

FEMALE ENGINEERING APPRENTICES – CASE STUDIES

Paige Boland – Manufacturing Engineer Apprentice at Worcester Bosch



Hello, I'm Paige Boland and I am 20 years old. I'm currently in my 3rd and final year of my apprenticeship which I started with Herefordshire Group Training and my company Worcester Bosch in 2010. I will then have an extra year added to my apprenticeship by Worcester Bosch who will train me within the workplace to gain knowledge and experience in a specific department where the skills I learn will relate to the job I will be doing.

I went to Bewdley High School where I achieved 10 GCSE's, I then moved from Bewdley to Hereford where I had no idea what I wanted to do after school but knew I enjoyed Art so I went to Hereford College of Arts. I realised during the 2nd year I didn't really enjoy art college as it didn't feel hands on enough for me and I got bored, however I completed the 2 year course but looked into Apprenticeships during this time as I knew I definitely didn't want to go to Uni. I saw advertising for HGTA and their engineering Apprenticeships which really grabbed my attention as I'd be learning many skills and qualifications as well as gaining a job in trade.

I started a Level 3 BTEC National Diploma in Manufacturing and NVQ Diploma Level 2 Performing Engineering Operations (PEO) and achieved a Double Distinction grade in my National Diploma and I am currently working on my NVQ Level 3. I have also started my HNC in Manufacturing.

I was very wary at the beginning that I may not get chosen by a company to begin my Apprenticeship but I was offered 3 interviews and I got offered the Apprenticeship with Bosch. I accepted with no hesitation and was really pleased to be working with such a well known company.

3 years on and the Apprenticeship has flown by, I have learnt many new skills and gained much more knowledge of engineering and I am still gaining knowledge now by continuing with my education.

How have you found it being a female in a so called man's world?

At first it was a jaunting feeling but everyone is so helpful and encouraging it has been really easy and now I don't think of it as a man's only environment as many of the skills needed both men and women can do.

The Apprenticeship has been great for me and I would definitely recommend it to anyone who doesn't want to go through University. You are paid whilst learning; getting qualifications and gaining work experience and I have paid nothing towards it. The amount of support your company invests in you is phenomenal and really encourages you to go further.

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Many of my friends are at University who may not come out with a job straight away or the job they studied for as well as having to pay loans back. Others carried on with various college courses as they still didn't know what they wanted to do career wise but obviously as soon as you hit 18+ you need to start paying for your education.

Being so close to the end of my Apprenticeship I am looking forward to fully qualifying as an engineer but I also want to continue with my qualifications. Then using these skills I have gained to help train other apprentices who come into the company or using my knowledge and mind set which may be new to others to help with future projects or problems that may occur.

Employers Comments

Engineering as a profession undoubtedly has had a male only perception primarily due to the general perception that engineering is a heavy physical job with plenty of potential to get dirty. The reality is that engineers work in many varied fields such as: communications; construction; Transport; Domestic appliances; Process control; Packaging; Energy production; & automotive, also in many disciplines such as: Manufacturing; mechanical; electronics; design; Quality; Research & Development. There is much variety & none is gender specific, there are many opportunities for females who want to be involved in innovation, Technology, & work organisation.

Paige is part of the quality department for a domestic heating appliance manufacturer and like all professional engineer positions it comes with responsibility. The way I look at it is that every working day, we as a group of professionals are responsible for the health, Safety, & customer satisfaction of about 4000 new people.

Engineering needs women and many are already choosing engineering as a profession with happy results. Engineering is far from the male dominated domain that it once was and is better for it.

Georgia Peters Engineering Apprentice at Yamazaki Mazak



Hello I'm Georgia Peters and I am a first year engineering apprentice at Worcester Group Training. I went to the Chantry school where I gained 7 GCSE's and then I started my Advanced Level 3 City and Guilds and Level 2 NVQ Apprenticeship with Yamazaki Mazak at the age of 16 years

When I was at school I didn't know what I wanted to do for my future career, and when I spoke to my career adviser at school they showed me different types of paths I could follow, and that's when I learnt about Apprenticeships. After going home and talking to my parents I researched what type of Apprenticeships I could go for and saw on Gumtree about the Mazak Apprenticeship and straight away I was interested and applied.

Before starting at WGTA I hadn't had any previous experience in the engineering industry except when I came for a two day induction while applying for Mazak. I thoroughly enjoyed it because it made me aware of what engineering would involve and the types of activities that I would be involved with when I started my Apprenticeship.

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I'm glad I decided to do a Apprenticeship because it's a more adult based environment and its completely different to school, when I think back I'm glad I didn't go to college/sixth form because I'd rather be in a working environment.

After my 4 years of training I hope to stay at Mazak to gain a higher position to gain more experience for my future. I hope to learn more about the different areas to gain as much information as I can.

Charlotte Board Electronic Engineering Apprentice at **Dytecna**



Hello, I'm Charlotte. I'm 21 and in my fourth year of the Advanced Apprenticeship working with Malvern Dytecna

I attended Aylestone Secondary School where I achieved 11 grade GCSE's of which my favourite was Graphic Design. I then enrolled and completed a two year Construction and Architecture Diploma at the Hereford College of Technology.

