



JOSEPH MCGRATH

MECHANICAL
ENGINEERING GRADUATE



PERSONAL STATEMENT

A focused and meticulous individual with an affinity for learning who enjoys the challenges of working within a dynamic and fast paced working environment.

Uses experience and knowledge gained from previous roles and university course to adapt quickly, think creatively and work effectively as part of a team or on his own.

Recent experience includes a year-long Internship at Airbus UK.



KEY SKILLS

Teamwork | Data Analysis | Writing | Time Management | Coding | Data Collection | Project Management | Decision Making



CONTACT

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UNIVERSITY EDUCATION

COVENTRY UNIVERSITY

BEng Mechanical Engineering (Hons)
First Class (1st)

2016 – PRESENT

3rd (Final) Year

Highlights

As part of my final year at university, I had the opportunity to write a thesis titled "Developing the Electric Charging Infrastructure in the UK to enable nationwide mass-charging by 2029". The project required research to be completed in multiple sectors in order to gain data for deep market analysis.

The thesis was completed to a first-class standard, and I was asked to publish the thesis due to its unique content and new data collected during interviews from business in the industry.

As part of the Mechanical Product Innovation module, a year-long group project was undertaken to design a luggage storage space in a small electric vehicle. This project required the team to follow the full design process from initial ideas to final product. As team leader, it was my job to lead the team through the process by guiding meetings and delegating work as well as taking part in project deliverables. Overall, the project required good presentation and communication skills as well as the ability to undertake market research and use engineering tools such as CAD to develop a final design. This project was completed to a first-class standard.

Key skills: *Presentation skills | Writing Skills | Time management Skills | Teamwork | Research | Data Analysis*

3rd Year Modules

3005MAA – Fluids and Heat Transfer
323MAE – Professional Development and Project Planning
324MAE – Individual Project
325MAE – Mechanical Product Innovation

326MAE – Stress & Dynamic Analysis
333MAE – Finite Element Analysis
350MAM – Control System Engineering
A306EEI – Post Placement Perspectives

Years 1 and 2

1st Year Modules

101MS – Engineering Mathematics 1
102EMM – Manufacturing Technology and Materials
102MAE – Mechanical Science
103MAE – Design
104MAE – Engineering Application
108SE – Electrical Science
A103IAE – Creative Thinking for Business

2nd Year Modules

201EMM – Engineering Management
206MAE – Solid Mechanics and Dynamics
207MAE – Thermofluids Mechanics
208MAE – Analytical Modelling
209MAE – Design and Sustainability
210MAE – Instrumentation and Control
A203IAE – Making Money On-Line

Highlight of Year 1:

IMechE Project – Tasked to design a vehicle that could travel forwards towards a perpendicular wall, touch it and return to its original position. Designed using CAD and created from 6mm plywood shaped with a CO2 laser cutter and a small motor. Very successful result, and both the project and write-up were completed to first class standard.

Highlight of Year 2:

Lab Presentations – As part of the Thermofluids Mechanics module, presentations of the topics covered were presented after completion of labs. This involved calculating and observing findings from the lab and using data collected during. I enjoyed the process of discovery; and the challenge of presenting my findings on a presentation and poster. This improved my presentation and analysis skills.

EMPLOYMENT HISTORY

References available upon request

AIRBUS UK | ATA 32 LANDING GEAR INTERN

JUL 2018 – JUL 2019

Liaising closely with internal design and development teams, I was responsible for all deliverables associated with the certification of the Landing Gear of the BelugaXL aircraft. Part of my role was the management of an action tracker as well as presenting weekly meetings with certification document authors to ensure everything was running smoothly.

As well as working within a project management role, I gained a huge amount of experience in working as part of a team with the task of authoring documents for the following:

- Testing on the Landing Gear of new aircraft designs
- Certification of new weight variants of aircraft
- Research and testing on the capability of current aircraft
- Procedures for maintenance and turnaround of an Aircraft in ambient temperatures of down to -54°C

Key Skills: Project Management | Presentation Skills | Data Analysis | Attention to Detail | Decision Making | HTML/CSS | Front & Back-End Web Design | Document Writing | MS Office

EARLY EDUCATION

LAWRENCE SHERIFF SCHOOL

2014 – 2016

A-Levels - Maths (B) / Physics (B) / Accounting (B)

QUINTON HOUSE SCHOOL

2009 – 2014

GCSEs - 12 GCSEs A*-C (1 A*, 3 As, 4 Bs, 4 Cs)

INDUSTRIAL WORK EXPERIENCE

JPMG ELECTRICAL | ASSISTANT

MAY 2017 – SEP 2017

After my first year of study at university, I worked for an electrical engineering company, this work was based in Amazon Distribution Centres working mainly as a labourer, I did however, learn quite a lot about electrical systems and working as part of a team, I also spent some time with the mechanical engineering team examining conveyors and discussing how they could be optimised. Working up and down the country for five days a week over several months was a good experience of a real work environment and working away from home.

Key Skills: Teamwork | Electrical Systems | Excel Spreadsheets | Data Collection and Entry

BEDFORDSHIRE CLEANING | TEAM LEADER

SUMMERS OF AUG 2014 – SEP 2016

Quickly advanced from cleaning university rooms to leading a team of over 15 workers. I was responsible for keeping the team working efficiently and ensuring work was completed to a high standard.

Key Skills: Leadership | Organisation | Teamwork

KPMG, Milton Keynes | SCHOOL WORK EXPERIENCE

2013

Visited several teams at the company, most of which were based around audit and tax, my interest however was cost accounting, which I went on to do at A Level- this was really useful when studying management accounting for engineering.

HOBBIES

