



Rochdale Institute

Registration No: 21432

Certificate III in Polymer Processing PMB 30107

Twenty-one (21) Competencies* must be achieved consisting of:

- All four (4) Group1 – mandatory units
- Select a minimum of four (4) units of the technical unit list
- Select the balance of units required from Groups 3A and 3B, at least one unit must be from Group 3A

Group 1 – mandatory units

- ❖ Apply quality standards
- ❖ Work Safely
- ❖ Achieve work outcomes
- ❖ Process and record information

Group 2 – technical units

- ❖ Interpret technical drawing
- ❖ Set up and prepare for production
- ❖ Set up equipment for continuous operation
- ❖ Set a die
- ❖ Change extrusion die and setup
- ❖ Produce products
- ❖ Take a machine out of production
- ❖ Produce electroplated products

- ❖ Produce injection moulded products
- ❖ Produce blow moulded products
- ❖ Produce continuous thermoforming products
- ❖ Produce extruded products
- ❖ Produce compression moulded products
- ❖ Produce polyurethane foam
- ❖ Produce blown film
- ❖ Produce foam injected mouldings
- ❖ Produce rotational moulded products
- ❖ Produce powder coated products
- ❖ Produce sheet feed vacuum forming products
- ❖ Produce polystyrene shape moulded products
- ❖ Make moulds for formed products
- ❖ Produce printed and decorated film
- ❖ Produce thermally bent products
- ❖ Convert plastic film
- ❖ Shut down plant area
- ❖ Produce composites using hand lamination
- ❖ Construct jigs and fixtures
- ❖ Develop patterns
- ❖ Use material and process knowledge to solve problems

Group 3A – other elective units

- ❖ Administer inventory procedures
- ❖ Perform engineering measurements
- ❖ Facilitate the implementation of OHS for a work group
- ❖ Issue work permits
- ❖ Issue work permits (hot work/confined space)
- ❖ Identify and implement opportunities to maximise production efficiencies
- ❖ Apply HACCP to the workplace
- ❖ Identify equipment faults
- ❖ Maintain and organise workplace records
- ❖ Contribute to the development of plant documentation

- ❖ Develop and adjust a production schedule
- ❖ Provide coaching/mentoring in the workplace
- ❖ Facilitate a team
- ❖ Use structured problem solving tools
- ❖ Coordinate waste disposal
- ❖ Perform basic tests
- ❖ Provide training through instruction and demonstration of work skills

Group 3B

- ❖ Coordinate work of team/section
- ❖ Apply Just in Time (JIT) procedures
- ❖ Apply cost factors to work practices
- ❖ Apply 5S procedures in a manufacturing environment
- ❖ Participate in environmentally sustainable work practices
- ❖ Work safely with industrial chemicals
- ❖ Organise and communicate information
- ❖ Work with others in a manufacturing, engineering or related environment
- ❖ Interact with computer technology
- ❖ Use hand tools
- ❖ Use power tools/hand held operations
- ❖ Follow OHS procedures
- ❖ Follow emergency response procedures
- ❖ Control minor incidents
- ❖ Undertake first response to non-fire incidents
- ❖ Undertake first response to fire incidents
- ❖ Operate breathing apparatus
- ❖ Gas test atmospheres
- ❖ Provide initial first aid response
- ❖ Use equipment
- ❖ Make measurements
- ❖ Perform tasks to support production
- ❖ Operate equipment
- ❖ Use enterprise computers or data systems

- ❖ Work in accordance with an issued permit
- ❖ Monitor and control work permits
- ❖ Enter confined space
- ❖ Apply workplace procedures
- ❖ Clean workplace or equipment
- ❖ Communicate in the workplace
- ❖ Work in a team
- ❖ Identify and minimise environmental hazards
- ❖ Receive or despatch goods
- ❖ Pack products or materials
- ❖ Transfer loads
- ❖ Monitor process operations
- ❖ Undertake minor maintenance
- ❖ Handle goods
- ❖ Manage conflict at work
- ❖ Participate in continuous improvement
- ❖ Sample and test materials and product
- ❖ Finish products and components
- ❖ Fit attachments to products
- ❖ Repair product imperfections
- ❖ Hand decorate products
- ❖ Shift materials safely by hand
- ❖ Store products
- ❖ Prepare moulds for composites production
- ❖ Assemble materials and equipment for production
- ❖ Prepare materials to formulae
- ❖ Operate ancillary equipment
- ❖ Operate calender
- ❖ Operate cable winding equipment
- ❖ Operate injection moulding equipment
- ❖ Operate blow moulding equipment
- ❖ Operate thermoforming equipment
- ❖ Operate extruders
- ❖ Operate blown film equipment

- ❖ Operate printing equipment
- ❖ Operate rotational moulding equipment
- ❖ Operate polystyrene shape moulding equipment
- ❖ Operate film conversion equipment
- ❖ Use materials and process knowledge to complete work operations
- ❖ Operate hand held air/power equipment for production processes
- ❖ Splice cables
- ❖ Perform creel rack operations
- ❖ Build reinforced conveyor belts
- ❖ Cut materials
- ❖ Lay up rubber lining or lag pulleys
- ❖ Bond polymers to surfaces
- ❖ Layout and cut materials
- ❖ Fabricate materials
- ❖ Hand mix materials
- ❖ Hand lay up composites
- ❖ Prepare surfaces for coating
- ❖ Apply liquid surface coatings
- ❖ Apply gel coat or other polymer surface finish
- ❖ Operate compounding equipment
- ❖ Operate an internal mill blender
- ❖ Operate an open mill blender
- ❖ Operate mixing equipment
- ❖ Operate granulating equipment
- ❖ Operate continuous vulcanising equipment
- ❖ Operate tyre curing equipment
- ❖ Operate retread curing equipment
- ❖ Check recycle wash process
- ❖ Operate portable vulcanising equipment
- ❖ Prepare tyre casings for retreading
- ❖ Operate steel cutting equipment
- ❖ Operate bead coiling equipment
- ❖ Operate injection blow moulding equipment
- ❖ Operate resin-glass depositor equipment

- ❖ Finish composite products
- ❖ Assemble mould
- ❖ Demould product
- ❖ Operate open flame moulding equipment
- ❖ Operate computer controlled equipment
- ❖ Weld plastics materials
- ❖ Operate filament winding equipment
- ❖ Operate resin infusion moulding equipment
- ❖ Operate pultrusion equipment
- ❖ Operate vacuum bagging equipment
- ❖ Operate resin transfer moulding equipment
- ❖ Operate composite sheeting equipment
- ❖ Operate centrifugal casting equipment
- ❖ Operate equipment using moulding compounds
- ❖ Operate equipment using pre-preg material
- ❖ Collect waste for recycling or safe disposal
- ❖ Operate a forklift

