

National Certificate Plastics Manufacturing

NQF 2 (49450) - 120 Credits

Overview: Learners will gain understanding of the manufacturing process, quality requirements and recognise changes in the production process which will result in reduced levels of safety, health, quality, or efficiency and respond to them.

They will also:

- Understand and use appropriate tools and equipment to make simple adjustments or changes to equipment and process,
- Finish product
- Convey (move, lift) materials or products.
- Work effectively with others, understand own role in the organisation and understand the purpose of the organisation in the economy of the country.

Unit standard 12465: Develop a learning plan and a portfolio for assessment -6 credits

Outcomes

- Explain and discuss the learning and assessment system
- Develop a learning plan
- Prepare a portfolio for assessment
- Reflect on the process of compiling a learning plan and preparing a portfolio for assessment

Unit standard 220: Keep the work area safe and productive -8 credits

Outcomes

- Discuss and explain the purpose of safety equipment
- Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations
- Use personal protective equipment
- Perform housekeeping duties in work area
- Identify and respond to unsafe or potentially unsafe conditions, incidents or acts that may occur.

Fact sheet: National Certificate Plastics Manufacturing NQF 2-49450

Unit standard 14445: Frame and implement an individual action plan to improve productivity within an organisational unit – 3 credits

Outcomes

- Demonstrate understanding how individual actions affect the productivity of an organisational unit
- Identify opportunities to optimise productivity improvement in my unit.
- Frame an individual activity plan to improve productivity

Unit standard 9909: Identify and process waste - 4 credits

Outcomes

- Demonstrate an understanding of water, effluent, waste, solids and gas handling and treatment method
- Identify and separate waste.
- Process and dispose of waste.
- Work safely with due care for self, fellow workers, equipment, materials and the environment.
- Recognise and report environmentally damaging practices.
- Discuss and explain incidents and problems related to waste disposal.

Unit standard 9009: Apply basic knowledge of statistics and probability to influence the use of data and procedures to investigate life related problems - 3 credits

Outcomes

- Apply various techniques to organise and represent data in order to model situations.
- Give opinions on the implications of the modelled data for the required purpose.

Unit standard 13217: Collect and use information - 5 credits

Outcomes

- Explain and discuss the importance of using information in the work situation

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- Collect information from a variety of sources by recognising/reading and/or using sensory cues
- Organise, summarise, and respond to information collected during the course of work activities
- Enter data into retrieval systems

Unit standard 119139: Monitor the quality of the input materials and the manufactured plastic product - 12 credits

Outcomes

- Conduct visual checks on incoming materials and components and the manufactured product.
- Measure products, components and materials and conduct operational on-line tests.
- Recognise defects and mark or remove defective materials, products or components.
- Record production and defects and report incidents.
- Receive and respond to instructions, information or communications.
- Respond to 'what', 'what if' and 'why' questions related to monitoring the quality of the input materials and the manufactured product.

Unit standard 13258: Participate in work group activities - 4 credits

Outcomes

- Describe the work team, and roles and functions of team members
- Identify and explain the benefits and difficulties of teamwork
- Describe and discuss helpful and unhelpful behaviours in the context of a work group
- Contribute to work group goals and decisions

Unit standard 12463: Understand and deal with HIV/AIDS - 3 credits

Outcomes

- Explain and discuss HIV/AIDS facts and figures
- Identify behaviours that may create a risk of HIV transmission
- Explain the rights and responsibilities of employees in the workplace with regard to HIV/AIDS

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- Identify and apply relevant policies and procedures for dealing with HIV/AIDS in the workplace

Unit standard 119146: Prepare manufactured plastics product for the next stage or for storage - 10 credits

Outcomes

- Determine packing and finishing requirements for manufactured product or components and prepare working area.
- Perform finishing procedures.
- Carry out post-production operations.
- Identify, respond to, record and report problems.
- Respond to 'what', 'what if' and 'why' questions related to preparing manufactured product for the next stage or for storage.

