CURRICULUM ENHANCEMENTS
HIGHLIGHT FOR 2016 - 2017

151 years later… Another great year @obu_memms

It was hard to follow 2015 with all of the amazing 150th anniversary celebrations and big names but this academic year we celebrate again: 20 years of Motorsport programmes @OBU_MEMS, remembering 1996 and our humble beginnings with eight students in year one, to being a premier motorsport education institution!

This 20th jubilee year started with a truly inspirational lecture by Adrian Reynard, who brought his first car built at Brookes as his capstone project. You will be amused to hear his admission that it did not match the title assigned (a strain gauge experiment, I believe), hence he got 0% for it! (The lecturer is long retired; you will be pleased to hear!)

Industry visits and links

Our reputation as the home of motorsport education, resulting in close links with the motorsport industry, has reached a new high:

Nineteen top students and two academic staff were invited to visit Ferrari. The morning of the visit to Maranello included both factories and as usual with our visits, we were not allowed to take any photographs once we passed the reception. However our memories will stay with us; some interesting facts:

- Did you know that each V12 engine is assembled by one person in four days and carries the signature of that person.
- The two robots working in collaboration to assemble engine cylinders are called Romeo and Juliet.
- Each department is mostly made out of glass and has a small ‘oasis’ in the middle of it!
- One is constantly running a risk of being ‘knocked over’ by the latest Ferrari car model, test driven (quite fast!) through the small internal streets dividing departments of Ferrari!

This adventure was followed by a working lunch and Q&A with the Talent Acquisition Director and the Head of Design office of Ferrari F1. In the afternoon we were taken to Ferrari museum and time was dedicated to history and photo opportunities. We are looking forward to developing further our collaboration with Ferrari to include further recruitment, projects, etc.

The event received a lot of interest in social media; last time we looked it had 17k+ views!
Another group of students had a chance to see an F1 team closer to home: our great friends, Renault F1, were as ever a brilliant host to thirty of our students and showed us around.

MSc students on our Aerodynamics module had the pleasure of unique Skype lecture with Willem Toet, long-standing (recently retired) Head of Aerodynamics, who is one of OBR mentors and associate lecturers.

Read more - mems.brookes.ac.uk/staff/willemttoet.html

MSc students on our Motorsport programme continue to enjoy being taught by the best, with Sergio Rinland delivering lap time simulation module, using the most sophisticated lap time simulation software currently available (VSM) as a result of a unique partnership with AVL.

Read more - mems.brookes.ac.uk/staff/sergiorinland.html

In this year we also hosted senior staff from Formula E, MSA and BRSCC, Porsche, GKN and had enquiries to franchise our flagship Motorsport programmes to China and Australia.

A group of ten students and three academic staff visited Dallara to present the latest development in Formula Club E project and discuss fine details in preparation to run our simulation model in acclaimed Dallara simulator.

Whilst some were in Italy, others went to visit Xtrac, for our annual visit.

Xtrac is a world-leading transmission manufacturer supplying to Formula One, Rally, IndyCar, Sportscar, GT, Touring Cars and Moto GP.
Employability

We continue to work with our students to maximise their chances of securing best positions in industry. This year in addition to the annual CV workshop and international employability workshop we organised CV speed-dating and excellent mock interviews held by Head of Graduate recruitment and Head of Design office at Renault F1.

So far, we had graduates securing positions in Red Bull, Renault F1, Xtrac, MAHLE for example, whist three junior Formula Students members went to Williams for their sandwich year in industry. Once again, we were invited to nominate five of our top students for Autosport Williams Engineer of the Future Award, watch that space!

Autosport Exhibition

Another great stand at the annual Automotive show which takes place at the NEC Birmingham. Our Formula Student team members and Dallara project (Formula Club E team members) had an opportunity liaise with industrial visitors and general public as well as visit industrial stands. This develops their technical skills i.e. understanding of the relevant industry and also soft skills such as communication and networking. They had a great opportunity to discuss Dallara project with Hewland and secure their support for gearbox design. We are delighted to be working with Hewland on this project and are making great progress.

This year we were also hosting RaceStaff recruitment consultancy, veterans in recruiting for race industry, also mentoring and recruiting our students to full-time posts and industrial placements.

Oxford Brookes Racing (OBR)

Oxford Brookes Racing was one of the first few teams in the Formula Student UK competition, with the first concept car built in 1999.

The department believes that this activity offers a unique opportunity for students to implement the theory learnt into practise of designing and building a single-seater racing car, thus strongly supports the team and helps in creating links with a range of dedicated sponsors.

OBR regularly competes at UK and Germany and another competition that varies annually and has included the USA, Czech Republic and Hungary in the past.

The team has members from all over the world with a wealth of experience in engineering and racing and for the last two years it includes the world winner from Formula 1 in schools, who joined us as a Williams’s scholar, choosing Brookes as his academic institution.

The team is mentored by alumni, many of whom are presently in F1 teams and this year we had an opportunity to say a big thank you by inviting them to our greatest ever launch at Porsche Driving Experience Centre, generously sponsored by Porsche Motorsport UK.
The team has opted out for a retro finish this year and the car looks amazing. As the team had a couple of tough years with ‘aging engines’ we are very much looking forward to a new chapter in its history, implementing recently acquired three brand new KTM engines.

**Speed sisters documentary screening**

We saw a very honest and real documentary showing the world of racing in Palestine. We were fascinated by the determination of the female racers, overcoming the obstacles imposed by war and constraints of their society, in pursuit of their passion for racing. We were delighted to have assembled an expert panel of female engineers, our alumni from motorsport and automotive industry who shared their views and made a great contribution to the discussion. Female students that attended the evening found the event particularly motivational.

**Women in engineering day, investing in our future**

Every June we spend a day instilling passion and demonstrating the sense of fun around science and engineering, enhancing chances that the bright and able girls and boys in Britain will choose these disciplines in the future.
Plans for 2018

More industry links for: experts lecturing on the modules, projects, technical visits and recruitment activities and further embedding of OBR activities into PG provision.

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