Department of Mechanical Engineering

External Advisory Board (EAB)



External Involvement Opportunities

Student Education

Group Business & Design Projects (undergraduates – year 3)

In the 3rd year of the 4-year MEng degree, groups of 5 or 6 students undertake engineering design projects full time from February to May. These projects are normally set by external company collaborators to meet real industrial needs. They may include the design of products, systems or processes. Students determine customer needs and draw up specifications, and undertake marketing studies, conceptual development, financial appraisal, technical calculations, detailed design, part identification etc. If you would like to suggest a project brief and sponsor a project (there is no cost, just your time to provide some guidance) please get in touch. We also need external reviewers to join the panel which undertakes mid-project design reviews.

Contact: MEGDBPCoordinator@bath.ac.uk

Final Year Projects (undergraduates – final year)

Do you have a research or design topic that would be appropriate for one of our Final Year students to explore? This could include detailed analysis or simulation work, or prototyping and experimental investigation. Students work on scoping their projects from October each year, and then are full-time on their projects for 3 months from February. If you would like to propose a project, please get in touch via your Academic contact, or directly as below.

Contact: Roger Ngwompo ensrfn@bath.ac.uk (Final Year Project co-ordinator)

Student Consultancy Projects (MSc students)

Also known as "Practice Track", our Faculty of Engineering & Design and School of Management joint MSc programmes give our students the option to work with our industry partners, creating solutions to current engineering management, commercial and research challenges. Our new automotive engineering and technology MSc suite has an equivalent project activity. Between June and September, a small diverse team of students will apply a range of techniques and analysis, utilising the latest research available to address the challenge. Do you have a R&D project that you currently do not have the resource to solve? Or perhaps you require an innovative solution to an existing issue. Our students could offer you a fresh perspective, a multicultural approach whilst learning from professionals with expertise in your sector.

Contact: Peter Mott pm829@bath.ac.uk (Engineering Management),

Daniel Coren dc2028@bath.ac.uk (Automotive)

Big Team Challenges (MSc students, engineering management)

Small groups of taught Postgraduate students take part in Big Team Challenges with corporate industrial partners. The partners set engineering management challenges for teams to work on and answer queries on this over a few hours in one session. The students work in consultancy-style groups to deliver fresh ideas on the challenges. If you have a challenge you would like to explore with our students, please get in touch.

Contact: Pippa McLernon pm729@bath.ac.uk (Postgraduate Partnerships Manager)

External Integrated Projects (undergraduates – year 3)

A small number of our 3rd year undergraduates undertake an EIP instead of a Group Business and Design Project. In an EIP, a student works on a specific project set by a company and is embedded in the company.

Contact: Alexander Lunt ajgl20@bath.ac.uk (EIP Co-ordinator)

Guest Lectures and Case Studies (all students)

Do you have expertise in a subject or discipline that you think might be appropriate for our Undergraduates, MSc students or PhD students? We always welcome hearing from those with interesting industrial experience that intersects with application of academic content. You might be able to give a guest lecture, or provide us with information about case studies which brings our teaching to life.

Contact: Debbie Janson djj32@bath.ac.uk (Deputy Head of Department)

Vertically Integrated Projects (all students, university-wide)

Since 2019/20, the University of Bath has been developing Vertically Integrated Projects (VIPs), which are innovative research and applied learning projects that enable inter-disciplinary, multi-level teams of students to work with a member of academic staff on long-term real-world projects. We are the first University in England to develop VIPs. VIPs are an attempt to create sustainable, research-engaged communities of staff and students - both undergraduate and postgraduate - who work collaboratively on live projects. Our students come from a range disciplines or fields and from across year groups, enabling more experienced students to support other student team members, and allowing everyone involved to work closely with researchers or senior staff. To find out more, click here <u>Vertically Integrated Project</u>.

Contact: Vertically-Integrated-Projects@bath.ac.uk

Programme Content (undergraduate and MSc programmes)

It is vital for us as a world class Department, that our programme content remains relevant to students entering industry. We would very much appreciate input from external advisors to help us ensure that this happens. Please get in touch if this feels like something you could support or advise upon.

Contact: Andrew Plummer arp23@bath.ac.uk (Head of Department)

Placements and Careers

Placement year (undergraduates between year 2 and 3 of academic study)

About 70% of our undergraduate students take a paid placement year in Industry. This provides them with invaluable experience. Organisations gain fresh input from our bright, motivated students and placements also work as an excellent talent pipeline for graduate recruitment. Consequently, most of our placement partners recruit students year on year. We have a proactive team of people in the Placements Office that work with you to promote your opportunities and ensure that the relationship progresses well throughout the placement year. If you would like to find out more about having a placement student, please get in touch or have a look at our webpages.

Contact: Vicky Hill <u>fac-eng-placements-team@bath.ac.uk</u>

Graduate recruitment

Are you looking to recruit graduates from the University? If you would like to promote your opportunities to students across the University you are welcome to advertise directly to our finalists or alumni via the Careers Service site. You can <u>register at this link</u> or see our <u>Careers Service web pages for employers.</u>

Contact: recruit@bath.ac.uk

If you have any specific enquiries around MSc students from the Department of Mechanical Engineering, contact Pippa McLernon.

