Beyond university

Birmingham graduates share with us their experiences of University and the world of work.

Foster Wheeler

Three graduates from Chemical Engineering at Birmingham have recently been offered jobs with the international engineering consultancy company Foster-Wheeler. This prestigious company has employed many Birmingham graduates in recent years.

Kate

Kate grew up in Gloucestershire and chose to study chemical engineering on the basis of a pre-University work experience with the chemical producer Monsanto. After attending the **Appreciation of Chemical Engineering course (/schools/chemical-engineering/undergraduate/before-university/taster-course-chemical-engineering.aspx)**, she chose Birmingham.

Kate has spent a year abroad as part of her studies (/undergraduate/courses/chemical-engineering/chemical-engineering-industry-meng.aspx), working as a research assistant in tissue engineering at the University of Melbourne, Australia. Tissue Engineering is one of the newest areas of application of Chemical Engineering. It concerns the culturing of cells in order to construct replacement parts of the human body. The result of her work was a publication in the medical literature, a very special achievement for an undergraduate engineer!

Kate has taken a very active role in the **Chemical Engineering Society (/schools/chemical-engineering/undergraduate/chemical-engineering-society.aspx)**, acting as social secretary, third year representative and chairperson. Kate says "the Chem Eng Soc at Birmingham is one of the best in the country. We run lots of social events, provide a voice for feedback to the lecturers and reflect the cultural mix of students within the Department. There is something happening all the time and the Chem Eng Soc makes Birmingham one of the friendliest Departments in the UK" The Chem Eng Soc also provides opportunities for the students to get to know their lecturers better.

Kate believes that the friendliness of the staff at Birmingham is a real asset. "You never feel afraid to ask questions and all the staff are approachable".

Kate chose to apply to Foster Wheeler because she was impressed by their graduate programme which offers opportunities to travel and a diverse range of possible careers. Kate found out about the company at a presentation given in the Department by the company which was organised by the Chem Eng Soc.

Ahmed

Ahmed grew up in Kilmarnock, Scotland and chose to study chemical engineering because he found it an interesting subject which built on his academic strengths (maths, chemistry) and he thought that job prospects would be good, as indeed he has found. He chose Birmingham as his place of study because of the lively city, attractive University campus and the high reputation of the Chemical Engineering Department, which achieved the top 5* rating in the 2001 Research Assessment Exercise.

Ahmed has made the most of his time at Birmingham. He was Captain of the Departmental Football team and 1st Year representative and vice- chair of the Chemical Engineering Society. He found the course to be very challenging and he gained much satisfaction from it. A particular high point was the completion of the design project during the third year which put into practice the theoretical concepts learned throughout the course.

Ahmed completed two work placements during his studies, working for the process intensification consultancy company Cal-Gavin Ltd in the summer of his second year and the contracting company Haliburton in his third year. It was these experiences that led Ahmed to choose contracting and consultancy as a career.

Nicola

Nicola also decided to study Chemical Engineering at Birmingham after having a fantastic time on the **Appreciation of Chemical Engineering course (/schools/chemical-engineering/undergraduate/before-university/taster-course-chemical-engineering.aspx)**. She completed work placements with BICC Cables, Solutia and finally Foster-Wheeler in her final year which led to her being offered a job with the company. Nicola says "Foster Wheeler allows you to work in a variety of different technical areas, but they are very keen to for you to do other things too such as cost estimating, marketing, contracting as well as Engineering". Nicola's favourite things about the course were learning new scientific concepts and learning how chemical engineers have a responsibility towards maintaining the environment.

Nicola has been involved in the Chemical Engineering Society but has also made the most of Birmingham's excellent sports facilities during her stay. She played netball for the University 1st and 2nd teams for 4 years and for English Universities for two years, beating Scotland and Wales but losing to the excellent team from Jamaica!

Nicola also praised the Guild of Students at Birmingham, which is very active and is currently campaigning to make Birmingham the first "Fair Trade" University in the country.

Three Birmingham graduates sign up with BP

Mohsin

"I graduated from Birmingham University in July 2002 after completing a four-year degree in Chemical Engineering with Management. I very much enjoyed my time at university and it changed me in more ways than I could imagine. It was a great experience, not just for the academic side of things but also the social side. University was a great opportunity for me to meet many people from many backgrounds and it helped me to mature and become a lot more independent.

The atmosphere in the university was great, the campus is arguably one of the best in the UK and the Chemical Engineering course is accredited by the IChemE. It was hard work but I worked hard and played hard!

After leaving university I took a year out for travelling (and a well deserved break). I joined BP recently to work as a technical graduate at the Coryton refinery in Essex. I had worked previously for BP for a summer placement and after attending an Assessment Centre I was offered the job. I immediately accepted as BP is a huge multinational company. It has gone through several acquisitions and mergers and has been expanding into new markets, such as Russia and the Far East, so it is a very exciting time to be in the company as there are numerous opportunities.

I have joined the InspirE graduate scheme; this is the scheme for the Downstream business (Refining and Chemicals). Under this scheme, my professional development will be assisted by a combination of training and on-the-job experience. As part of the scheme you can move around on one to two year placement at

various locations within BP in Europe. Conversely though, if you are not the travelling type you can simply stay at your "home" location and take different jobs at that location. It is a very flexible scheme and can be tailored to almost anything you want; the key objective of the scheme is your professional and personal development.

