



FUTURE FORWARD

OUR APPRENTICESHIPS, UNDERGRADUATE
& WORK PLACEMENT OPPORTUNITIES



OUR VISION

AN INDEPENDENT PROVIDER OF EFFICIENT, HIGH PERFORMING AND INNOVATIVE MOTION CONTROL SOLUTIONS THAT IMPROVE THE WORLD.

OUR MISSION

TO SIMULTANEOUSLY CREATE VALUE FOR ALL STAKEHOLDERS BY DELIVERING BEST IN CLASS MOTION CONTROL SOLUTIONS.



HydraForce was founded in 1985 in Lincolnshire, Illinois USA; after our founding partners saw a gap in the market for high quality hydraulic cartridge valves and manifolds for the mobile and industrial equipment markets.

With the number one priority of providing customer delight, coupled with the highest quality products, we produce valves for many

diversified applications. Our major markets include: construction, agricultural equipment and material handling equipment, among many more.

Our manufacturing locations are in North America, Europe, Brazil and Asia, alongside a network of stocking distributors. Our site in Birmingham is the European Headquarters since opening in 1988.

WORKING AT HYDRAFORCE

Whichever level you're working at, here at HydraForce – we treat you like you're one of the team! Whether you are an apprentice, undergraduate or placement student, you will be working on real-life projects and tasks that make a difference to the business. You won't be forced to make tea and do the filing; instead you could be taking part in Business Unit meetings, production tasks or strategic projects, to name but a few!

We have had people join us straight from school, college or even later in their careers who have progressed quickly up the HydraForce ladder as we have seen the potential they have to succeed; and we have even had some of our employees win regional and national awards as a result of their hard work and commitment.



CAREER PATHS

Find out which HydraForce career path suits you best:

Min. 5 GCSEs Grades 6 – 9

or equivalent (including Maths*, English, Science)
*Advanced Level Mathematics GCSE is preferred

Level 3 Apprenticeship

Mechanical/ Electrical Engineering

Min. 5 GCSEs at Grade C / 5-9

or above (including Mathematics – Higher Paper, English and a Science, Technology or Engineering related subject). A-Levels at minimum Grade C in a Mathematical based subject and a Science, Technology, Engineering or additional Mathematics; or 90+ credits in an Engineering BTEC at Level 3

Level 6 Apprenticeship

Mechanical/ Electrical

Bachelor's or Master's Degree in Mechanical or Electrical

(predicted grade of 2:1)

Undergraduate Engineering Work Placement

Minimum 40 weeks or dependent on University's needs

Business or Engineering Students

Short work placements available

Duration dependent on both business and student's needs.

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HYDRAFORCE APPRENTICESHIPS LEVELS 3 & 6

Here at HydraForce we offer Apprenticeships for individuals who want to become engineers. If you want to specialise in Mechanical, Electrical or Manufacturing Engineering then we have an opportunity for you!

Our Apprenticeship Scheme has been running since 2004 and is an exciting way to start your working life! We offer two levels of Apprenticeships:

The Level 3 Apprenticeship scheme lasts four years, during which time you will have the opportunity to learn both the practical and theory of your chosen discipline. In the first year, you will attend college full time; returning in the second year to join us at our Birmingham Facility. During years two, three and four, you will work on site for four days a week, attending college for the other day on day-release.

Our Level 6 Apprenticeship scheme typically takes five years, during which you will achieve a BEng (Hons) In Engineering.

Initially, you will attend college full time with your Level 3 colleagues and then continue with your degree studies while undertaking work experience and development for the remainder of your training.

Whichever scheme you join, a key part of your training will be the time you spend in various Engineering and business departments, to understand the product and the business.



“During my apprenticeship, I had the opportunity to complete extra training which allowed me to expand my skillset more than I originally thought. I opted to do extra modules at college when studying towards my BTEC and I am the first Electrical Apprentice to develop and build a test rig at HydraForce. I work as part of an apprentice duo and have been involved in the building and commissioning of over 18 test rigs so far. This was the most high-profile project any Electrical apprentice had ever been given at the company and it meant a lot that HydraForce trusted me with such an important project...This apprenticeship has helped me to grow in confidence and opened doors into an industry I have always wanted to be part of!”

