## Faculty of Engineering Engineering | Product Design



# Collaborate



### Bachelor of Product Design







Limitless possibilities come from combining creative design, science, engineering and business. Do you have the right combination?

The School of Product Design is looking to engage with organisations, to collaborate on projects bringing together design and engineering, aesthetics and technology, to develop creative user focused solutions which organisations may not normally have time, or the resources, to consider.

Image:

Project Brief: Lamp Shape, using laser cutting 1st-Year Product Design Principles course by Emily Bosma and Bella Harris (2019)



## Becoming an industry project partner

We have students, who have the right combination of creative design, science, engineering and business, studying in the fields of Applied Immersive Game Design, Chemical Formulation Design, and Industrial Product Design, who are keen to engage with industry and work on real-world projects.

#### Create a win-win

Let us connect you with our community of students, and academics. We want you to challenge them with the projects that will help your business grow and innovate, and at the same time you will be helping shape tomorrow's industry and community leaders.

#### Don't miss out

Student numbers are limited, and vary from year to year, so if you are keen to take advantage of our creative students, we recommend talking to us early to avoid missing out.

Contact us if you have differing needs around time-frames, or need support in identifying a project, or project outcomes.

#### **Industry Project Partner Facts**

#### Cost

- Costs are negotiated on a case by case basis, depending upon the project. As a guide we would recommend budgeting NZ\$5000 for this.
- Whilst the School of Product Design can supply some materials and software, it is expected industry partners will supply materials for prototypes, and any specialist software required not already owned by the University, to ensure the success of the project. Any additional costs will be agreed with the sponsor in advance.
- The partner will need to invest time with the student, to ensure the best outcomes for the student and the partner. This time commitment can vary from project to project. It is regularly noted by past partners that the more they engage with the student the more value they get out of the process.

#### **Project selection**

For a project to be selected, it must satisfy the following requirements to ensure it benefits both the students and the sponsor:

- The School is able to offer appropriate academic expertise and appropriate resources.
- Students have prerequisite skills to undertake the project.
- The project is suitable in technology, content and scope.
- There are no existing or potential conflicts of interest for the University or the School.
  In our experience, projects are of particular benefit to industry when the work does not distract from the normal operation of the business/organisation or have time-critical outputs from students.

#### **Project Timeline**

- Final submission date for a project proposal is: Thursday 30th une 2022
- Project start date is: Early July 2022.
- The projects typically take five months, allowing for holidays and other breaks along the way.

• The initial meeting with the company and project participants will take place during the first week.

• Project end date: Early November 2022.

#### **Project outcomes**

• Project outcomes typically include: product ideation and design concept sketches, proof of concept or prototypes; analysis; feasibility studies; or, test data. Outputs include progress reports, a final report, a presentation or a demonstration, in addition to project meetings throughout the year.

• Sponsors often say that their project provided an effective way to meet future recruits and it is quite common for students to subsequently become employed by their sponsor.

• For our students, industry projects are a key element for their learning and development. The opportunity to work on real-world problems, and collaborate with real clients, is one of the final steps to ensuring our graduates are industry ready.

• Confidentiality is designed into the programme and students sign a non-disclosure agreement. Project outcomes will only be shared

publicly if and when the sponsor agrees.

"If you think good design is expensive, you should look at the cost of bad design."

Ralf Speth, CEO of Jaguar Land Rover



Image:

Project Brief: A biodegradable foamed product using starch and chitosan 2nd-Year Students: Thea Roughan, Emma Glover, Gemma Thompson, Lucy Hayes

## Industry projects

Organisations are increasingly turning to design led thinking and creativity, combined with science and engineering, to innovate and grow their businesses. Product Designers are one of the newest professions to come from this demand, bringing together design, engineering, aesthetics, technology and business skills to deliver user-centric solutions.

The Bachelor of Product Design combines design, business and science/engineering. Our students are studying at the forefront of modern practices in the fields of:

- Applied Immersive Game Design,
- Chemical Formulation Design, and
- Industrial Product Design.

#### A guide to projects

To give you an idea about the types of projects that could be considered, but not limited to, please see the following descriptions.

If you have a project idea and you are not sure if it is suitable, please contact us. We are really happy to talk to you about your project idea.

#### Applied Immersive Game Design

Applied Immersive Game Design students are prepared with knowledge of the product design process, game design and structure, coding, game engine use, and immersive interface design to create new applications that take advantage of the rapidly emerging ability of 3D technologies to place users within, and in control of, virtual or augmented reality spaces and systems.

#### **Chemical Formulation Design**

Chemical Formulation Design students are trained in chemistry, formulation science, product design and marketing, making them not only ready for the innovative and generic over-the-counter product industries, but also for all sorts of chemical products including cosmetics, fragrances, paints, foods, adhesives, and many household products.

#### Industrial Product Design

Increasingly, many industrial designers work in multi-disciplinary collaborative 'clusters'. They also work in design departments for large manufacturing companies, design or engineering consultancies, and architectural practices. They do design work for businesses in many areas, including:

- furniture
- electronics
- packaging
- recreational and sports equipment
- medical appliances
- consumer goods
- vehicle design
- ergonomics
- entirely new fields/inventions.

"Most people make the mistake of thinking design is what it looks like. People think it's this veneer – that the designers are handed this box and told, 'Make it look good!' That's not what we think design is. It's not just what it looks like and feels like. Design is how it works."

Steve Jobs, CEO of Apple Inc.



## Submit a Product Design Project for 2022

If you have a project idea - half a page is sufficient at this stage (the brief can be refined later) - please email the following information to engindustry@canterbury.ac.nz:

- Title of the project.
- Contact name and contact details for the project.
- Summary of your expected project outcomes, for example, what you want to achieve or the problem you would like to solve.
- Constraints and/or expectations that need to be taken in to account for the project.
- Indicative number of students your business/ organisation would like to work with for the project.
- Support (time, resource & equipment) your business/organisation will provide.
- Any other information you consider relevant. Or complete the online form:

www.canterbury.ac.nz/engineering/industry/ project-sponsorship



