



WHY IT MATTERS... MECHANICAL ENGINEERING



Loughborough University

James Littlewood

Graduate Engineer

My degree subject matters to my job because it has taught me the skills of critical thinking and given me the ability to solve complex numerical problems. My degree was a lot of mathematics which I don't use daily, but I need to understand the fundamental maths to understand my job.



My current role in maintenance is a lot more practical and hands on than my degree but I do enjoy this because it is something different and doesn't consist of always being in the office. I believe that in the future my degree will become more relevant the more technical and the more challenging my job becomes overtime.

Post 16 Education	Higher Education
BTEC Mechanical Engineering	HNC Mechanical Engineering BEng Mechanical Engineering

I really enjoyed GCSE maths and sciences and having achieved average grades I decided to do a higher education apprenticeship with a company that specialised in the design and manufacture of medical devices. During my 4 year apprenticeship I attended college and gained my Level 3 BTEC, then (on a day release program from my employer) a Level 4 HNC. Once I'd finished my 4-year apprenticeship I decided I wanted to go to university and become a full-time student. I joined Loughborough on a foundation programme - a bridging programme for students who don't have A levels/ the correct A levels to study their chosen course. Post foundation year I progressed onto the full-time Mechanical Engineering degree.

Why did you choose Mechanical Engineering?

I wanted to pursue my subject at degree level because I always felt like I never had enough time at college to fully understand the fundamentals of mechanical engineering. Studying mechanical engineering at a degree level has allowed me to study different modules of interest. Such as heat transfer, internal engine combustion and finite element analysis that I would have never been able to study if I didn't go to university.





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James' advice: Don't rush, you don't have to go to university at 18 years old. There are plenty of options for young people. You can go into full time employment; you can do a higher education apprenticeship where you can study and work at the same time or you could take a year out to go travelling. I went to university at 20 and it took my 5 years to complete my degree because I wanted to make sure that it was the right degree and that I got the most out of my university experience.

James' experience as a student

Studying at Loughborough University was an amazing experience, it allowed me to meet people from all different backgrounds of life and to get involved in activities that I would have never had the opportunity to do. I chose Loughborough University because it had an amazing foundation programme that was well structured and organised. Also because it has a fantastic campus and hundreds of clubs/societies. During my time at University I was part of several different clubs and societies including Surf, Yoga, Boxing, Kickboxing and Ultimate Frisbee. I was fortunate enough to go on trips to Spain, Croatia and Fuerteventura.

One of the highlights of my university experience was travelling to Kiev the capitol of Ukraine as part of a research trip with my final year project tutor. During this trip we explored Kiev for 5 days and spent time at the National Institute Academy of Science of Ukraine which was an amazing experience.

James' Career

I am currently on a three-year graduate scheme with a company called Total on their Lindsey Oil Refinery platform. Total is a major energy player, which produces and markets fuels, natural gas and low-carbon electricity. My current role is all about planning and organising day to day maintenance of the mechanical equipment onsite. This equipment must be kept at a very high standard so that it can operate in a safe and efficient condition. These are things like valves, pumps, turbine, heat exchangers and furnaces. I got here by doing a placement year during my third year of university at the Lindsey Oil Refinery, this was only possible because of the brilliant industrial connections Loughborough University has.

Loughborough University offers degrees in

Mechanical Engineering, Engineering Management

Please note: Degrees and their titles change over time. Some graduates may have studied degrees that have evolved and changed in response to changes in demand from employers.