

How Product Design changed my life:

Sitting here just over 5 years into my Engineering Career and lucky enough to now work for Mercedes Formula 1 Team, I can honestly say the decision to take Product Design up to A level, really has enabled me to get where I am and will continue to help as I progress.

The key is **creativity**! My advice to any budding Engineer is, in order to get yourself ahead in industry, do not underestimate the value of developing those creative skills. The focus moving to uni applications is on those maths and sciences, but I am so glad I made the decision to add Product Design alongside those. Whether it's software development, automotive engineering or even in the technical project management, having that ability to embrace creative problem solving and even presentation skills is so valuable.

When you study Product Design, you're always thinking about the 'experience', whether it is the obvious user experience of the product you are designing; or the person reading your coursework or even you when making the product. This ability to put yourself in different scenarios and consider different contexts is an absolutely critical skill that I pride myself on having developed and which has enabled me to succeed in many aspects of my career so far. A couple of broader examples I have from my experience:

- Prototype testing at Jaguar Land Rover – whether it be on track or in the wind tunnel, the ability to think of approaches to best create engineering solutions that not only allow you as a test engineer to make it on the spot but would also be something that could feasibly become a productionised part. This requires a lot of awareness of the context beyond the immediate performance challenge you are trying to resolve, and it's the ability to think of designing for manufacture that you will learn in Product Design which will enable this perspective to grow.
- Data Presentation – from technical Aeroacoustic frequency plots to project timing data, making that slide which draws attention and gets your message across is critical. So, being able to put yourself in the viewer's shoes enables you to excel at this in an industry where many struggle with communicating their own understanding of a complex topic.

Also, advice for when you are sitting there in the depths of coursework and struggling to see the end: that ability to clearly and creatively 'tell the story' which you are currently developing, is what will get that Director to sign off that ground-breaking piece of development or that Fund to invest in your start-up. You could have completed some of the best testing and have some

fantastic data sets, but without the ability to lay that data out in a clear way, you will struggle to get others as excited as you. As a rule, the more complex the data or the product you're presenting, the more creativity is required to find a way to best present it in a digestible way.

What have I done since leaving SHS?

- Master's degree from Durham University in Engineering (Specialising in Mechanical).
- 4 years at Jaguar Land Rover with the Aeroacoustics Department – a few highlights within that time:
 - Co-author of 2 academic papers/conference presentations on Acoustic Beamforming working with international teams of engineers.
 - Completed approximately 1750 hours of testing in the FKFS Aeroacoustic wind tunnel facility at Stuttgart University, Germany.
 - Worked on the development of the Evoque and Defender product line over design and testing phases.
 - Lead for Aeroacoustics attribute test and development on the New Range Rover, from initial design to shipping products to customers.
- 9 months as a Project Engineer within the Planning team at Williams Formula 1 team. Responsible for the Project Management of the FW44 Suspension, Body Work, Rear Wing and Brake Ducts from R&D projects up to having the final car at track for Race 1 of the 2022 season.
- In my current role at Mercedes Formula 1, I am responsible for Project Management across the Test & Development design and lab facility, and I also look after Pit Equipment design too. The role is a new one for the company, which is great as I have the scope to mould it into what I feel is required to optimise the efficiency of these groups which is critical in the cost cap world.

I've attached a photo of me with the 2nd place trophy George Russell won during my time at Williams F1. Unfortunately, I don't have one yet at Mercedes F1, as I made the statement when I joined that I wouldn't get another trophy picture until it was a race win. Little did I know with the 8 time champions, I would be nearly 8 months in and I would still be waiting 😊.

