



INTERESTED IN PARTICIPATING IN DMEM'S INDUSTRIAL PROJECTS?

What?

The DMEM Industrial Projects scheme enables companies to engage with the Department by setting project topics for student teams. Over the years we have helped a large number of companies, from startups to multinationals, to explore new ideas, concepts and systems over the course of an academic year. Collaboration as part of the scheme can help organisations who lack the necessary time or resource to turn ideas into reality.

Why?

Participating companies have experienced a number of benefits:

- Access to University equipment, resources, cutting edge technologies and techniques
- Leadership and management training opportunities for young staff
- Opportunities to experience the latest design methodologies with a view to improving company design processes
- Access to enthusiastic senior undergraduate and postgraduate students

How?

Development teams consist of senior undergraduate and postgraduate students from product design, manufacture and management related degree programmes. A company representative is appointed to liaise with the team. Teams are allocated a DMEM academic mentor who provides support and guidance throughout the project to ensure the project deliverables are met. The mentors include both University staff and Royal Academy of Engineering visiting professors.

When?

Projects normally run for the majority of one academic year (September - May). Significant emphasis is placed on project management, and the team is expected to take a best practice approach to documentation and coordination of all project activities.

Students meet at least once per week in the DMEM studio space to discuss progress with academic staff.

Teams have access to DMEM's state-of-the-art Digital Design and Manufacture Studio (DDMS), including virtual and rapid prototyping.

The final project report may be accompanied by a prototype, CAD layouts, experimental data or other identified deliverables.

“

We find the DMEM projects provide a different and refreshing perspective... last year's project was particularly successful and is being prototyped for possible production. We have also had a number of graduates working with our team, all of whom have gone on to full-time employment.”

Dr David Sykes
Separations Project Leader, Hoover

Project format

Once a brief has been finalised between the client company through preliminary discussions, the project is allocated to a suitable team of either single discipline or multi-discipline students.

Projects are related to the areas of product design and development, manufacturing and engineering management. Examples include the design and prototyping of a countertop dispenser for a soap manufacturer, process improvement at a bottling plant using simulation analysis, and the development of a CSR strategy for a high-end audio company.

Projects are best realised through commitment and active involvement. The client company, University and student team each appoint representatives who are readily available to communicate and liaise on a regular, informal basis. There are four stages to each project (see opposite) with associated milestones. At each milestone formal feedback is required of the client company - this engages both the student teams and clients in presentations or meetings to reach shared decisions.

“

Deb found this a highly rewarding scheme, not only in terms of design output but also in the working relationship formed with the students and University. As such, it has been a valuable developmental experience for many of our staff.”

Dean Limbert
R&D Manager - Design, Deb Group

Brief

Once a project has been agreed a development team and University mentor are appointed. The client, mentor and team then meet for formal discussions to ensure all parties are clear on the content of the project brief.

Definition

A thorough investigation is carried out to define the parameters and criteria to take the project forward. This may be presented as a design specification, layout schematic, gap analysis, or other appropriate format.

Conceptualisation

The team typically develops a range of concepts and solutions to the particular problem, identifying avenues for development as the project progresses. For example, rendered CAD models may be generated, evaluated and presented to the client. A key outcome of this stage is clarity on final project deliverables.

Realisation

The final project solution typically includes a report which should be of strategic benefit to the client organisation, accompanied by supporting models or drawings as appropriate.

Department of Design, Manufacture and Engineering Management

T: 0141-548 2091

E: dmem-adminteam@strath.ac.uk

