

Daniel was studying **MEng in Mechanical Engineering** at Cardiff University when he completed his placement at IWT.

Daniel was involved in manufacturing the large robot weld improvements and developments.

Daniel's Comments;

"During my time on placement with IWT, I have had an active and exciting role within the company that has also been significantly beneficial in terms of my learning and development as a young engineer.

Over the last 12 months I have encountered and learned about the state of the art manufacturing processes in place here, such as laser and fibre-optic sheet metal profiling, CAM integrated hydraulic presses and robot welding.

One of my main projects has been to design and oversee the manufacture of a large robot welding chassis jig. Using Solidworks CAD and the help of the engineering team, I have made a definite and tangible contribution to the advancement of the company regarding the manufacturing of trailer chassis. The work has allowed me to experience both designing and also the more hands-on aspects of engineering such as welding and workshop machinery.



Robot Welding

IWT understands that a lot of their placement undergrads have little or no prior industrial experience (other than their studies) and my responsibilities were built in a way that ensured the work was challenging but manageable. IWT is a friendly environment to work in – help is always available and the management are very approachable.

I was also lucky enough to be able to take advantage of the company accommodation in Corwen. A few minutes from the factory, the large flat has fully furnished 'bed-sit' style rooms with two separate bathrooms and a well sized communal kitchen.

Working at IWT has expanded my knowledge on manufacturing extensively as I was able to work closely with engineers and develop my own learning in a manufacturing LEAN Techniques. During my placement I was always made to feel very welcome at the company and as a part of the engineering team."

Arwyn studies **BSc Product Design Engineering** at Liverpool John Moores University and completed his 12-month industrial placement at Ifor Williams last year.

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During Arwyn's time at IWT he had the opportunity to work across multiple disciplines including Engineering, Design and Marketing. One of Arwyn's tasks was to compile a comprehensive database for the Business in a Box trailers we produce. This involved looking up the trailer build history, listing all BIABs produced to date, reviewing their specification and, where appropriate, contacting end users for feedback on the end application. The project involved fully understanding the large range of options and features in the BIAB range, organising the data into a logical format and then populating the database with the relevant information, to report back to the senior management team.

Arwyn was also responsible for compiling brochures for the exhibition units and the catering units produced by the company. He used his engineering and technical knowledge to re-design the brochure and developed a strong relationship with an outside design house to take his ideas forward to a full brochure layout. Arwyn then worked with the design agency and co-ordinated a series of proofreading sessions to ensure that the information was technically accurate. The brochure has now been forwarded for printing in readiness for the Showman's Show.

Through his placement year, Arwyn gained an appreciation of how his technical ability is incorporated with our customer requirements to enable us to produce state-of-the-art product designs which are then communicated back to our customer market. Arwyn also had the opportunity to develop a broad skill set due to the variation of his role, these skills included; his ability to communicate with a range of individuals from senior managers to external suppliers, his ability to develop new skills within graphic design, as well as building on his existing skills within Engineering, for example using CAD software.



Brochure Design

Arwyn's Comments:

"Having been brought up only a few miles from the Ifor Williams Trailers manufacturing facility, I have witnessed first-hand the impact the company has on their surrounding community by both job opportunities and generosity to local schools and charities. This, along with Ifor Williams Trailers being renowned as Britain's Leading Trailer manufacturer, was the reason I was so passionate about applying to Ifor Williams Trailers for my 12-month placement. All the projects I have been involved with during my time in the Engineering, Design and Marketing departments, have all been directly related to my course and have also really challenged me, enabling me to exceed my goals. The opportunity to put the theory taught at university to the test in a practical working environment has enhanced my understanding to the point where lectures alone cannot do. From the first day to the last, all my co-workers have been fantastic, from those on the shop floor right up to senior management, they were always happy to help at every occasion."

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Undertaking a 12-month placement at Ifor Williams has been an invaluable experience, not only will it help me with managing my workload for my final year of studies but it will also be a huge advantage to have a 12-month work experience in such a well-known company on my CV."



Trailer Assembly, Production Line

Andrew was studying **BEng in Mechanical Engineering** at Liverpool John Moores University.

Andrew was involved in projects intended to make significant improvements in our manual welding department. His project covered process improvements by first identifying "waste" elements within a particular process and then engineering them out. All aspects of production were open to review and improvement, from equipment used, material flow and capacity planning systems.

Andrew's Comments;

"The experiences I've had so far have been great. It's not all office work which suits me as I like to get involved from both a practical and theoretical point of view. I have been given the opportunity to help plan and move two production lines within a short time scale, it was hard work but I would say this was a definite highlight so far. IWT is a friendly environment – help is always available and the management are very approachable. As part of my project I'm tasked with improving the capacity planning of the manual weld area of the factory, this is a significant responsibility as it plays a big part in the smooth running of the operations but I'm finding it very enjoyable. The support I've received from day one has been fantastic. I have comfortable accommodation, fully furnished and only 5 minutes from work. I live with another placement student and a graduate so it's been easy to settle in. So far I've really enjoyed my placement, I've learnt a lot and my project is interesting."

