

## OJT CORE COMPETENCIES

# Plastic Process Technician

### TERM OF APPRENTICESHIP

The term of the apprenticeship is 3 years.

### APPRENTICESHIP APPROACH

Time-based

Competency-based

Hybrid

*Apprenticeships may be time-based, requiring a set number of OJT (on-the-job training) and RTI (related technical instruction) hours; competency-based, allowing completion once all skills are mastered; or hybrid, blending both time and competency requirements.*

### SCHEDULE AND CHECKLIST

Essential Job Categories	Competencies
Safety	<ul style="list-style-type: none"><li>• Understands the use of appropriate PPE</li><li>• Understands how to identify, handle, store and dispose of hazardous materials</li><li>• Understands appropriate lock-out/tag-out procedures</li><li>• Understands injury reporting procedures</li><li>• Understands appropriate protection of molds</li><li>• Understands proper plastic part handling</li><li>• Maintains a clean and organized workspace</li><li>• Employer specific competency</li></ul>
Quality	<ul style="list-style-type: none"><li>• Understands shop math</li><li>• Understands how to read blueprints</li><li>• Understands how to use various measuring tools and techniques</li><li>• Understands how to identify defects</li><li>• Employer specific competency</li></ul>
Materials	<ul style="list-style-type: none"><li>• Understands the appropriate use of various materials</li><li>• Understands various plastic behavior throughout the molding process</li><li>• Understands various plastic chemical and physical properties</li><li>• Employer specific competency</li></ul>
Mold Setting	<ul style="list-style-type: none"><li>• Understands sequencing, cycles, and timer operation</li><li>• Operates control panel</li><li>• Sets injection limit timer and pressure</li><li>• Sets injection pressure, holding pressure, and back pressure effectively</li><li>• Adjusts and assesses temperature settings of barrel zones, melt temperatures, core and cavity mold temperatures</li><li>• Sets screw rpms</li><li>• Sets mold closed and mold open times</li><li>• Sets effective clamp force</li><li>• Employer specific competency</li></ul>

## OJT CORE COMPETENCIES

# Plastic Process Technician

### SCHEDULE AND CHECKLIST

Essential Job Categories	Competencies
Molding Process Technology	<ul style="list-style-type: none"><li>• Understands the impact of machine controls on heat, pressure, flow, and cooling</li><li>• Optimizes the use of machine controls to impact cycle time and maximize productivity</li><li>• Employer specific competency</li></ul>
Molding Machine Maintenance	<ul style="list-style-type: none"><li>• Establishes a maintenance schedule</li><li>• Understands and performs mechanical system machine maintenance</li><li>• Understands and performs hydraulic system machine maintenance</li><li>• Understands and performs electrical system machine maintenance</li><li>• Understands and performs preventative maintenance and safety-system checks</li><li>• Employer specific competency</li></ul>
Troubleshooting	<ul style="list-style-type: none"><li>• Solves and understands root cause of common molding defects</li><li>• Understands problem solving techniques</li><li>• Employer specific competency</li></ul>
Process Improvement Techniques	<ul style="list-style-type: none"><li>• Understands Statistical Process Control concepts</li><li>• Maintains SPC procedures and documentation</li><li>• Employer specific competency</li></ul>



Igniting Illinois manufacturing excellence and global competitiveness.



IMEC.org



info@IMEC.org



888-806-4632

© IMEC. All rights reserved.