JOSHUA LAMBDEN

Junior Manufacturing Engineer

"I completed the last six months of my four-year apprenticeship in Manifold Design, starting officially as Manifold Design Engineer in January 2014 after I'd completed the scheme. Before becoming an apprentice, I didn't know my current role existed or even what a hydraulic manifold was; but the apprenticeship scheme helped me discover what was available by having the chance to work in different departments. I gained hands on practical experience and developed new skills in a manufacturing environment."

SAM HEMMINGS
Manifold Designer



"I joined HydraForce at 15, as their youngest ever apprentice and worked with different people from technicians and engineers, to external suppliers.

I was always treated as part of the team and worked on a high-profile project of developing production test rigs - becoming the first Mechanical apprentice to do so. These test rigs are critical to the company's processes and quality standards and I had ultimate responsibility for carrying out mechanical based tasks; including building mechanical assemblies, mounting and connecting all pneumatic systems;

as well as other aspects of the project's lifecycle including: designing, purchasing, commissioning and modifications.


This company has given me so many great opportunities and it shows how an apprenticeship has a lot to offer a young person - as you gain qualifications, work in the engineering industry and earn a wage, all at the same time!"

RITIK SHARMA
Junior Manufacturing Engineer

“I’ve always been interested in how machinery works and how things are made; and this was the main reason why I chose mechanical engineering. I decided on the apprenticeship route, as opposed to University because I’d always struggled to learn through the normal academic, theory driven process. Instead I learn and retain information better when I see the theory being put into practice, which the apprenticeship course allows for, as you can apply the theory you’ve learnt.”

The apprenticeship also gives you industry experience; which you can’t get by doing a degree or HNC alone. It’s also a great opportunity to experience a working environment, which is so different to school or college. The HydraForce apprenticeship taught me so many skills, such as milling, turning, fault finding and CAD design, to name a few. I’m hoping to use my knowledge of repairing broken tooling to improve designs in my new role as Manufacturing Engineering Technician.”

ADAM FLOHR
Manufacturing Engineering
Technician



**“I LOVED SOLVING PROBLEMS;
IMPLEMENTING THE SOLUTIONS
THAT I’D WORKED OUT AND
SEEING THE PRODUCT OR
MACHINE FOR EXAMPLE,
WORK AS IT WAS INTENDED TO!”**

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HYDRAFORCE UNDERGRADUATE SCHEME

If you're looking for a work-based placement, whilst at University then join our Undergraduate Scheme here in Birmingham.


Our scheme is tailored to students who are studying towards their Bachelor's or Master's Degree in Electrical or Mechanical Engineering, so if you fit that criteria then you're exactly who we're looking for!

Placement students join us annually in August for a minimum of 40 weeks (dependent on the university's requirements) and can choose to extend their placement if they wish to and if required by the business.

As the placement student, you will be assigned to a particular department and from there you will undertake what we call a 'departmental rotation' where you will get experience working in all of the relevant departments allowing you to get an understanding of the complete business.

Departments include: Quality, Production, Business Units, Plant Engineering and Purchasing & Accounts.



A man with dark hair and a beard, wearing safety glasses and a black polo shirt, is looking at a rack of electronic equipment. He is holding a white folder or notebook. The equipment includes various modules, some labeled 'TDK-Lambda'.

"I CHOSE HYDRAFORCE FOR MY UNIVERSITY PLACEMENT BECAUSE OF THE DEPARTMENT ROTATION SYSTEM THEY OFFERED. THIS ALLOWED ME TO BE EXPOSED TO DIFFERENT AREAS OF THE COMPANY, GAINING AN UNDERSTANDING OF THE BUSINESS IN ITS ENTIRETY.

I RETURNED TO HYDRAFORCE AFTER COMPLETING AND GRADUATING FROM UNIVERSITY, IN MY NEW ROLE AS A TRAINEE ELECTRICAL ENGINEER."

HARIS TAHIR

Trainee Electrical Engineer

"I have been involved in many different projects from all departments during my placement year. My main project was an Exhibition Project and involved using skills that I had gained from all departments during my rotation. These included creating the circuit diagram, designing the manifold, designing the enclosure to meet safety standards, programming an ECU and using additive manufacturing for prototyping and final products. Other projects I was involved in include; process improvement, customer change requests, warranty processing, manifold pricing, and shop floor layout improvements.


I have become a much more confident person since starting the placement by working independently and as part of a team. I have also been offered the chance to complete my dissertation in conjunction with HydraForce; where I will be working alongside HydraForce employees to complete a workplace project.

