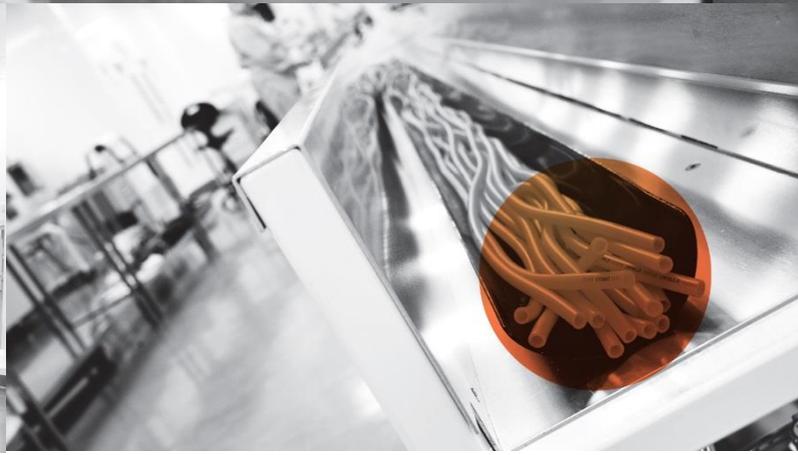




STUDENT PLACEMENT YEAR 2021/22





About Mi3

Founded in 2006, Mi3 is a specialist partner in the design, development and manufacture of complex plastic medical, pharmaceutical and scientific devices. Supporting clients from an early stage concept interpretation to development and design for manufacture. Mi3 can be contracted for one or more parts of the product cycle or the entire process, assisting with:

- Market and technology research
- Concept creation and design
- Development and prototyping
- Pilot to full-scale production
- Sterilisation
- Regulatory and technical documentation.

What You'll Gain

By opting to undertake a placement year with Mi3 you will gain an opportunity to develop your skills and experience in a broad range of areas including:

- New Product Development
- Injection Moulding
- The Regulatory Environment
- Sterilisation
- Feasibility Testing
- Prototyping
- Extrusion
- Mould Flow Analysis
- Financial Awareness
- Process Development
- R&D
- Assembly and Packaging.

Location

The placement is based at the Mi3 facility in Blackburn, Lancashire. The successful candidate may need to relocate in order to be able to fulfil the role.

Benefits

£17,500 per annum plus a generous holiday allowance.

Length of Placement

12 months

Placement Start Date

July – September 2021

Application Process

Interested applicants should send a copy of their CV and a Covering Letter, explaining how they meet the criteria of the role, to jobs@mi-3.co.uk, using 'Student Placement Year' as a subject title. Potential applicants will then be contacted by phone for an initial telephone interview. If applicants are successful in their telephone interview they will then be invited to an assessment centre in Q1 2021.

Application Closing Date

31st January 2021.

Job Description

Responsible for supporting a portfolio of NPD (New Product Development) projects in accordance with relevant ISO regulatory standards and the Mi3 QMS (Quality Management System) providing data for project owners to determine if project tasks are completed on time and to budget.

Key Responsibilities

- Provide support, under guidance from the project owner, for internal (COGS reduction and continuous improvement) and customer focused projects (new product introduction) in accordance with relevant regulatory standards and QMS policies and procedures appropriate to the project and product.
- Provide support under guidance of the new business development engineer or sales & marketing manager for sales & marketing including; technical input on leads, drafting of request for quotation, drafting project costings and research into new and emerging technologies.
- Maintain effective and timely communications with project owners and other internal stakeholders for projects.
- Complete testing of products as required for project, under direction of project owner.
- Ensure recording of project progress is up to date, and obtain progress updates from task owners.
- Ensure all physical and electronic project documentation is correctly maintained.
- Create specifications, CAD models & technical drawings, under guidance from E&PD team, ensuring they are completed according to our approved systems and processes and in line with BS 8888 or other drawing standard as specified at the time.

