



## Business Placement Case Study and Evaluation 26

**Chris from The McAuley Catholic High School visited PI Technology on a business placement in July 2008.**

PI Technology is a design and engineering consultancy for a range of industries.

The company has two full time employees and a varied number of contract engineers depending on projects.

PI Technology offers product design, engineering design and rapid prototype consultancy. The techniques used include concept design (sketch/WG), 3D CAD, 2D CAD, prototyping, testing and production specification.

Strategic planning for the company is influenced by market resources, for example working on several environmental products and recycling products.

Regular communication with customers and suppliers, design projects are influenced by materials and the most sustainable and low carbon manufacturing methods.

**Range of occupations**

Product design

Engineering design

Rapid prototyping expert

Mechanical engineering

**Opportunities available for young people**

There are no opportunities at present. Long term as the company grows there will be opportunities for designers with engineering knowledge.

**Pathways and routes of entry**

Engineering or product design degree

**Specific business and transferable skills required**

Good communication skills and an understanding of engineering and manufacturing processes are required. The company looks for good communication, self motivation, and honesty. Good levels of literacy, numeracy and ICT are also needed.

## Job Study - Product Design Consultant

### **What does your job role involve?**

I am involved with project management and liaison with customers. In my work I have to solve problems, give presentations and keep in touch with clients by email. I undertake concept design including 3D CAD work.

I am responsible for my own time management. I plan my day and set myself goals

### **What key skills are required for your role?**

Skills in literacy, numeracy and ICT are important.

For example:

**Numeracy** This is used everyday in various forms including working out angles, costing products and calculating profits.

**Literacy** Making presentations to customers, writing reports and explaining concepts require good literacy.

**ICT** ICT is a major factor and is used predominately for the job (eg using 3D programmes /industrial software).

**Working with others** As a female in a male dominated sector you need to have confidence and belief in yourself and not be over-sensitive.

**Problem solving** This is a key factor within the role. There are always numerous problems to solve.

**Developing own performance** The nature of the business demands working in areas of unknown territory.

**What qualifications, training and/or experience did you need to enter your job?**

I did my A levels followed by a foundation course and university degree.

**What extra qualifications/training have you gained in your current role?**

I have been on courses in personal assertiveness training, Microsoft Excel and I spent 4 days training to learn the basics of 'solid works' (3D design software)

**What are the working conditions of your job?**

I work 8 hours per day, 5 days per week.

My work is spent about 80% indoors and 20% on site.

The only health and safety issues are those linked to working on a computer.

**What advice would you give to young people interested in entering this field?**

You need to be interested in solving problems and being innovative. An awareness of objects that surround you, how things are made and how they work is also useful.

## **Evaluation of the Business Placement**

**What did you do on the placement?**

I had 'hands on' experience in designing a 'live' project. I found out about the programs and machinery used and I discovered how cutting edge technology is used to manufacture precision components.

**What knowledge about the organisation, its sector and its market place did you gain?**

I found out about the wide use of ICT (CAD/CAM) and the wide variety of projects taken on. I also discussed some of the legal aspects of the (e.g. patents) and some of the constraints and issues involved

**Do you feel that the placement was a success? Please give reasons**

I spent four days there and I thought it was a success. I enjoyed being there and was made very welcome and made to feel part of the team. Time was taken to explain things to me and I was given the opportunity to get involved, which I did. I learnt new technologies and made contacts with other people that will hopefully prove positive back at school - so students will benefit.

**Could you suggest any improvements to the management of the business placement?**

No. I thought that it was very well organised. Thank you.

Be whatever you want to be