This company is welcoming and treat you as part of the team from the first day; and it has helped create the foundations for my future career!"

WILL MOSLEY

Undergraduate Placement Student
2018 – 2019





“During my time at HydraForce I took on a substantial project, introducing a new vision system to inspect hydraulic valves before packing and shipping to customers. The HydraForce engineers gave me time and advice, and I learnt a lot. The project was new and I needed to source potential suppliers as well as learning about how the company operates so I could integrate the project into their processes. It was a really collaborative way of working. I found that HydraForce was really good at letting me drive projects and be in charge of them; and I learnt a lot about project management.”

ALAN WALKER

Application Engineer Electronics
& Software for Europe

MARKUS BISSBORT

European Applications Manager

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FOR HYDRAFORCE
THE PLACEMENT
PROGRAMME IS BASED
ON A LONG-TERM PLAN,
AS WE NEED TO HAVE
EMPLOYEES READY FOR
THE FUTURE AND THE
UNDERGRADUATE SCHEME
FORMS PART OF THIS
EDUCATION.

HYDRAFORCE DEPARTMENTAL ROTATION

As an apprentice or an undergraduate student you will become part of what we call a 'departmental-rotation'. Simply put, this is an opportunity for you to experience working in different departments within the company to see which one you prefer and could potentially see yourself working in. Let's take a look at an example of the departments that you could be working in, as part of both schemes:

QUALITY: here, you will gain an understanding of our inspection processes, including the high quality requirements and strict checks of component parts.

VALVE ASSEMBLY: you will have the opportunity to understand our one piece build process, lean manufacturing and testing processes within our biggest production area.

MANIFOLD PRODUCTION: you will have the chance to be involved in building our custom designed manifolds and learning about their

corresponding processes; including manifold block preparation, building to manufacturing assembly layouts (MALs) and testing to specific test control plans (TCPs).

PLANT ENGINEERING: next, we move you into the offices, where you will be working closely with production. Within Plant Engineering you will learn about designing HydraForce Test Rigs, Test Cell layouts, Manifold Lines and Manifold Test Rigs.

MANUFACTURING ENGINEERING: here, you will be able to work with the team who are responsible for moving product production from our USA parent company to here in the UK; as well as capacity, efficiency and improvement projects.

MANIFOLD AND VALVE BUSINESS UNITS: in our Business Units, you will work with engineers from both departments who are responsible for managing the production of the products.

PURCHASING & ACCOUNTS: these two will be shorter department placements, with the aim of giving you a deeper understanding of the departments' business function with a focus on sourcing, scheduling, account reports and budgets etc.

WARRANTY: here you will have exposure to customer concerns, quality investigations and reports, along with learning about Six Sigma and other quality tools used internally.

TECHNICAL SUPPORT: working alongside the Technical Team and in the Applications Development Laboratory, you will get full exposure to the Technical Support Engineer role, supporting internal and external customers with technical advice, product development and new projects.

// HYDRAFORCE IS A FAST PACED, HIGH ENERGY ENVIRONMENT THAT PRESENTS NEW CHALLENGES DAILY. A PLACEMENT WITHIN THE MANUFACTURING SIDE OF THE BUSINESS WILL EXPOSE THE RIGHT CANDIDATE TO THESE CHALLENGES WHILST GIVING THEM THE SUPPORT TO DEVELOP CREATIVE YET PRACTICAL SOLUTIONS.

MARK ABBOTT
Manufacturing Manager

HYDRAFORCE WORK PLACEMENT OPPORTUNITY

Internships and work placements at HydraForce can be adapted to suit both your requirements and our business needs.

However long your work placement is, you will be working on real-life projects that make a difference to the company.

We welcome students from the UK, Europe and across the world to join HydraForce for our work placements, so we can help support their growing careers. Our placements can range in duration, with past students staying anywhere between two weeks and five months!

“I LEARNED THAT HYDRAFORCE HAS A CULTURE WHERE DEVELOPING BOTH THEIR EMPLOYEES AND NEW PRODUCTS IS IMPORTANT AND KEY TO THEIR DEVELOPMENT.”

