Polymer Processing Technologist Apprenticeship
Overview

- Developmental Overview
- Apprenticeship Title and Occupational profile
- Companies taking part to date
- Programme Details
- Employer Obligations
- Cost to the employer & apprentice
Developmental Overview
Title:
Polymer Processing Technologist, Level 7
Academic title: Bachelor of Science in Polymer Processing Technology

Typical tasks and responsibilities:
- A Polymer Processing Technologist will work cross functionally with engineering and quality teams to develop and optimise polymer manufacturing processes within the company.
- They will address machine, material, mould, die or tooling issues in the specification, introduction, validation and continuous improvement of equipment and processes.
Case Study – Nypro, Bray
Programme Overview

- Developed by Polymer technology Ireland along with First Polymer Training Centre, Athlone Institute of Technology (coordinating provider), Institute of Technology Sligo and representatives from the plastics industry.

- 3 year programme
- Level 7 - 180 credits
- 7 phases
  - 4 x On-the-job (includes online modules)
  - 3 x Off-the-job (Athlone Institute 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); QQI-FET level 5, mature students (over 23).
- For non-native English speaking they must demonstrate competence (guidelines provided).
Apprentice Support Structure for ‘On the Job’ Learning

- Academic Supervisor
- Quality Assurance
- Apprentice
- Industry Mentor (Trainer and Assessor)
- Compliance
- Authorised Officer SOLAS/ETB

Collaboration
## Programme Overview – Phase Block Release

### YEAR 1

<table>
<thead>
<tr>
<th>May - August</th>
<th>Sept - Dec</th>
<th>Jan - April</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the Job (Phase 1)</td>
<td>Off the Job (Phase 2)</td>
<td>On the Job (Phase 3)</td>
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</tbody>
</table>

### YEAR 2

<table>
<thead>
<tr>
<th>May - August</th>
<th>Sept - Dec</th>
<th>Jan - April</th>
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<tbody>
<tr>
<td>On the Job (Phase 3 cont.)</td>
<td>Off the Job (Phase 4)</td>
<td>On the Job (Phase 5)</td>
</tr>
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### YEAR 3

<table>
<thead>
<tr>
<th>May - August</th>
<th>Sept - Dec</th>
<th>Jan - April</th>
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</thead>
<tbody>
<tr>
<td>On the Job (Phase 5 cont.)</td>
<td>Off the Job (Phase 6)</td>
<td>On the Job (Phase 7)</td>
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Programme Overview – ‘On The Job’

PHASE 1
- On the Job Learning
  - ICT & Learn to Learn

PHASE 3
- On the Job Learning
  - CAD & Design
  - GMP

PHASE 5
- On the Job Learning
  - Six Sigma 1 – Lean Sigma
  - Phase 5 Project

PHASE 7
- On the Job Learning
  - Six Sigma 2 – Stat. Control
  - Phase 7 Project

ASSESSMENTS
ONLINE
PROJECTS

OBSERVE
PRACTICE
APPLY
AUTONOMY
The On-the-Job assessment is contextualised under three broad polymer processing skill-sets.

- **Injection Moulding**
- **Blow Moulding**
- **Extrusion**

The apprentice will be supported by a well structured framework of learning, made up of assignments and tasks that he/she must complete. These will be *Pass/Fail evidence based* assessments.

<table>
<thead>
<tr>
<th>Checklist of Skills</th>
<th>E-Portfolio</th>
<th>Self-Evaluation Log Book</th>
<th>Industrial Site Visits</th>
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</thead>
<tbody>
<tr>
<td>Apprentice will be assessed by the industry mentor in terms of their ability to complete tasks outlined in Book 3</td>
<td>Apprentice will upload evidence based learnings e.g. photos, videos, documents</td>
<td>Apprentice will record and reflect on their technical learnings</td>
<td>Academic supervisor will visit apprentice during each on the job phase to evaluate performance in the workplace</td>
</tr>
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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 suitably qualified person in the occupation to act as a mentor to the apprentice for ‘on the job’ elements.

• **Note:** Mentor training will be provided and funded by the consortium.
Cost

- Company pays apprentice’s salary for both on and off the job phases.
- Salary set by individual company.
- Government pays for college training.
- Annual apprentice registration fee of €1,500 will apply.
Target Group

• School leavers, production operators and technicians who want to train or retrain in the Polymer technology sector and progress along the NFQ to level 7.

• Any one of the 200+ Polymer Technology companies currently established in Ireland.
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