From this time in further education I realised that the Apprenticeship was the right way for me to go. I applied and was successful in securing a place on the scheme with Dytecna. I started the Apprenticeship in 2010 and in the first two years completed a Diploma in Electronic Engineering and an NVQ in a range of subjects from Computer Aided Design to Mechanical Maintenance. Since then I've started a BSc in Product Design Technology and I am a member of the IED. I am currently working as a Design Engineer in the Malvern Engineering Department.

The Apprenticeship has enabled me to break into a heavily male dominated sector although it has been difficult to settle due to my competitive nature. But there are always lessons to learn and I have found it's taught me to be firm and to be confident and resourceful in putting my opinions and points across. It teaches you to be thicker skinned and to accept that you're not always going to win. But above all else, it has taught me to be passionate, ambitious and with uncompromising determination I can and will compete, side by side, with the best men and women in industry.

Rhiannon Boulton - Electrical Engineering Apprentice at **Special Metals Wiggin**



Hello, my name is Rhiannon Boulton, I completed my Apprenticeship with Herefordshire Group Training in 2011 at the age of 20 and I have been working in full time employment with Special Metals for the past 2 1/2 years, gaining hands on experience whilst running my own shift. I was a student at Bishop of Hereford Bluecoat School where I achieved 10 GCSEs.

After leaving school I decided that I wanted to do an Apprenticeship in engineering. I wanted to earn while I

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learned.

While at HGTA I achieved a Level 2 and 3 NVQ in Electrical Engineering along with a BTEC National Certificate in Electrical/Electronic Engineering with a double grade merit pass.

Now at nearly 23 years of age and two and a half years of being qualified, I have progressed not only as an engineer but also as a person.

I have moved around different departments in my company to broaden my knowledge of electrical equipment and fault finding skills.

Being the only female engineer in my company was tough to begin with, but in the end it just made me want to work harder and strive to do the best I can at my job.

The Apprenticeship has given me the opportunity to have the career I wanted but without the extortionate debt of university fees.

The support I received from HGTA and my fellow Special Metals Apprentices are what helped me along the way.

An Apprenticeship was the best decision I've made for securing myself not only a job, but a career for life.

I am still committing to pushing myself harder and striving to climb up the engineering ladder within my company.

Sarah Watkins Engineering Craft Apprentice at Dytecna



Hello, I'm Sara Watkins and am 17 years old. I am currently in my second year of my four year Advanced Craft Apprenticeship in Welding and Fabrication with Dytecna

I attended Fairfield High School, where I achieved 10 GCSEs grade A-C as well as a Level 2 BTEC in Engineering. When I was at school I knew that I preferred the hands on experience of learning and because of this sixth form didn't really appeal to me. I didn't want to spend two years sat at a desk for 5 days a week.

Following advice from my Engineering teacher at school I started looking at Herefordshire Group Training for an Apprenticeship. It seemed more appealing to me because I could gain hands on practical experience in something that I really enjoyed, whilst gaining vocational qualifications to back up my experience, as well as getting a wage.

In spring 2012 during my last year at high school I applied to HGTA for a Welding and Fabrication Apprenticeship. They helped me to put a portfolio together and gave it to any interested companies. I attended a few different interviews but decided to take the position at Dytecna Ltd. I started my Apprenticeship in September 2012, where I undertook "off the job training". This was basically learning all of the necessary skills that I would need when I returned to company, as well as completing NVQs in MIG welding, TIG welding and CAD.

I also started my City and Guilds Qualification in Health and Safety, Engineering Principles, MIG Welding and Advanced Maths and Science.

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In July 2013, I started working in company for my second year of my Apprenticeship. I am currently working at Dytecna for 4 days a week, whilst still attending HGTA once a week on day release to continue my City and Guilds Qualification in my chosen topics of Welding Principles, Sheet Metalwork and Pattern development.

Although most people think that engineering (especially welding) is a man's job, I have found it easy to integrate into my career. Some people seem a little shocked when I tell them that I am training to be welder, they never tell me that I can't be one because I'm a girl, it always just seems to be shock that they're not use to seeing girls in engineering. I have been told by several people since I have started my Apprenticeship that they don't know why there shouldn't be more girls in Engineering, as they see us capable of doing everything that the men can do.

The Apprenticeship has really helped prove that engineering is what I want to do. I have been able to try out my chosen career, get qualifications and experience whilst getting paid, and it hasn't cost me anything. I think that it also has really helped with my personal development and confidence, as we went on a team building week, where we took part in activities that really meant that we had to work as a team if we were going to complete the task. I found this experience really useful because every member of the team was important and we learnt what it really means to work as and rely on your team members.

All of my other friends went on to sixth form to complete 'A' levels; with many of them still not sure what they are going to do afterwards. They have also complained of having to get poorly paid jobs to help them afford transport to college, meaning that they have had to sacrifice their weekends in order to make some money, whereas because I am getting a decent wage from my Apprenticeship this means that my weekends are free.

