

Job Title: Manufacturing Engineer Apprentice – Level 6

Qualification: Level 6 Manufacturing Engineer

Location: Miskin, South Wales

Learning Provider: Gower College and Cardiff University

Duration: 5 years

What is a Manufacturing Engineer Apprentice?

The BEng Integrated Engineering Degree Apprenticeship will build on your employment experience to develop the higher-level skills required to become a professional engineer.

The programme is designed to produce engineers with broad knowledge and skills in more than one of the traditional engineering disciplines. This apprenticeship integrates work-based learning in the form of a significant industrial project with on-going reflection on the application of your learned skills in the workplace. This structured Degree Apprenticeship will give successful candidates the opportunity to study for a degree whilst working on exciting and challenging work placements.

Where will I be working?

This role is based at our Miskin site near Llantrisant, South Wales, you may on occasion be required to travel to other Renishaw sites for work. **You will need the ability to travel independently to college and work.**

What will I do?

Year 1, 2 & 3 modules will be delivered at Gower College Swansea.

Year 1 - A Laboratory module will be delivered throughout the year to prepare you for the application of advanced practical skills as well as a module in Professional Engineering to introduce you to the world of the professional engineer.

Other year 1 modules are aimed at science and engineering specific topics. You will learn from your workplace experience, reflecting on how what you are learning is used in practice. You will also be required to keep a reflective diary of your work experiences which will contribute to the assessment of the final year work-based project.

Year 2 - consists of all the core modules. These are engineering specific modules aimed at deepening your knowledge in specialist areas, applying principles, and developing problem solving skills. A module in Engineering Management will equip you with knowledge of corporate finance, employment law and other relevant legislation, essential for managers in today's world of engineering building on your workplace experience.

Year 3 - during year 3 consideration should be given to the nature of the work-based project. You, together with your employer and college tutor, will meet to discuss potential opportunities for formulating a suitable project and identifying an appropriate academic supervisor in Cardiff University.

Year 4 & 5 modules will be delivered at the School of Engineering at Cardiff University.

Year 4 - the year includes the commencement of the major work-based project totalling 40 credits, which will run through the whole of the last two years of the programme applying what you have learned to solve real life problems. For this you will study individually on a substantial problem identified in your workplace,

alongside a supervising academic staff member from Cardiff, your tutor from Gower College and your line manager.

Year 5 - you will return to Cardiff University for the final two semesters of Level 6 modules, leading to your degree completion. You will complete two further core modules and the final two optional modules whilst bringing your work-based project to a conclusion.

What qualification will I achieve?

You will study towards a BEng Integrated Engineering via blended learning with Gower college, Swansea and Cardiff University, School of engineering.

It will be delivered through a blended learning approach with a combination of face-to-face delivery and learning activities at Gower College Swansea and Cardiff University's School of Engineering, online delivery of lectures and example classes and work-based learning at your place of work.

The work-based project element will take place completely in your workplace and will be specified in consultation with the employer to deliver a project which is of real benefit to the business as well as meeting the learning outcomes of the module.

What skills and qualifications do I need?

Applicants must have:

- Either three A levels at CCC, one in should be Maths, and others in a STEM related subject OR a BTEC Level 3 Extended Diploma at MMM, in an engineering related subject.
- Other qualifications of a similar level can be considered. We would encourage applicants with non-standard qualifications to contact us to discuss their eligibility.
- Good written and verbal communication skills.
- A current or recent job, this does not need to be relevant to engineering and can be a paper round or Saturday job, as this demonstrates maturity, responsibility and independence.
- Relevant work experience done through school or college would be beneficial although is not essential.
- A genuine desire to become an exceptional mechanical/electrical engineer.