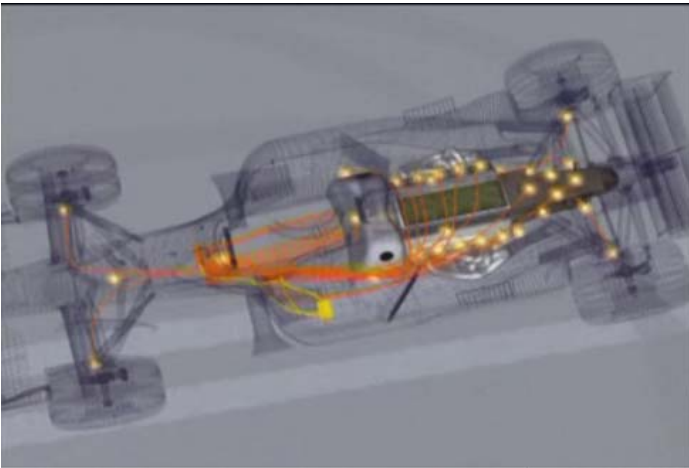


# BEng/MEng Hon. Project or ERASMUS/SOCRATES Final-year Project School of Engineering, University of Aberdeen ([www.abdn.ac.uk](http://www.abdn.ac.uk)), Scotland, UK



Data acquisition system in a F1 car



TAU Racing 2010 car at Silverstone race track

## Project Name:

**$\tau$ Elementry:** TAU-racing Electronic car-management system and Telemetry for the 2011 *Formula Student* racing competition at *Silverstone*.

## Project Description:

Data acquisition and electronic car-management are at the heart of modern day motorsport<sup>1</sup>. This project aims at developing a *race-fit* system for **digital acquisition, processing and transmission** of data collected by a variety of **sensors** (including three-axis acceleration, temperature, wheel speed and suspension displacement) placed on the single-seater **racing car** built by TAU Racing<sup>2</sup>, a team of Engineering students of the University of Aberdeen, to compete in the 2011 Formula Student<sup>3</sup> event at Silverstone in July 2011.

## Candidate Description:

BEng/MEng or Erasmus/Socrates exchange student in **Electronics, Telecommunications** or **Mechanical Engineering**.

## Required Skills:

- Fundamentals of Digital Signal Processing (DSP) and Data Acquisition (DAQ).
- Experience with DAQ devices and software (e.g. LabVIEW).
- Experience with digital communication equipment and DSP software.

## Project Period:

Within the Academic Year 2010-2011. The project should start early enough to allow development of the telemetry equipment during the preparation of the *Formula Student* race at Silverstone (provisional dates 14-17 July 2011).

## Contact:

Dr **Fabio Verdicchio**, School of Engineering (Electronics Research Group), University of Aberdeen.

Address: University of Aberdeen, Aberdeen AB24 3UE, Scotland, United Kingdom.

Email: [fverdicc@abdn.ac.uk](mailto:fverdicc@abdn.ac.uk)

Webpage: <http://www.abdn.ac.uk/engineering/people/details.php?id=fverdicc>

(or Google: *Verdicchio Engineering Aberdeen*)

<sup>1</sup> <http://www.yourdiscovery.com/video/the-secret-life-of-formula-one-the-science-of-winning>

<sup>2</sup> <http://www.tauracing.com>

<sup>3</sup> <http://www.formulastudent.com>