MADS IVERSON

Engineering placement student, Denmark



“My engineering placement started in February and ended in July 2019. I found out about HydraForce, when working at Danitech A/S, which is Hydraforce’s Danish distributor – as my Father is CEO of the company. I learned that Hydraforce has a culture where developing both their employees and new products is important and key to their development. This sparked my interest as I knew it was a company that was professional, where training was important to them.

The internship gave me a lot of valuable contacts and resources and I gained a very good understanding of the design, production and function of Hydraforce’s products. During the placement, I worked on a Hydraulic

Pulsation Unit which is used to test and verify the function of hydraulic cabin suspensions systems. I also worked on investigating failures of a valve in a manifold assembly; as well as various smaller projects.

It was great to do my internship in an environment that was focused on training and personal development; and it was easy for me to access additional training within the company as these processes were already established. I feel the placement has been invaluable to my future and has helped me develop both personally and academically.”

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MATTEO CHIAVEGATO

Engineering Placement
Student, Italy

“I live in Italy, so stayed in the UK for two weeks for my HydraForce placement. It was my first time working in such a big company and I found the staff to be very supportive, taking me through each stage of the internal processes and opening my mind to the reality of working in an engineering company; which is the sector I plan to go into after completing my engineering studies.

During the two weeks I visited each area of the company, including: Manifold Production, Design, Valve Business Unit, Warranty, Quality and also Technical Support. I found HydraForce to be a helpful and supportive environment to work in and there was mutual collaboration between employees, who were all working to achieving the same goal.”



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DIEGO MUSCAT

Business Placement
Student, France

“I did a Business placement with HydraForce for three months, from May to August 2018.

I am from France, so came over to England especially for the placement. My time at HydraForce helped me to improve my English, as I interacted with clients and co-workers on a daily basis; and it allowed me to develop my social and professional skills.

This placement gave me a good understanding of how a company functions and how everything is managed within the business. I worked in numerous departments during the three months but spent most of my time in the Sales and Human Resources department; where I conducted audits, worked on surveys, organising information and contacting clients.

My favourite thing about HydraForce was the energy and determination of the team to be the best they could be in their industry. The placement has taught me a lot of new skills and has helped me with my future career.”



PROGRESS WITH HYDRAFORCE

We promote the philosophy of growing talent from within here at HydraForce, and we like to see our employees progress to their dream roles. Luckily many of them have done just that. From Apprentices to Trainees – HydraForce has seen people who joined the company at the young age of 16 or 17 become Managers, Engineers and Technicians within the European Headquarters; creating a new generation of leaders and experts from within the company.

Let's take a look at just a few of our success stories, who show that there is more than one pathway to creating your best future...

"I joined HydraForce just before my 18th birthday as Trainee Quality Technician. I was extremely ambitious and soon had ultimate responsibility for the business' calibration. I completed tasks in half a day so I could pester engineers to shadow them or do extra tasks. After 18 months I was promoted to Quality Technician.

I started studying towards my Level 3 Quality Management and took on Junior Quality Engineer tasks such as 8D analysis, customer audits etc. When the Business Units were established, I became Quality Engineer for Manifold. I again took on extra tasks, such as chairing leadership meetings – and really got a taste for it! The Manufacturing Manager saw massive potential in me, and after searching for a new Manifold Business Unit Manager, they took a gamble and offered me the job.



I was 23 years old, managing a team of 100 blokes with limited knowledge, however I was determined to succeed and strengthened the Business Unit by changing the team's culture and leadership. After expressing interest in broadening my knowledge – I was promoted to the new role of Mechanical Valve Business Unit Manager.

HydraForce took a huge leap of faith by giving responsibility of the toughest department to the most unexperienced manager. They offer amazing opportunities and give employees space to learn and develop, leading to an amazing career in engineering and manufacturing."

MATT HARPIN

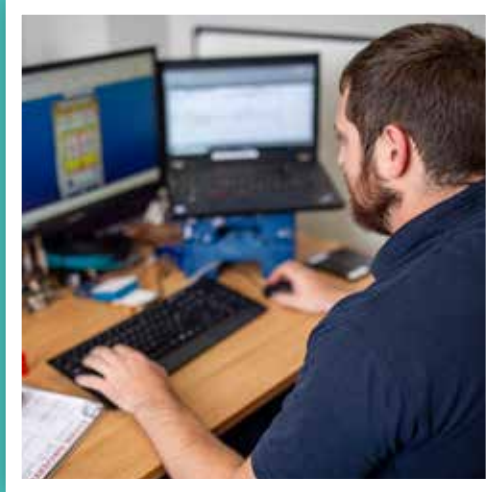
Former Quality Trainee now
Mechanical Valve Business Unit Manager