Contact: Pippa McLernon pm729@bath.ac.uk (Postgraduate Partnerships Manager)

Research collaboration and knowledge exchange

Research collaboration

A big part of our activity as a Department is research. Research projects are long-term activities (typically at least a year) which generate new knowledge and understanding. Much of our research is motivated by solving real-world challenges and is usually collaborative with industry. Research can be funded by government or industry or a combination, including EPSRC, EU or Innovate UK. Our areas of expertise can be seen on our webpages under the 'Research' tab, and also under the 'People' tab for expertise of individual members of academic staff. If you have a potential area of research collaboration, we'd be keen to discuss. Dr Carl Sangan is our Director of Research and can help direct you to the best academic for an initial conversation. We also have a dedicated team of University specialists, our Research and Innovation Services team (RIS), who provide help to develop proposals and run projects. If you would like to explore forming a collaboration with the University please get in touch.

Department contact: Carl Sangan cms20@bath.ac.uk (Director of Research) RIS contact: Steven Boakes sb2577@bath.ac.uk (Business Partnerships & KE Manager)

Knowledge Transfer Partnerships

A KTP is a partnership between a company and the University. We jointly recruit a KTP Associate – a talented graduate or post-graduate - who is employed by the University to work at the company premises. The Associate works on a specific development project which exploits expert knowledge available at the University for the benefit of the company. Around 60% of Associates are offered a permanent position by the business when the KTP is complete. KTPs normally last between two and three years. You can find out more here.

Contact: ktp@bath.ac.uk

PhD research projects

We are able to attract highly capable PhD students to undertake in-depth 3-year research projects leading to the award of their degree. Many of our PhD students work directly on industry-based projects, funded in full or in part by industrial partners. Some of these are linked to our Centre of Doctoral Training (CDT) in Advanced Automotive Propulsion Systems (AAPS), and we also partner with Computer Science in a CDT concerning Artificial Intelligence. If you would be interested in proposing or collaborating on a PhD project please get in touch.

Contact: Oliver Pountney ojp20@bath.ac.uk (Director of Postgraduate Research Studies)

Commercialisation of Research

Do you have experience of commercialising research or technology that you could share with our world class academics? This can be in the form of seminars, guest lectures or collaborations. Or do you wish to assist with progressing commercialisation processes? Please get in touch if you'd like to discuss.

Contact: Vimal Dhokia vd209@bath.ac.uk (Deputy Head of Department))

Consultancy

Short projects to access the expertise of academic staff can often be undertaken on a consultancy basis. The expertise of staff can be seen on our <u>webpages</u> under the 'People' tab, and staff with the appropriate

skills can be contacted directly. The University consultancy manager can be contacted for general questions on how consultancy is run, or to help find a suitable expert.

Contact: Julie Chambers jc277@bath.ac.uk (University Consultancy Services Manager)

General

Mentoring Support (all students)

Would you like to "give something back"? Do you have invaluable knowledge and experience that could benefit our students? We are looking to offer mentoring relationships to our student cohorts, and more specifically for our under-represented minorities. If you feel this is something that you'd be willing to support, please get in touch.

Contact: Debbie Janson <u>djj32@bath.ac.uk</u> (Deputy Head of Department) Bath Women in Engineering Society (WES) contact: <u>WESBath@bath.ac.uk</u> Bath Black Engineering Society contact: <u>bathblackengineering@bath.ac.uk</u>

Networking Events (all students and staff)

We are looking to hold Networking Events with Students, Staff and our Industrial partners. We also have specific groups for under-represented minorities that regularly hold events. If this would be something you might be interested in attending, supporting (via a trade style stand) or presenting at, please get in touch.

Undergraduate contact: Vicky Hill vlh26@bath.ac.uk (Placements Manager)

MSc contact: Pippa McLernon pm729@bath.ac.uk (Postgraduate Partnerships Manager)

Bath Women in Engineering Society (WES) contact: wESBath@bath.ac.uk

Bath Black Engineering Society contact: bathblackengineering@bath.ac.uk

Department Strategic Initiatives

Sometimes within the Department, we embark on strategic, operational or improvement initiatives. We recognise that we could learn a lot from efficient and effective working practices in organisations outside of the University. If you feel that you could offer expertise in these areas, please get in touch.

Contact: Sarah Stead sls39@bath.ac.uk (Operations & Projects Manager)

Subject Matter Experts

Do you have a specific area of knowledge and expertise that you would like to share with the Department (with either students or staff)? We would be interested in keeping in touch with you so that we can ensure that our programmes remain relevant, and that our research is can be exploited by users. If you would be interested in having an informal discussion, please get in touch via any of our academics, or as per below:

Contact: Andrew Plummer arp23@bath.ac.uk (Head of Department)

Policy, Regulations and Standards

If you work in policy, regulations or standards in an area relevant to the Department, and would like to collaborate or get involved in associated research, please get in touch.

Contact: Andrew Plummer arp23@bath.ac.uk (Head of Department)

Marketing

If you have any news-worthy content that you think would help our Marketing Team promote the achievements of our students, alumni or staff, or show the impact of our research, we would be delighted to hear from you.

Contact: Faculty Marketing Team: fed-marketing@bath.ac.uk