin - 2008 USYD FSAE Team Leader

[aaus9911@mail.usyd.edu.au](mailto:aaus9911@mail.usyd.edu.au)

Formula SAE-A is a project run by the Society of Automotive Engineers, and is available to students of the school of Aerospace, Mechanical & Mechatronic Engineering years 2 through to Thesis. Formula SAE allows students to design, manufacture, and compete in a single seat, formula one style race car, that in theory is to be mass-produced at 1000 per year as a weekend racer.

Each year the University of Sydney team creates a car to compete against other universities at the formula SAE-A event held in Melbourne. Approximately 25-30 teams compete each year, including half a dozen international teams from Germany, Japan and other high profile car production countries.

The event has is split into 2 main sections. Static and design events and performance trials. The static and design events are based around cost reports, design analysis, presentation, testing and feasibility of the car according to the design brief and rules set out by the SAE every year. In the performance trials, the car is tested for its handling, power and performance. This is done by an acceleration test, autocross event, skid pad and endurance races.

In 2007, the University of Sydney's car achieved an overall placing of 9th , with only 90 points separating USYD to 4th place out of a possible 1000. SAE is the ultimate university project in designing, manufacturing and testing high performance cars. You get to work with top people, manufacture everything you design and have a blast doing it.

Jabiru

[http://www.aeromech.usyd.edu.au/AERO1400/Jabiru\\_Construction/home/home\\_index.htm](http://www.aeromech.usyd.edu.au/AERO1400/Jabiru_Construction/home/home_index.htm),

A first year course that is held in 2nd semester, which is part of the straight aero degree, and is optional for other combined degrees. There are about 60 people that do the subject, which are broken down into groups of about 20 to work on the aircraft. As part of the course you construct a small Amateur Built Experimental Aircraft.

Over the 12 weeks that you will build the plane, you will get to know basic workings of a simple aeroplane, what parts do what and where they go, and this is not only through theory, but by constructing and installing them yourself. The workshop has very enjoyable working environment, along with getting to know the very friendly workshop staff, you get to build an aircraft that you should have the opportunity to see fly. It's a great course that everyone enjoys.