



ENGINEERING AND MANUFACTURING WORK PLACEMENT

PLACEMENT DETAILS

Placement title:

Engineering and Manufacturing Work Placement

Employer:

Good Directions Group

Working hours:

The preferred working hours are 9.00 am to 4.00 pm.

We appreciate that students may rely upon public transport and can offer reasonable flexibility around arrival and departure times where necessary. Any alternative arrangements should be discussed and agreed in advance.

ABOUT GOOD DIRECTIONS GROUP

Good Directions Group is a Portsmouth based British manufacturer specialising in exterior clocks, clock towers, street furniture, roof turrets, architectural structures, GRP products, metal guttering and rainwater systems, water features and other bespoke commissions.

Our work combines traditional craftsmanship with modern design, engineering and manufacturing methods. Many of our products are designed and manufactured specifically for individual customers and projects, with products supplied throughout the UK and internationally.

We work with a wide variety of materials and finishes, including wood, metals, fibreglass, plastics, paint systems and traditional gold leaf.

PURPOSE OF THE PLACEMENT

This placement is intended for students with a genuine interest in engineering, manufacturing and practical work.

It will provide an opportunity to experience the working environment of a British manufacturing business and understand how products progress through production, from raw materials and individual components to assembly, testing, finishing, quality checking and despatch.

The placement will primarily focus on workshop and manufacturing activities. Although clockmaking may form part of the placement, our work is extremely varied. Depending upon the projects passing through the factory, students may have the opportunity to assist with products such as exterior clocks, street furniture, roof turrets, architectural structures, metal guttering, water features and other bespoke commissions.

Students will also be introduced to the wider business and shown how its different departments contribute to the design, manufacture and delivery of our products.

The exact activities undertaken will depend upon the student's age, ability and interests, together with the projects passing through the factory during their placement.

POSSIBLE PLACEMENT ACTIVITIES

Under appropriate instruction and supervision, activities may include:

1. Measuring and marking out materials and components.
2. Using suitable hand tools.
3. Assisting with basic fabrication and assembly activities.
4. Working with materials such as wood, metal, fibreglass and plastics.
5. Assisting with the manufacture or assembly of clocks, street furniture, roof turrets, metal guttering, architectural products and bespoke commissions.
6. Assisting with clock assembly, setting and testing where relevant.
7. Learning how clock mechanisms, motors and controllers operate.
8. Preparing products and components for finishing.
9. Learning about specialist finishes, including painting and traditional gold leaf gilding.
10. Assisting with general workshop and production tasks.
11. Checking completed components and products.
12. Learning about quality standards and the importance of accurate workmanship.
13. Preparing products for packing and despatch.
14. Observing how technical drawings and manufacturing information are used within the workshop.
15. Learning how different products and materials require different manufacturing methods.
16. Observing modern manufacturing equipment and specialist workshop processes.
17. Where time, materials and workshop activities allow, designing and making a small item for themselves to take away at the end of the placement.

TOOLS, EQUIPMENT AND MACHINERY

Students may use appropriate hand tools under supervision.

Any use of workshop machinery will only take place following suitable instruction and will depend upon the student's age, ability, confidence and understanding of the relevant safety procedures.

Students may also have the opportunity to observe specialist manufacturing equipment, including:

1. CNC turning and milling machinery.
2. CNC folding equipment.
3. Waterjet cutting equipment.
4. Laser cutting equipment.
5. CNC routing equipment.
6. Other workshop machinery and manufacturing processes relevant to the work taking place.

Exposure to particular machinery or processes cannot be guaranteed, as this will depend upon the production work being undertaken during the placement. Some specialist equipment may be demonstrated or observed rather than operated by the student.

All activities will be assessed and supervised by an appropriate member of staff.

PERSONAL PROJECT

Where possible, we try to give each student an opportunity to make something for themselves during their placement.

The project will be selected according to the student's interests and abilities, the time available and the materials and equipment that can be used safely.

The aim is to give the student experience of taking an idea through measuring, planning, manufacture, finishing and completion.

This provides the student with a tangible reminder of their placement and a practical example of the skills they have developed.

LEARNING OUTCOMES

By the end of the placement, the student should have gained:

1. A better understanding of how a manufacturing business operates.
2. Practical experience within a working workshop environment.
3. An appreciation of workplace conduct, standards and responsibilities.
4. An understanding of the importance of accuracy, quality and attention to detail.
5. Greater confidence when communicating with colleagues and asking questions.
6. Experience of listening to instructions and completing tasks safely.
7. An insight into engineering and manufacturing careers.
8. An understanding of how traditional workshop skills are combined with modern manufacturing technology.
9. Experience of working with a range of products, materials and manufacturing processes.
10. Where practical, experience of completing a small project or identifiable piece of work.

PERSON SPECIFICATION

Essential qualities

Applicants should demonstrate:

1. A genuine interest in engineering, manufacturing and practical work.
2. A willingness to listen, learn and follow instructions.
3. Reliability, punctuality and a responsible attitude.
4. The confidence to ask questions when they are unsure.
5. A careful and safety conscious approach.
6. The ability to use their initiative appropriately.
7. Respect for colleagues, equipment and the working environment.
8. The ability to work as part of a team.
9. Care and patience when completing practical tasks.
10. An understanding that some manufacturing activities may be detailed, repetitive or require sustained concentration.

PREVIOUS KNOWLEDGE AND EXPERIENCE

No previous workplace experience is required.

A genuine interest in engineering or manufacturing is important. The following would be useful, but are not essential:

1. Experience of completing practical projects at school, college or at home.
2. Experience of using basic hand tools.
3. An interest in technical drawing or CAD.
4. An interest in clocks, mechanisms, electronics or product design.
5. Experience of engineering, design, technology or other practical subjects.

CLOTHING AND SAFETY REQUIREMENTS

Students must bring and wear suitable safety footwear.

They should also wear sensible workshop clothing that allows them to move comfortably and that they do not mind becoming dirty.

Any additional protective equipment required for a particular task will be supplied.

Students will be expected to follow all health and safety instructions and workplace procedures throughout the placement.

MOBILE PHONES AND PERSONAL MUSIC

The use of mobile phones is prohibited within the factory unless permission has been given for photography or listening to music.

Photography must only take place with prior approval, as some products, customer projects and manufacturing processes may be confidential.

Where permission is given to listen to music, only a single earpiece may be used. The other ear must remain unobstructed so that the student can hear instructions, machinery, alarms and other people within the workshop.

Mobile phones and earphones must not be used while operating machinery or completing any task where they could create a distraction or safety risk.

APPLICATION AND SELECTION PROCESS

Students should apply through the process arranged by EBP South.

Applications should explain:

1. Why the student is interested in the placement.
2. Which aspects of engineering or manufacturing interest them.
3. Any relevant school, college or personal projects they have completed.
4. Any experience they have of tools, technical drawing, CAD or practical activities.
5. What they would like to learn from the placement.

Good Directions Group would then like to participate in the final selection, where students may be invited to visit our premises before the placements are confirmed.

The visit would include:

1. An informal conversation with members of our team.
2. A tour of our workshops and offices.
3. A discussion about the student's interests and what they would like to gain from the placement.
4. An opportunity for the student to ask questions about the company, the working environment and the placement.

This is intended to give the student useful experience of a realistic employment selection process. It will also allow both the student and Good Directions Group to decide whether the placement is likely to be suitable and worthwhile.