

Minutes of the Mechanical IAB Meeting

Date

3rd March 2016

Location

G27

Start

2.00 pm

IAB Members Present

Maurice Ashmore substituted with Tolu Oluwatudimu (Eaton Ltd); Ian Care (Rolls Royce), Ashley Gillibrand (Jaguar Land Rover), Tony Hughes (Ford), Narj Jiskoot (Cameron), Zulshan Mahmood (Ford), Gerry Riley (RJM International), Richard Smith (Winchester Consulting).

SEMS Staff Present

Lorenzo Botto, Adrian Briggs (Chair)

Introductions

All members of the IAB introduced themselves and briefly described their background and which industrial partner or field they represent. SEMS staff members described their role in the School.

Minutes from Previous IAB Meeting

The minutes of the IAB on 29.10.2015 were approved.

Mechanical Engineering MSc and Sustainable Energy MSc - Conversion from any Science

AB explained to the meeting that the MSc is delivered through eight taught modules over two semesters, then the students undertake their dissertation (equivalent to four modules) over the summer, therefore the MSc consists of twelve modules in total. There will be a specific module, Engineering Methods that is specifically tailored and targeted for students with a science background. This module can be tailored dependent on the intake each year.

It was suggested that potential students should be given a reading list prior to applying for the MSc to ensure they have a general appreciation and understanding of engineering before they embark on the course. The course will need to be marketed and advertised correctly. The board discussed the saleability of the conversion programme to employers, the Industry Advisers felt that these students with a cross between science and engineering would be highly employable.

The Industrial Advisors felt that SMEs struggle to recruit staff that can manage projects, use people skills, analytical skills and present themselves correctly and confidently. They would like students to understand the opportunities at SMEs and the supply chain network.

Review of Undergraduate Programmes and the QMUL Teaching and Learning Initiative

AB explained the objectives of the QMUL Teaching and Learning Initiative to the IAB and that it seeks to address issues that our academically bright students may lack, e.g. social capital, networking opportunities etc. due to the fact that they are often first generation university students from their backgrounds. This initiative may mean that additional resources are available to include more in the curriculum outside of the usual academic content, it could be an opportunity to provide worthwhile extras for the students.

AB asked for input from the IAB as to the non-engineering skills that our graduates should have when they graduate, in addition to their academic and engineering skills.

The IAB gave the following recommendations:-

- Students need to have self-belief and be confident.
- Students need to understand the competitive market.
- Students should have confidence in their ability as they had a different start in life but still successfully secured a university place and undertook a degree.
- They should be able to present themselves well.
- They should be able to use negotiation skills.
- They need to understand how to embrace networking opportunities.
- Focus on the strengths of students that can connect more with the community as they have diverse backgrounds in comparison to the “usual” university student.
- Students should have presentation skills, project management skills and opportunities to lead.
- Students should demonstrate that they are different and willing to “go the extra mile”.
- Students should possess a “can do” attitude.
- Potential employees should understand the culture of the business they are applying to, including the Corporate Social Responsibility aspect.
- Academics should remind students of aspects of the course they have undertaken that can contribute to a job application.
- Communication skills.
- Engagement.
- Attention to detail, ability to structure a rigorous report.
- A balance of structure versus creativity.

Additional suggestions raised by the IAB outside of the Teaching and Learning Initiative were given:-

- Give students a QMUL lapel badge at Graduation.
- Create a SEMS/QMUL alumni community and network.
- Careers and CV Advice – already provided centrally and within SEMS by a dedicated staff member.
- Invite ex-graduates to come back and talk about their roles and what they have achieved since graduation.
- Write about what ex-graduates have done since they graduated to inspire future and current students.

Explore Potential Guest Lecture Opportunities

AB advised that the objective is to have one guest lecture per module.

Action – AB will produce a list of subjects, with a module description and circulate to the IAB members for consideration as to how they can contribute a guest lecture.

Explore New Potential Collaborations

There is currently a list of SEMS final year projects and there is some industrial input. It was agreed that companies benefit from the MEng projects as they have ideas but no spare staff/time/capacity so the projects are a good way to get things done. All agreed this is a mutually beneficial arrangement.

Jaguar Land Rover have two weekly coaching sessions with their project students, this good communication practice means the projects work well. Jaguar Land Rover work on a fiscal year basis from April therefore potential projects need to be identified at the end of the financial year in April.

Cameron advised that their planning processes mean that request for a project need to be submitted by September for a start date of twelve months later.

Rolls Royce launch six new projects every month so it can be a challenge to find projects for universities.

Action – IAB members to suggest potential projects.

Any Other Business

Cameron, Rolls Royce and Jaguar Land Rover suggested that teaching Big Data needs to be incorporated in the curriculum.

Any Other Business

Date to be confirmed in November 2016.