

MR. NIALL MADDEN

**STRESS ENGINEER
BOMBARDIER AEROSPACE,
BELFAST, UK**

www.bombardier.com



Education and Training

→ B. Eng. (Hons) Aeronautical Eng, University of Limerick, Ireland, 2009

Current Position

Title	Dates	Employer
Stress Engineer	Aug 2009 - Present	Bombardier Aerospace, Belfast, UK

Previous Positions

Title	Dates	Employer
Design Engineer	June 2007 - Jan 2008	Lola Cars, Cambridgeshire, UK

"Home" Town(s)/County(s)

Naas/Newbridge, Co. Kildare

Please describe your current job

As a stress engineer at Bombardier Aerospace I am responsible for ensuring that the aircraft we design and build are strong enough to be flown safely for their intended use. I work on the Learjet and Challenger programs which are business jets that can seat up to 19 people and travel at speeds of almost 550mph. I use computer programs or sometimes just a simple pen and paper to perform calculations, making sure that the structure we design is safe. I attend meetings and take part in conference calls to other Bombardier locations in Canada, America, and China to deliver my results and advice to fellow engineers.

I am currently based in Belfast, Northern Ireland but will eventually get opportunities to work abroad in other Bombardier sites around the world. One of my favourite parts of the job is that we get a half day on Fridays 😊!

It is exciting to be involved in the design of such impressive machines and I am thankful that I am able to do my dream job.

What made you decide to study Aeronautical Engineering at UL?

Ever since I was young I have had a fascination with racing cars and aeroplanes. I was always intrigued as to how man could create such machines. Coupling this with my aptitude for maths and the sciences I felt Aeronautical Engineering was the perfect choice for me. It was the only aero-specialist course in the state and the university had a good reputation as an academic institution

Are you glad you did?

Yes. The degree has put me in the perfect position to pursue the career I have always wanted.

What did you most enjoy about studying at UL - academically, and also non-academically?

The variety of subjects taught, the hands-on laboratory experience, and the helpful and patient lecturers made my academic experience at UL very rewarding. UL is also located in a beautiful setting with riverbank walks and acres of land to stroll about on. The sports facilities are without a doubt the most impressive of any university in the country!

Where did you do your COOP?

I did my COOP at Lola Racing Cars in England. As an undergraduate design engineer at Lola I was responsible for designing and testing components for different racing cars. On weekends I travelled to races to provide track support to our teams. I also performed some wind-tunnel testing on 50% scale model cars to improve the car's aerodynamics. I was able to use a lot of what I learned at university, and the job was very interesting and rewarding. I believe that my COOP experience enabled me to get an advantage over other graduates when applying for jobs after university.

What advice would you give school-goers considering choosing Aeronautical Engineering?

The course can be challenging if you are not motivated to improve your knowledge in key areas of maths and the sciences. So prepare to work hard. But if you enjoy problem-solving and logical thinking then this is the perfect course. University will be some of the most enjoyable years of your life and of course having fun is important, but striking a good work-play balance is essential to maximising your experience in Limerick.

What advice would you give future graduates of Aeronautical Engineering?

Sell yourself. Be proud of what you have learned and what you can do. Employers aren't doing you a favour by giving you a job - they NEED you to exist. Have this mentality and confidence in your abilities and interviews will become a great deal less stressful.