Jonathan completed his industrial placement as part of his studies towards **BEng in Manufacturing Engineering** at Loughborough University.

Jonathan was involved in a project to implement the introduction of two new trailer models. His project covered all aspects including shop floor layouts, new equipment purchases,

documenting standard operating procedures and creating a balanced work flow of processes in order to establish the safest and most efficient assembly methods.

Jonathan's Comments;

"From the very start I was involved with projects ranging from large and small, a real variety with no two days the same. Within the larger overall project, we were able to break down and figure out many smaller problems which enabled the completion of the main task. Working on various projects enabled me to gain a diverse experience, within project management, theoretical engineering solutions and practical implementation. The placement also related extremely well to my studies and allowed me to apply my knowledge learnt at university to a real working environment. During my placement I also interacted with senior engineers, quality engineers, designers, operations and skilled operators on the production line. The exposure this type of work offers is really varied and means that I am developing competency very quickly across many areas of manufacturing engineering."

Ifor Williams has exceeded my expectations and made me feel part of a team which values my input. I have found that my time at IWT has been a real success and I would definitely recommend this company to other students looking for placement – it's about the manufacture of the best trailers on the market. The accommodation package is good too and allows you to move away at low cost before your last year at university, which you'd struggle to find at other companies."



Ifor Williams TT2515 Tipper trailer

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Geraint completed a Design Engineering placement at IWT as part of his studies towards **BEng (Hons) in Agricultural Engineering** at Harper Adams University.

Following his contribution on the 15-month placement, Geraint was offered a permanent position within the company as a Graduate Design Engineer, having successfully finished his degree a year later.

Geraint's Comments;

"I realised the dominance and reputation IWT's products had in their field from an early age. I therefore leapt at the opportunity of joining the company during my placement year."

I started my placement in the June and finished 15 months later at the end of August, which was great as I was able to save up some extra funds from the optional extra 3 months. During my placement within the company I was involved in turning a brand new trailer spec from a CAD model on a screen to a prototype. This meant producing all the production drawings and specifying the appropriate material grades for each part, then co-ordinating the ordering of all required prototype parts in the correct sequence, taking lead times and the order in which they were needed into consideration. My close liaison with other departments within the company was really useful in showing all the different elements of product development. It also illustrated to me how decisions made at the design stage effect other departments, whilst improving my communication skills in the process.

My project management skills improved significantly as I was working on complex projects to agreed deadlines and often had several projects to work on at once.

The invaluable experience that I gained as part of the Design team at IWT unquestionably placed me in good stead for my final year at University. The practical and theoretical responsibilities I undertook gave me a far deeper understanding of the Mechanical Engineering industry than any text book from a library could. It also gave me a real insight to engineering questions and a sound foundation to approach my dissertation project.

I joined IWT with potential, but left with prospects."



Business Inabox, Workshop Trailer



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Stuart completed his industrial placement at IWT as part of his studies towards **MEng in Mechanical Engineering** at Cardiff University.

Stuart is involved in projects intended to make significant improvements in our engineering department. For a project of this agenda, all aspects of production are open to review and improvement, from equipment use, material flow and capacity planning systems.

Stuart's Comments;

"My time at Ifor Williams Trailers Ltd has been enjoyable and continues to be varied. I have been tasked with a range of projects and for most of these I am able to get hands on myself. It's not all office based work which suits me as I like to get involved from both a practical and theoretical point of view.

My first project involved managing the line balance of a major production line, this related directly to material I had studied in Year 2 Manufacturing Systems Design. Putting my academic knowledge in to practice was more challenging than I had expected, but equally it was rewarding to visibly see the positive effect on production output that was due to the work I had undertaken.

I then worked on a new product which was subsequently launched to our distributors and customers all over the world. The project involved setting up new production lines as well as engineering solutions to problems that arose during the build. I used SolidWorks CAD to design jigs and equipment and have increased my skill with this software greatly.

Since starting here, I have been involved in design and process improvement along various production lines and recently been tasked with more managerial themed tasks which I really enjoy. I have undoubtedly become more confident in myself with this experience, seriously improved my CAD skills and proven that I can deal with the responsibility of making big decisions. I strongly recommend a year out in industry to all students and a placement at IWT offers fantastic experience. The experience I have gained from working in a reputable manufacturing engineering business will prove invaluable when I look to apply for graduate careers."



CNC Press Machining