

Industrially Backed Project Initiative

During the final year of a Masters in Engineering a student undertakes an 'Individual Project'. A significant element of a student's degree programme, accounting for a considerable proportion of their overall mark, the student spends between 300-600 hours undertaking a combination of tasks ranging from detailed literature research, technology review, concept development/design, lab based or simulated experimentation, numerical modelling and analysis culminating in a comprehensive technical report. It is an opportunity for our students to demonstrate their inventiveness and the engineering skills they have accrued over the course of their degree. As well as making a significant contribution towards degree classification, a good project report provides an excellent portfolio of a student's work for future job interviews.

The staff within the School of Mechanical and Aerospace Engineering recognise the importance of highlighting industrial/commercial contexts in our students' development. We have a successful history of industrial collaboration, both locally and internationally. As part of our efforts to continue and improve upon this tradition the School is aiming to establish links between its Final year students and leading industrial partners.

Members of the engineering industry are strongly encouraged to approach the School with projects/problems/tasks for which they feel an undergraduate, with guidance from an academic supervisor, can contribute to or complete in the course of their 'Individual project'.

Ultimately the aim of the initiative is to demonstrate the quality of our students and create lasting links which will benefit all parties; industry, university and its students.

Such projects will create authentic experiences for the student while building new and lasting collaborations with departments and companies with the added potential to tap into funding streams designed for industry-academic research and development.

The School of Mechanical and Aerospace Engineering offers these industrially linked projects on the basis of certain expectations for both parties (the University and the industrial collaborator).

Please read our guidance below before deciding if you are able to enter into an industrially linked project partnership in these general terms.

What the School of Mechanical and Aerospace Engineering expects to facilitate:

- To give you, the industrial partner, the opportunity to participate in a 30 minute supervision meeting every fortnight in term time, with academic supervisor and student present.
- To provide a response to questions relating to progress of the work being undertaken in a reasonable time-scale.
- To provide a copy of the final report and any artefacts to you, as the industrial partner. In the case of hardware, cost of required components and assembly should be covered by you, the industrial partner.

What you, as the industrial partner, should expect to offer:

- To commit to at least two project meetings at the University per term. (The recommendation would be weeks 3 and 9 of semester 1 and weeks 2 and 5 of semester 2).
- Beyond two company visits off-campus per semester by the academic staff or student, travel costs will be covered by the industrial collaborator.

Industrially Backed Project Initiative

- To make best efforts to ensure that there is a single regular contact person available to liaise with the project student and academic supervisor (rather than a succession of different staff), and provide timely response to questions.

Placement (Summer or Full Year) Students

- In the instance were a student, returning from a yearlong or summer placement, has the backing of the University and industrial collaborator to carry out a follow on project, the company must confirm that the work to be completed is novel and solely originates from the student.
- In all other cases the company cannot specify a particular student to undertake the work and it will be open to all final year project students.

Costing

- Based on typical Project costs in the 2016/17 Academic year the School will seek financial backing of £4000 for facilitating an industrially backed project.
- If the industrial partner has a standing relationship with the School (i.e. membership on the industrial advisory forum) the cost will be reduced to £2000.
- If the industrial partner is currently involved with the University via an ongoing funded project no additional contribution will be sought.*
 - *Any project involving the University and Industrial Partner from which the University is receiving financial support (examples include Horizon2020, Knowledge Transfer Partnerships, industrially backed PhDs, etc.)
- Payment in the form of in-kind contributions can be made in the form of materials or machine time (not available within QUB) to a maximum of 50% of the cost. Industrial staff time will not count toward in-kind contribution.
- Additionally there is scope to carry out zero cost projects via charities or social enterprises.

IP

- Each party will retain ownership of any background IP they introduce to the project.
- Should new foreground IP arise both parties will share both the cost of pursuing IP protection and any financial benefits gained on a 50:50 basis. The 50% retained by the University will be dispersed subject to University Policy.
- Should either party choose, by agreement, not to pursue IP, the other is free to pursue it independently.

Licensed Software

- During the course of their studies at QUB, students may use software or datasets licensed to QUB by the owners of the software or datasets. A student must use such software or datasets solely for academic or educational purposes. Use for other purposes (for example commercial purposes) may well result in the student or QUB being in breach of copyright and facing legal action for copyright infringement.
- Documents/Files/Drawings etc. created using software for which the University holds an academic licence cannot be transferred to the industrial partner.
- As a consequence, in the completion of industrially backed projects students are restricted to using software for which the industrial backer retains a valid licence agreement (which will be made available for the student as required).

Industrially Backed Project Initiative

Health and Safety

- The University and industrial collaborator must exercise a “duty of care” to employees and to those under supervision and this duty is recognised in both criminal and civil law.
- Upon visiting an industrial collaborator both staff and students should be given all necessary health and safety training and Personal Protective Equipment (PPE) and this should be recorded.
- Likewise, upon visiting the University staff from the industrial collaborator should also be provided with any necessary health and safety training and PPE and this should be recorded.

Additional notes:

- Supervisors are not expected to act as consultants to the company as part of the project; their role is as an academic supervisor. Such consultancy arrangements are not prohibited, but require additional consideration and negotiation, and are not guaranteed approval.
- During the course of the project all communication should include all parties i.e. student, academic staff and industrial collaborator.
- In the event that a company has to withdraw its formal support for a project, the School would expect that the company continue (as far as is possible) to provide any resources, licences, information etc. that were initially agreed upon for the duration of the project.