Manufacturing Technician and Manufacturing Engineer Apprenticeship Programmes
Overview

1. Background and consortium
2. Apprenticeship Title and Occupational Profile
3. Programme Overview
4. Cost, Registration, Employer Obligations, Apprentice Support Structure
5. Companies enrolled to date
Development Process

- **National Apprenticeships Development**: Critical path and implementation partners
  - Programme development: Industry-led consortium
  - Validation & Q/A for programme approved: Apprenticeship Council
  - Occupational profile approved: Apprenticeship Council
  - Project plan approved: Development funding allocated: SOLAS, HEA, Apprenticeship Council

- **Proposal research skills need industry-led consortium**

- **Apprenticeships under way industry-led consortium**

- **Approval of employers registration of apprentices SOLAS**

- **Implementation plan & budget agreed SOLAS and HEA**

- **Creation of industrial training order SOLAS**

- **Higher Education Authority (HEA)**

- **SOLAS (Solicitors of the Institute of Industry and Commerce)**

- **Apprenticeship Council**

- **Manufacturing Apprenticeship Ibex**

- **Galway-Mayo Institute of Technology (GMIT)**
Apprenticeship Programme Titles

1. **Manufacturing Technician, Level 6**
   Academic title: Higher Certificate in Engineering in Manufacturing (Apprenticeship)

2. **Manufacturing Engineer, Level 7**
   Academic title: Bachelor of Engineering in Manufacturing (Apprenticeship)
Occupational Profile – Manufacturing Technician

Typical tasks/responsibilities

Manufacturing Technician, Level 6

- The Manufacturing Technician provides technical support function for manufacturing operations, including troubleshooting equipment and process issues, validation and qualification activities of the manufacturing site through the creation and support of necessary validation documentation for equipment, process and product release.

- The manufacturing technician will work both autonomously and cross-functionally with Production, Operations, Engineering Support, Quality, Facilities, and Safety to ensure that the engineering activities/projects are completed as per defined project schedule.

- The manufacturing technician will also work in establishing and coordinating corrective/preventive maintenance activities for Production/Operations equipment within the manufacturing site.
Manufacturing Engineer, Level 7

• A Manufacturing Engineer facilitates efficient operations within the production area, to optimise existing processes, implement new processes and to ensure that production goals are met. Monitors performance of equipment, machines and tools and corrects equipment problems or process parameters that produce non-conforming products, low yields or product quality issues, all within a highly regulated and complex manufacturing environment.

• Analyses and solves problems from basic engineering principles, theories and initiates technical activities leading to new or improved products or process to meet strategic goals and objectives of the company.

• Applies project management methodologies and Kaizen improvement philosophy to manage production/product design and process and systems improvement respectively.
Programme Overview

- Developed by the Irish Medtech Association along with Galway Mayo Institute of Technology (coordinating provider) and representatives from the medtech industry.

- 2 year programme – Manufacturing Technician
- 3 year programme – Manufacturing Engineer

- Level 6 - Manufacturing Technician
- Level 7 - Manufacturing Engineer

- Phase Block Release
  - 15 week block per year in one of the participating Institutes of Technology.

- Entry Requirements: Leaving Certificate (or equivalent), Grade 06 at ordinary level in 5 subjects 2 of which must be maths and a language (English or Irish).
# Programme Overview – Modules

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**Level 6 Year 1 & 2**

**Level 7 Year 1, 2 & 3**
Cost

- Company pays apprentice salary for both on and off the job phases.
- Salary set by individual company.
- Tiered remuneration recommended for 2 and 3 year programmes.
- Government pays for college training.
- Annual apprentice registration fee of €1,500 will apply.
Key Employer Obligations

- Company must ensure apprentice is released to attend induction presentation and ‘off the job’ blocks.

- Company must provide access for the apprentice to the appropriate equipment and resources to complete the ‘on the job’ elements of the programme.

- Company must assign a person qualified in the occupation to act as a mentor and/or assessor/verifier to the apprentice for ‘on the job’ elements.
Apprentice Support Structure for ‘On the Job’ Learning

- Academic Supervisor
- Quality Assurance

Collaboration

- Apprentice
- Industry Mentor (Trainer and Assessor)

- Compliance
  - Authorised Officer
  - SOLAS/ETB

Manufacturing Apprenticeship IBEC
Companies Engaged to date

- Hollister
- Abbott
- Sanmina
- Johnson & Johnson Vision Care, Inc.
- DePuy Synthes
- Baxter
- Boston Scientific
- Stryker
- Teleflex
- Lake Region Medical
- Takumi Precision Engineering
- Siemens
- Nordson Medical
- Masonite
- Molex
- Zimmer Biomet
- Merit Medical