“During my apprenticeship, I completed my NVQ, a foundation degree in Electrical Engineering & Data Communications and a Bachelor’s degree in Electrical Engineering Systems, which I passed with first class honours. I was also put forward for both a Regional and National award, achieving the Final Year Apprentice of the year award for EEF. After I finished my apprenticeship, HydraForce offered me an Electrical Technician role. I was then offered the position of Systems and Control Engineer, which is my current role. With the opportunities and experience I had during my apprenticeship at HydraForce I feel I have created a solid foundation and have used it as a springboard to put myself onto a great career path.”

GREG PRENTICE

Former Electrical Engineering Apprentice
now Systems & Control Engineer



“IT’S SHOWN ME
THAT AN APPRENTICESHIP
IS JUST THE BEGINNING OF
A LONG CAREER
IN ENGINEERING.”

“When I’d finished my apprenticeship I was promoted to Plant Engineering Technician.

I worked in this role for two years and got involved with machine breakdowns and the building of new test equipment.

I then moved into a new role as Manufacturing Technician, where I designed new test equipment and oversaw the build of new projects. In 2018, I was then promoted to my current role as Junior Manufacturing Engineer.

I think enjoying what I do and wanting to learn helped a lot and has opened doors for me. I never thought I’d be able to complete an apprenticeship like I did and I was able to push even further and complete my NVQ and earn a foundation degree in Mechanical Engineering.”

MATTHEW FANNON

Former Mechanical Engineering
Apprentice now Junior
Manufacturing Engineer

HYDRAFORCE A WINNING APPRENTICESHIP SCHEME

At HydraForce, we celebrate our success stories – not only internally but externally too. We've had many of our apprentices go on to achieve great things including winning awards both on a regional and national basis. HydraForce itself is a double award-winning apprenticeship scheme, having won the Ladder for Birmingham award for Large Employer of the Year for apprenticeships, sponsored by the West Midlands Apprenticeship Ambassador Network, in 2019, as well as the Greater Birmingham Large Employer of the Year for apprenticeships in 2021.

Sam Wilcox-Wright, Learning & Development Manager, accepted the latest award on behalf of the company at the ceremony held in Birmingham:

"HydraForce is delighted to be recognised by Greater Birmingham for its Apprenticeship Scheme, for the second time," said Sam. **"Our apprenticeship scheme here at HydraForce continues to grow from strength to strength, and we see apprentices as key towards our success in the future. We are excited that we have now expanded our scheme beyond engineering into other areas to develop our workforce and help us remain competitive in the industry".**

For the latest news of HydraForce's success at regional and national awards, visit our website here:



AHMAD FORD
Advanced Engineering
Apprentice

In 2021, Advanced Engineering apprenticeship Ahmad Ford, became the winner in two categories at the Greater Birmingham Apprenticeship Awards, winning Apprentice of the Year in Engineering & Manufacturing, as well as the overall Apprentice of the Year for the region: **"I am completely humbled and honoured, to not only be shortlisted, but to go on and win in these two categories, and I've had a smile on my face since the winner was unveiled"** said Ahmad, upon winning the two awards. **"It has reinforced why I wanted to become an apprentice and shows how hard work and dedication pays off. I wouldn't be here today without the belief and support from HydraForce, and I will continue to do my best to succeed in all aspects of engineering in the future."**

HYDRAFORCE SUCCESS STORIES

We also have our multi-award winner former apprentice, Daniel Millington, who won five awards during the course of his apprenticeship. After winning the Regional Advanced Apprenticeship of the Year award for two consecutive years (2017 and 2018); Daniel then went onto win the UK's National Apprentice of the Year award in 2018 at the National Apprenticeship award ceremony in London: **"I'm thrilled to have won the award. It was a huge shock and such an amazing feeling when my name was called out. I was up against some really large companies and some extremely talented apprentices, so it shows what I've been doing at HydraForce is really having a significant impact"** commented Daniel, who was competing against eight other apprentices in his category.

