

Why Work as an... Engineering and Design Draughtsperson

A solution for your training needs and career progression

ROLE OVERVIEW

Engineering design and draughtspersons produce designs and drawings for structures, piping, electrical systems, control and instrumentation systems and mechanical components used in industrial and commercial construction.

KEY POINTS

- **Level:** 3
- **Duration:** 42 months + End Point Assessment
- **Pathways:** Electrical, Control and Instrumentation, Mechanical, Piping, Structural
- **Entry requirements:** You may be required to undertake training in maths and English. See [HERE](#) for more information
- **Career progression:** Options include Electro-Mechanical Engineer, Product Design and Development Engineer (Degree), Post Graduate Engineer - Design and Development Engineer

KNOWLEDGE REQUIREMENTS

- Relevant national and industry health and safety, standards and legislation and those relevant to the specific disciplines, as appropriate
- Document management and change control
- Engineering codes and standards
- Fundamentals of engineering drawing and design
- Computer Aided Design (CAD) software, its appropriate application including 2D and 3D modelling
- Understand the impact of relevant factors that are important to the design e.g. the context in which you are working, the materials, components, assemblies, cost, quality, safety, security, risk, environmental impact, ergonomics, aesthetics, the end use and purpose of the design

SKILL REQUIREMENTS

- Review and interpret technical information and requirements from different sources e.g. specifications, concepts, stakeholders
- Identify inaccuracies or discrepancies in engineering drawings and specifications and propose solutions
- Design engineering concepts to solve engineering challenges
- Develop effective solutions which satisfy the required standards and can be manufactured, proven, operated and maintained in a cost-effective way whilst minimising costs

BEHAVIOUR REQUIREMENTS

- Have a strong work ethic including attention to detail and commitment to completing the task in hand
- Take personal responsibility for own work, set the right example for others and actively seek opportunities for quality improvement
- Apply and uphold principles of ethics and sustainability
- Commitment to advancing own learning and competence, showing a willingness to learn new skills and an openness to others' ideas and input
- Accept and promote equality and diversity

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