BA Industrial Design and Technology

This Industrial Design and Technology BA (Hons) degree will equip you with the skills and understanding of product form, usability and interaction to develop and communicate design ideas, product styling, 3D designing, and the production and use of prototypes as a part of design practice.

The degree specialises in the development of skills and ability in the design and communication of ideas, interactions and user experiences, with a focus on three-dimensional design, product styling and form, user research, materials, manufacturing processes and the production of prototypes and finished artefacts. This will involve you concentrating on the creative form and aesthetics of contemporary and future manufactured products.

BSc Product Design and Technology

This degree will equip you with the skills and knowledge of usability, electronics, mechanics and interaction to develop and communicate design ideas; product styling, 3D design and the production and use of prototypes as a key part of design practice.

The main aim is to broaden your theoretical and working knowledge of the entire design process, from conception through to manufacture. This includes developing core skills and knowledge of product development, communication, product styling, three-dimensional design, materials, ergonomics, the techniques of planning and costing, manufacturing processes and the production of prototypes and finished artefacts.





Han-Lin Li

PhD Student, Loughborough Design School

Hydrogen is already proven to give clean energy, allowing vehicles to travel long distances without the need to regularly recharge; the only waste product is pure water.

But hydrogen is sensitive to flame – basically it explodes quite easily. It must be handled professionally. In reality todays hydrogen vehicles are safe; we do though need to build



public confidence and prepare drivers to understand their vehicles and carry out basic repairs.

I hope the impact of my research will be that every driver has the desired knowledge, confidence and skills to handle a hydrogen fuelled vehicle. I want to support people to learn about their car while they are driving it without putting them under more pressure.

"Design is about finding a solution to change the world – that people will use; a solution that is acceptable to the general public and the user."

Education

- **Post 16** A Levels Maths, ICT, Physics & Economics (dropped Economics for A2)
- **HE** BEng Mechanical Engineering and MSc Advanced manufacturing and management

Now studying for a PhD combining elements of Ergonomic and Human factors and Transportation Safety

Han's experience as a student

My undergraduate degree focussed on front line technology so I learnt all the skills to create a scientific solution but then I wanted to focus on the person and how they interact with the technology.

I saw an advert for a postgraduate programme integrating human factors into technology and realised that this was important for me. I also felt that it would give me more career potential, as it's so important to industry.

I didn't know it would be this helpful but did feel that it would give me more options.

My advice: Choose science subjects then depending on your open day visits you can choose your final subject to give you both BA / BSc courses.

When I chose my A Levels I didn't know what I wanted to do I was thinking economics, finance so I kept that open but to be honest I didn't do that well in economics and that helped me realise it wasn't for me. It might have helped me if I'd studied Chemistry but if you know exactly what you need then you can learn that part specifically.

Career

Fold

Fold fold

fold

fold

Fold

fold

fold

fold

I like to solve problems, that's why I chose to study engineering to begin with. During my undergraduate studies I realised that I like to find the most front line problem and solve it by myself. So, I wanted to do a PhD where you find a problem and solve it your way.

Why did I choose to research vehicle design? Because I realise that in the end it's about the human; if the design doesn't satisfy the user then they won't use it. The solution has to be a real world solution – one that appeals to people other wise it will only ever appear on paper. My aim is to design a hydrogen fuel cell vehicle that people will confidently drive.

I use a wide variety of information to help combining the knowledge together with the aid of computer software I can accurately predict the explosion size in an accident scenario.

From my research experience there is no single solution – its about a combination of knowledge- need a bit of everything.

Ultimately I want to make sure the solution I provide satisfies the consumer – so they will buy it, so they will use it, so it can help to change the world.



To find out more about vehicle design check out the Transport Safety Research Centre pages:

https://www.lboro.ac.uk/departments/design-school/research/ transport-safety/