- Under guidance from the E&PD team draft technical protocols and reports, including feasibility investigations for new COGS & product opportunities. This includes statistical analysis if appropriate for the task.
- Preparation and contribution to all technical meetings as appropriate.
- Provide support to Operations and Technical departments for non-conformances raised on existing products where the issues are related to product design.
- Process EFACS transactions and maintain BOM's (Bills of Materials) for new and existing products, liaising with other departments to ensure parts, BOM's and routes are correctly established.
- Ensure project documents and specifications are approved via the relevant QMS procedures in a timely manner.
- Any other duties reasonably requested from you.

Additional Responsibilities

- Attend training and presentations to develop relevant knowledge and skills.
- Present technical topics and reports to the wider project team.
- Participate in risk assessment processes in accordance with relevant regulatory or QMS requirements for the product or process.
- Support the business and colleagues with participation in root cause analysis of process and customer rejects, particularly when related to product design.
- Research new technologies and products that could be utilized to facilitate the successful implementation of new products or to support future business needs.



Qualifications and Experience

Essential

- 2nd or 3rd year university student in Engineering, Maths, Physics, Chemistry or Biomedical discipline.
- Experience authoring technical documents such as protocols, rationales and reports.
- Experience with CAD software (during university or work experience), preferably Solidworks.
- Experience of managing multiple tasks across several projects.
- Good skills in written and spoken English to enable communication with colleagues and understand technical and QMS related documents.

Desirable

- Prototyping experience (3D printing or CNC).
- Knowledge of injection moulding or extrusion.
- Understanding of test method development process
- Understanding of validation process
- Understanding/ experience with root cause analysis techniques
- Mould Flow / CFD Knowledge.
- Knowledge of polymer, plastics and biomaterial selection.
- Experience in a medical manufacturing environment.
- Experience of document control procedures.
- Knowledge of statistical methods.
- Knowledge of DFMEA or PFMEA risk management techniques.
- Knowledge of design for electronic components.
- Experience with software coding for devices such as Arduino, raspberry pie etc.



What Previous Students Have Said:

“A student placement at Mi3 is unlike a student placement anywhere else. The company are really invested in your personal development and through 1:1 mentorship and working throughout the whole company (not just the Engineering & Product Development team) I’ve gained an appreciation of industry and the corporate side to engineering; something that I had always wanted to explore as it’s not taught at University. I really wanted to experience project management within the medical device sector too and I discussed this with my line manager. As a result, I’ve had the opportunity to be involved with multiple projects following the creation of a medical device from design concept to manufacture and I’m currently leading my own projects – a responsibility usually reserved for graduate students at larger companies.

The best thing about Mi3 is that I’m always learning. Whatever interests you within medical devices, Mi3 gives you the chance to experience it. It could be design, quality, validation, sterilisation, regulatory affairs or even business – all aspects of industry I’ve experienced so far during this placement.

If you want a placement that will entrust you with responsibility, constantly develop your industry/technical skills and treat you like an employee – not just a placement student, then Mi3 is definitely the company for you!”

– *Vanessa Yung, current Technical Placement Student and 4th year Mechatronics and Robotics Engineering student at University of Leeds.*

“The industrial experience was an opportunity to learn first-hand about the medical device industry. In addition, the learnt skills at University were applied and developed, alongside gaining new skills and knowledge relevant to the medical device industry, increasing my capabilities as a student. My work package was based around the product design, verification, validation and design transfer phases of the medical lifecycle. Having learnt some aspects of each phase at university e.g. CAD modelling for product design and Failure Mode Effect Analysis (FMEA) for verification and validation, I had the opportunity to work on these activities but to an industry standard. New activities were introduced for example, sterilisation validation an essential consideration for a medical device.

The nature of the workplace requires personal attributes to work harmoniously within the organisation. Day to day work helped develop soft skills such as communication, leadership, project management and emotional intelligence. Not only did I establish a relationship with Mi3 employees, but also with customers and suppliers, whilst working on project enquiries and device development, building soft skills and also learning from their expertise.

An understanding of business and how an organisation operates in the wider environment is often overlooked in non-business related degrees. Through my work on acquiring capital equipment, project enquiries and participating in project management discussions I obtained some commercial awareness, a useful perspective for decision making in the future.”

- *Muhammed Dassu BEng (Hons) in Medical Engineering from the University of Bradford and MSc in Medical Engineering at the University of Leeds*