Helen Morrison Electrical Apprentice at Buzz Electrical



Buzz Electrical based in Evesham have seen a clear benefit from the recruitment of apprentices. They have a track-record of taking on apprentices who have successfully completed their training and added a lot to the business.

Helen Morrison (18) is a first year Apprentice at Buzz Electrical, and is studying for her qualifications with JTL.

Before embarking on her Apprenticeship, Helen had been studying Health & Social Care and Early Years at 6th form, but since changing tact she has not looked back.

"There is never a typical day, and in terms of new, practical skills I've learnt, I couldn't begin to list them all. I really enjoyed woodwork at GCSE, and knew I wanted to do something practical and since starting my Apprenticeship, I can't imagine doing anything different'.

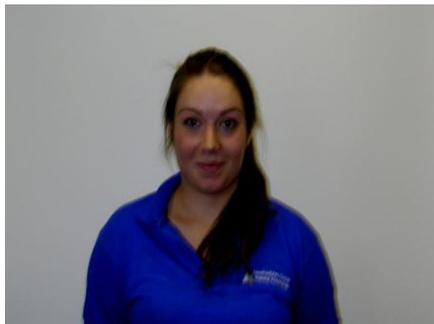
Helen is also encouraging more women to get into the industry. *'Like every other Apprentice – male or female – I have to work hard, but being a woman in a male-dominated industry has made me all the more determined to work hard and challenge the pre-conceived ideas that people might have about women electricians. If an Apprenticeship is what you want to do, don't let anybody put you off it!'*

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After completing her Apprenticeship, Helen hopes to use her own experiences to help other women into the industry: *“I would love to own and run an electrical contracting business, and employ other female electricians and Apprentices”*.

“Doing this apprenticeship has increased my confidence and my self-esteem. It has given me a purpose in life and every day I achieve something new.”

Pippa Dressler-Pearson Mechanical Engineering Apprentice at **Dytecna**



I am 19 years old and in the second year of my Advanced Engineering Apprenticeship.

I attended The Bishop of Hereford's Bluecoat School where I completed my GCSE's. I then continued my education through to Hereford Sixth Form College, where I gained A Levels in Mathematics, German and Business Studies.

I started my Apprenticeship in September 2012. In my first year I spent nine months based with the Company Training Provider (H/WGTA) where I completed my NVQ Level in Mechanical Engineering. At the same time I attended college one day a week undertaking the first of a two year BTEC National Diploma in Engineering Manufacturing. After the first nine months I joined my company and whilst integrating into the Project side of the business, I am completing my second, and final, year of the BTEC National Diploma.

I am now working in company, getting to grips with the way the company works and where I fit in. I work on Projects that include both military and commercial industries. I converse with customers and suppliers on a daily basis and have also carried out presentations in front of both. As well as the first of an annual presentation to the Management Team.

The Apprenticeship has given me an opportunity that I didn't know I actually had. Instead of going to University, I am learning while I am earning and gaining endless amounts of experience at the same time. Not many people my age can say that they are gaining the knowledge and skills to work within their chosen industry, rather than leaving University with a degree and then having to work in another arena. I am very fortunate to have been given an Apprenticeship with such a good company and without the support of W/HGTA I wouldn't have been given this opportunity.

I was nervous at first of surrounding myself with new people, yet I have gained so much confidence through speaking to customers and suppliers as well as my work colleagues.

The majority of my friends that didn't choose to do an Apprenticeship went to university instead. Whilst they are spending thousands of pounds a year on their continued education, my company are paying me a salary and also paying for my continued education. My friends have no idea what they want to do after university and some have even said they are doing a course that has nothing to do with what they want to do in later life. Also many of my friends rely on the government or their parents to fund their education, whilst I

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through gaining an Apprenticeship rely on no one but myself. This gives me my own freedom to do what I want, when I want.

Some of my friends went straight into trade or industry. This means that they don't necessarily have access to further education. This also means that although they earn good money now, they will find it difficult to improve their salary in future years. By doing an Apprenticeship, I am gaining a great education alongside gaining a thorough knowledge of my chosen industry. This means that I will be able to improve my salary as I gain further qualifications and experience, in my chosen area.

I am looking to carry on with further education over and above that offered on an Apprenticeship, as well as gaining more and more experience within my company and I see myself completing my Apprenticeship and becoming a technical engineer as well as gaining a degree, which my company will fund.

I have my own independence and am doing the thing that I have a genuine interest in. Not only that, I am getting paid to gain industry experience and worthwhile and recognised qualifications.

I thought being a female in a male dominated environment would have been a challenge. At first I felt as though I had to prove myself a lot more than I have to, when "competing" with the opposite sex. Once I settled in though, I found that it wasn't so much of a competition; rather it was more about communicating and working well together. The way in which men work compared to women is very different and I had to learn how to work in a male-dominated engineering environment. Having said that, all of my tutors and the people I work with have been great, I have never felt left out, and I have never been singled out for being female. If anything, being a woman in a man's world is better than being a man in a man's world. Of course you need to have the engineering ability, but you have automatically differentiated yourself by being a woman. As long as you are confident enough to push forward without being overly challenging, you can take those first few steps towards engineering. The rest is what you make of it.