To add to Daniel's growing award cabinet, he also achieved the EEF (now MAKE UK) Runner-up Apprentice Award in 2018; as well as the British Education Award (BEA)

Vocational Student of the Year in 2019 for England (Zone 1 Region): **"I'm absolutely delighted to win the Vocational British Education Award! It's brilliant to be involved in such a prestigious and important event and it really showcases what the up and coming generation can do, have done and are doing in a range of sectors. My apprenticeship and education has been a fantastic journey and has allowed me to accomplish some fantastic things, it's the best decision I ever made!"**

Daniel completed his Manufacturing Engineering Apprenticeship one year early, moving into position of Engineering Technician following successful completion of his apprenticeship, before being promoted to Process Engineer within a few months.



Joshua Lambden, former Electrical & Electronic Control Engineering Apprentice, won the Made in the Midlands Regional Apprentice of the Year Award 2019, during the third year of his apprenticeship. The event, held in Birmingham City Centre saw Joshua compete against eight other manufacturing apprentices in the region: **"I was ecstatic to have been shortlisted for the Made in the Midlands apprenticeship award but to go on to win it, has truly blown me away. Manufacturing is an ever-changing environment where the only limit is your imagination. It just goes to show that if you work hard at something, you can achieve anything"** said Joshua, after receiving the award.

Joshua also won the Ladder for Birmingham: Runner-up award for Outstanding Apprentice of the Year 2019 and has been shortlisted for the MAKE UK Engineering Apprentice of the Year: Rising Star for the Midlands & East region 2019*: **"It is a great honour and pleasure to be nominated for such a prestigious award"** said Joshua, **"The opportunity to take on an apprenticeship with HydraForce has not disappointed; and the guidance, support and encouragement from my managers and colleagues has helped me achieve things I never thought were possible"**

Joshua also graduated from his apprenticeship one year early, quickly progressing into the role of Maintenance Technician upon completion.

*brochure published prior to winner announcement

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RITIK SHARMA APPRENTICE OF THE YEAR

His third year was a success for Ritik, who won the Ladder for Birmingham: Outstanding Apprentice of the Year for 2019. The event was held on Thursday 4th July and saw Ritik Sharma triumph in the Engineering and Manufacturing apprentice category, sponsored by The Ladder Apprenticeship Foundation: **“Winning the Outstanding Apprentice of the Year for Engineering and Manufacturing award is an absolute honour”** said Ritik, **“It truly highlights the limitless possibilities available through the apprenticeship scheme offered by HydraForce. The support and training provided by the company has allowed me to continually grow as a professional and individual; and this award reinforces the idea that doing an apprenticeship is the best route to a successfully career in engineering”**

Ritik competed against three other Engineering & Manufacturing apprentices in the region, including fellow HydraForce Electrical & Electronic Control Engineering

apprentice Joshua Lambden, who won the runner-up award. Ritik was also one of the shortlisted candidates for the Made in the Midlands awards in 2019.

His success doesn't stop there, as Ritik also successfully won the Highly Commended award for the Regional Apprentice of the Year 2019, on behalf of the National Apprenticeship Awards; just a month after completing his apprenticeship in three years, instead of the predicted four.



Image: BirminghamLive/Ladder for Birmingham Apprenticeship Awards



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LIVING IN BIRMINGHAM

Take a look at what else this vibrant and buzzing city that has to offer:

- **Explore the city via boat:** with a staggering 35 miles of canals, Birmingham has more canal miles than Venice!
- **If you want live music or fancy going to the theatre** – Birmingham has multiple venues available including the O2 Arena, Symphony Hall, the MAC or the Alexander Theatre, to name but a few.
- Visit the Birmingham's famous **Frankfurt Christmas Market** every November and December to get you in the Christmas mood!
- **Have a quiet drink in the city's oldest pub:** The Old Crown, built in 1368 or dance the night away on Birmingham's Broad Street – there's something for everyone's perfect night out!
- **Do you love Peaky Blinders?** If so, there are festivals and tours to satisfy your inner fan!
- **It's the place to be if you're a football fan - we have local teams:** Birmingham City and Aston Villa; or slightly further afield West Bromwich Albion or Wolverhampton Wanderers
- **Digbeth & The Custard Factory:** with a cinema, independent shops, cafes, pubs and even an outside street food venue every weekend; this bohemian district makes the perfect day out.
- **Shopping:** we have something to tick every box from the Bullring Centre, Selfridges and Grand Central to the Mailbox and Jewellery Quarter if you really want to spend the pennies!



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