Unit standard 119156: Respond to changes in plastics manufacturing processes - 8 credits

Outcomes

- Recognise and report changes which affect the manufacturing process.
- Carry out housekeeping and simple maintenance processes as required by the process.
- Monitor material flow and respond to shortages.
- Monitor the manufacturing equipment and respond to changes.
- Record processing conditions, outputs, stoppages, and changes and determine output figures.
- Respond to 'what', 'what if' and 'why' questions relating to activities, changes, and incidents in the plastics manufacturing process.

Unit standard 119172: Use and care for services, tools and equipment required for plastics manufacturing - 12 credits

Outcomes

- Choose and use the right tools to cut, trim and finish product.
- Choose and use the right tools to adjust and maintain equipment.
- Choose and use the right tools and materials to clean equipment and product.

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- Lift, load and unload products, equipment, and containers.
- Adjust, clean and store tools and equipment.
- Respond to 'what', 'what if' and 'why' questions related to using and caring for services, tools and equipment required for plastics manufacturing.

Unit standard 7480: Demonstrate understanding of rational and irrational numbers and number systems – 3 credits

Outcomes

- Use and analyse computational tools and strategies and make estimates and approximations.
- Demonstrate understanding of numbers and relationships among numbers and number systems.

Unit standard 9008: Identify, describe, compare, classify, explore shape and motion in 2- and 3-dimensional shapes in different contexts – 3 credits

Outcomes

- Estimate, measure and calculate physical quantities to solve problems in practical situations.
- Explore transformations of two dimensional geometric figures.

Unit standard 9007: Work with a range of patterns and functions and solve problems – 5 credits

Outcomes

- Convert flexibly between and within various representations of functions.
- Compare, analyse and describe the behaviour of patterns and functions.
- Represent situations mathematically in order to interpret and solve problems.

Unit standard 13221: Perform routine maintenance – 8 credits

Outcomes

- Plan and prepare for routine maintenance.
- Monitor the condition of machinery and equipment.
- Perform routine maintenance.
- Apply quality checks on completed work.
- Care for and store routine maintenance tools and equipment.

Fact sheet: National Certificate Plastics Manufacturing NQF 2-49450

- Report on machine and equipment condition.

Unit standard 8962: Maintain and adapt oral communication – 5 credits

Outcomes

- Use a variety of speaking and listening strategies to maintain communication.
- Adapt speech to accommodate socio-cultural sensitivities without losing own meaning.
- Shape or decode meaning of unfamiliar vocabulary or constructions.
- Organise and present information in a focused and coherent manner.
- Identify and explain how speakers influence audiences.

Unit standard 8963: Access and use information from texts – 5 credits

Outcomes

- Identify the main ideas in different text types.
- Read and respond to texts for a variety of purposes.
- Use a range of reading and viewing strategies to make meaning of texts.
- Identify and discuss how language structures and features may influence a reader

Unit standard 8964: Write for a defined context – 5 credits

Outcomes

- Write for a specific audience and purpose.
- Use grammatical structures and writing conventions.
- Adapt language to suit context.
- Draft and edit own writing.

Unit standard 12461: Communicate at work – 5 credits

Outcomes

- Explain and discuss the importance of using communication in the work situation.
- Use workplace language to describe conditions, events, problems and actions
- Receive, evaluate, clarify and act on instructions
- Make oral reports

Fact sheet: National Certificate Plastics Manufacturing NQF 2-49450

- Participate in meetings

Unit standard 12466: Explain the individual's role within business – 4 credits

Outcomes

- Discuss the rights of an employee within the workplace
- Identify and explain the structures, culture and procedures and concepts within a organisation
- Discuss how business functions
- Reflect on the individual's role within the organisation

Unit standard 10718: Use a personal budget to manage own money – 3 credits

Outcomes

- Record and analyse current spending patterns.
- Take control of own finances and get the most for one's money.
- Recognise the need to save as part of personal financial management.
- Compile a personal budget for the next three months, to manage own money.

Unit standard 7469: Use mathematics to investigate and monitor the financial aspects of personal and community life – 2 credits

Outcomes

- Use mathematics to plan and control personal and/or household budgets and income and expenditure.
- Use simple and compound interest to make sense of and define a variety of situations.