There are also significant financial benefits of working at BP. The company provides financial assistance with relocation, the salary is better than "competitive", and you receive other financial perks such as the share plan and pension scheme.

I have now been working for BP for a few months. I received a "proper" job from day one and have been given responsibility for completing tasks that are essential to the refinery. In the past month, I have been working on developing operating procedures for a process unit, creating optimisation spreadsheets to monitor the crude oil feed into the refinery and working on the planning of a unit shutdown. The atmosphere at work is friendly and informal. There is plenty of support from my colleagues, as well as my mentor and my supervisor. All this has made the transition a smooth one for me. There is still a lot to learn and it is a very steep learning curve but I find that a challenge and not hindrance."

Paul

"My job with BP arose after successfully completing an internship during the summer break after my 2nd year at university and like Mohsin, I am in the Process Performance Team at the Coryton Refinery. I work within the Cracking Department.

My first impressions of BP were that they really cared about welcoming ALL the new Graduates to the company, the first day when we got to visit St James Square, where all the graduates got to meet was especially useful, as this has enabled us to build links (both professional and social) with the other graduates within the company. My first impressions of the refinery was awe at how massive the place was. The people here are all very friendly and welcoming.

As for my time at Birmingham, I really enjoyed my 4 years there, having first chosen the university for its reputation and location. During my time I made some very good friends, played a bit of sport, studied a bit, and drank a bit. I also co-hosted the student pub quiz in the Guild of students.

The department of Chemical Engineering at Birmingham has amongst some of the best staff I have ever known, the lecturers always had time for you. Although nothing can prepare you for the world of work, my degree from Birmingham does help to some degree."

Sam

"I joined BP Exploration & Production (E&P) in January 2003 after graduating from Birmingham in 2002 with a MEng in 'Chemical engineering with environmental management'. I had previously worked for BP as a summer student and also received a bursary that was available to students of selected universities of which Birmingham was one due to its excellent industrial relations.

Once with BP E&P I moved up to Aberdeen to begin work on the Clair project, as part of the 'Pipelines & Offtake' team. The Clair project is the development of the Clair field located 75 km west of Shetland, using a fixed platform structure and exporting the oil via a 105km pipeline to the Sullom Voe Oil Terminal (SVT) in Shetland. The pipelines & offtake team were responsible for the installation of the gas and oil pipelines and the necessary modifications at the oil terminal. As part of the team I was involved in wide range of activities from determining the cleaning philosophy that was to be followed during the pipelines operation, to engineering solutions on how the pipeline should be installed to minimise costs. I was even involved in the public relation activities for the local community in Shetland to ensure everyone was aware of the work that BP would be carrying out in their area.

The work was primarily office based but I was given numerous opportunities to go out on site including visits to SVT for site inspections, travelling to Edinburgh to witness the pipe coating, to a week on the pipelay vessel to watch the installation of the pipeline from SVT to the Clair site.

Now that the majority of the 'Pipelines & Offtake' team's work has been completed I have switched role and moved into the Start-up team, which is a team responsible for starting up the platform offshore next year. This is very exciting opportunity involving first a move to the construction yard in Wallsend where they are building and commissioning the platform topsides, and then working an offshore rota for 6 months to get the platform up and running!

However prior to my move down to Wallsend my team have seconded me out to another platform, Miller, to work offshore for 3-4 months. During this secondment I am working as part of a commissioning team responsible for managing a medium size platform modification. The aim of the secondment is to give me an experience before going on Clair of offshore life, plant operation, and confidence in managing the necessary paperwork.

In summary my time with BP has been an excellent mix of roles and responsibilities, being given opportunities both through work and training to maximise my learning and development. I have been given the space to take responsibility of my work while still receiving the necessary support from my team leader and the rest of the team."

Employment with Johnson Matthey

Barrie started at the University of Birmingham after gaining 'A' levels in Maths, Physics and Chemistry from my local college:

"I chose Chemical Engineering as I thought I would enjoy the applied science and theory and especially the practical hands-on problem solving. It was only in the second year that I opted to do a final year course in Chemical Engineering with Minerals Engineering. The course's flexibility allowed me to make an informed decision on the final year option after the first two years of core chemical engineering study. I enjoyed the course option tremendously, especially the field trips and

project work and it helped me to find employment with Johnson Matthey plc, a company who specialise in refining precious metals.

For the first year of study I chose to move into University Halls of Residence and settled in quickly with a group of friends but I also became involved with the Chemical Engineering Society. This was an excellent way of meeting students within the School. The society organised lots of events including numerous sports meetings, company presentations and social events such as a ball. In my second year I became the year representative and in my final year the Chairperson. I thoroughly enjoyed the job as the Chairperson and felt I achieved an awful lot for the School during this period and made lots of friends.

I enjoyed my time at the University of Birmingham immensely and tried to become involved in other activities on campus and in the city. One reason I chose Birmingham was the University's American Football team. I also enjoyed making use of the superb sports centre on campus and of course the Student Union.

In between my second and third years I worked for the National Rivers Authority and gained useful work experience - essential nowadays for finding employment after university. With a balanced academic and social life I was successful in getting a job with Johnson Matthey in North London as a Process Development Engineer which involves a large proportion of my time commissioning new plant and developing new processes. I am now in the process of moving into a Production role as a Technical Support Engineer which I hope will further my experience with a more day to day troubleshooting role. I really enjoy my job and it is everything I wanted it to be while I was studying and was certainly worth the hard work!”

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