

Graduate Profile, Aeronautical Engineering, University of Limerick, Ireland
CONOR GALLAGHER

MR. CONOR GALLAGHER

PROJECT ENGINEER - SUBSEA DESIGN

**MCS KENNY LTD.
GALWAY CITY, IRELAND**

www.mcskenny.com



Education and Training

→ B. Eng. (Hons) Aeronautical Eng, University of Limerick, Ireland, 2002

Current Position

Title	Dates	Employer
Project Engineer - Subsea Design	Dec 2008 - Present	MCS Kenny Ltd, Galway, Ireland

Previous Positions

Title	Dates	Employer
Lead Fuel Systems Engineer	Mar 08 - Nov 08	Airbus UK, Bristol, United Kingdom
Fuel Systems Supplier Manager	Jan 07 - Mar 08	Airbus UK, Bristol, United Kingdom
Fuel Systems Engineer	Jul 05 - Jan 07	Airbus UK, Bristol, United Kingdom

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

Galway City currently. Originally from Co. Mayo. Lived in Bristol for almost 4 years.

Please describe your current job

I currently work as a project engineer with MCS Kenny Ltd. It is an engineering consultancy that delivers subsea engineering solutions to the worldwide oil and gas industry. Clients include Shell, BP, Chevron and many other major oil companies and contractors around the world. It is a market leader in the design of subsea riser systems with a core area of expertise in the design and analysis of flexible, steel, top tensioned, hybrid and drilling risers.

I primarily work in the design and analysis of oil drilling risers. Drilling risers

are used when drilling for oil. They consist of a large diameter pipe that connects subsea equipment to a surface drilling rig. This enables a massive drill bit to drill several miles below the seabed in the search for oil. The subsea equipment is essentially a set of valves that controls the flow of hydrocarbons (oil) from the subsea reservoir. Due to the high pressures and the quantity and complexity of hardware involved, both above and below the seabed this is a very challenging and exciting job.

A very interesting part of my work is understanding how waves and currents cause ships and vessels to move and the effect this has on equipment connected miles below the sea. I do this using an in-house FEA (Finite Element Analysis) based software tool called Flexcom. It's very interesting, working and analysing equipment on such an enormous scale. Ships and vessels can be bigger than hotels, and valves can be bigger than the average two storey house!

As part of my job I get to travel the world to visit all of the major oil producing regions like Norway, Africa, Dubai, USA, South America, and Australia. The work is always interesting and I get to use a lot of the experience and equations I learned in university! Oil companies spend billions of dollars every year searching for, drilling and producing oil. With the right experience and a lot of ambition it's possible to make a lot of money in this industry!

Please describe your career path since graduating with your B.Eng. Aeronautical Eng.

Upon graduating from the University of Limerick with a B.Eng in Aeronautical Engineering I initially worked for Airbus, one of the biggest commercial aircraft manufacturers in the world. I worked in Bristol in the United Kingdom in the fuel systems department of the A400M programme. This is Airbus's first plane intended for military use. It's used as a tanker aircraft and can refuel fighter jets from its wings during flight.

I started off as an analyst modelling the flow of jet fuel through the fuel system. In less than three years I worked my way up to become a lead engineer in the fuel system team, managing a small team of engineers in the design of the air to air refuelling system. I got to work with world leading experts in many different fields such as wing and landing gear design as well as aerodynamics and safety experts. Every day I had the opportunity to be around aircraft and even climb inside aircraft wings and fuel tanks! I got to travel the world attending meetings and conferences and giving presentations. I got to meet test pilots for the aircraft, who provided great information about the aircraft

handling characteristics the human/machine interface.

If you are willing to work hard there are always great opportunities to be had. I remember particularly the aircraft's first flight. I got to travel to Spain on a private jet to see the event. We even got to meet the king of Spain. Another time, myself and my colleagues spent a week in Las Vegas at a military air to air refuelling conference. We got to meet pilots from Iraq and a top general from the White House. We also had the opportunity to travel to an army base and watch the fighter jets take part in a top gun style training mission called "Blue Flag".

Companies like Airbus are always on the lookout for Irish graduates with a B. Eng in Aeronautical Engineering and the University of Limerick is held in very high regard in this respect. Airbus offers world class training and personal development and provides its engineers with exciting and versatile opportunities. I left Airbus because I felt it was time to move back to Ireland. But the skills that I had developed both in University and with Airbus meant that I could immediately find a job within a different sector of engineering.

What made you decide to study Aeronautical Engineering at UL?

I decided to study Aeronautical Engineering at UL because I loved the idea of being involved in cutting edge and exciting projects involving aircraft. I thought Limerick had fantastic facilities and an exciting course. I loved the idea that I would have access to exciting equipment such as large wind tunnels and I was very excited that part of the course involved taking to the skies in a plane and taking measurements as the plane pulled various manoeuvres.

Are you glad you did?

I am glad I studied aeronautical engineering at Limerick because it has given me the opportunity to have a very exciting and varied career. It has given me the chance to travel the world and see and work with some amazing aircraft.

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

Studying at UL I most enjoyed working with all of the amazing facilities. I enjoyed the topics that were covered on the course like propulsion and aircraft design.

I loved the week long flight test labs where I got to go up in a plane and learn how it operated and moved. I enjoyed the enthusiasm the lecturers had for their subjects.

I also really enjoyed the student life, with great bars and night clubs as well as world class sports and training facilities. There were always lots of societies to join and I made a lot of great friends some of whom I have worked with down through the years.

Where did you do your COOP?

I did my COOP with Lufthansa Technik in Hamburg Germany. I worked in the VIP jets department and was responsible for documenting all the processes and test methods involved with kitting out large private jets. I worked on the world's first private 777 jet and I had the opportunity of walking around the Sheikh of Bahrain's private 747 jet!

The work experience was very interesting and it gave me great insight into how aviation companies operate. It allowed me to make many contacts within the industry. I was given plenty of responsibility and allowed to plan my own work. The experience has helped me in my career to date in that it helped me develop a work ethic of being professional and organised. COOP is a great opportunity to make relevant contacts within the industry. This always gives you an advantage over the competition when seeking a job.

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

Work hard and be ambitious. Get really involved in class projects. Make full use of the facilities and be sure and ask plenty of questions during lectures. Enthusiastic lecturers will be happy to explain material further. Most of all enjoy the learning experience and learn from others. Be prepared to put in some hard work but also be sure and enjoy the great social life that's available.

What advice would you give future graduates of Aeronautical Engineering?

Be confident that your aeronautical engineering degree is a world class degree. Approach your career as such and never be intimidated by any career opportunity.

Companies are always looking for skilled and motivated graduates and engineers - it's up to you to get noticed. Do this by building contacts, networking and most importantly sell yourself in your CV. Always show your employer you are versatile, competent, ambitious and willing to take on new responsibilities. Remain driven and always try and have a career plan. Be ambitious with what you want to achieve. Always keep learning new skills and always try to improve and add to your academic qualifications.