

## National Diploma in Plastics Processing Technology (Level 5)

**Level** 5

**Credits** 135

This qualification is **expiring**. The last date to meet the requirements is 30 June 2011.

### Purpose

The National Diploma in Plastics Processing Technology (Level 5) [Ref: 1004] is a technical qualification in the plastics industry that replaces the industry's traditional technician qualification, the New Zealand Certificate in Engineering (Plastics). It is designed to supplement the skills and knowledge of processing specialists in various sectors of the industry, and provide recognition for the ability to analyse complex plastics materials and processing issues. Holders will also possess significant first line, operational and project management skills.

Diploma holders are encouraged to undertake further training. This could be towards higher-level business management qualifications. Alternatively, higher-level technical qualifications in the plastics industry could be accessed in Australia in the form of the Advanced Diploma of Polymer Technology (PMB 6 01 01). Under the terms of the Trans-Tasman Mutual Recognition of Qualifications Agreement, the Plastics and Materials Processing Industry Training Organisation have established that holders would, subject to electives chosen, meet the entry requirements for this Australian qualification. Further information regarding these electives is available from the Plastics and Materials Processing Industry Training Organisation.

Candidates who have gained passes in specified papers of the New Zealand Certificate in Engineering (NZCE) (Plastics) may claim exemptions from the requirements of this diploma.

### Replacement Information

This qualification was replaced by the National Diploma in Plastics Processing Technology (Level 5) [Ref: 1597].

### Credit Range

	Compulsory	Elective
Level 2 credits	-	0-15
Level 3 credits	-	0-15
Level 4 credits	32	0-31
Level 5 or above credits	67	5-36
Minimum totals	99	36

## Requirements for Award of Qualification

### Award of NZQF National Qualifications

Credit gained for a standard may be used only once to meet the requirements of this qualification.

Unit standards and achievement standards that are equivalent in outcome are mutually exclusive for the purpose of award. The table of mutually exclusive standards is provided on the New Zealand Qualifications Authority (NZQA) website: <http://www.nzqa.govt.nz/qualifications-standards/standards/standards-exclusion-list/>.

Reviewed standards that continue to recognise the same overall outcome are registered as new versions and retain their identification number (ID). Any version of a standard with the same ID may be used to meet qualification requirements that list the ID and/or that specify the past or current classification of the standard.

### Summary of Requirements

- A minimum of 135 credits
  - Of which a minimum of 120 credits at Level 4 or above
  - Of which a minimum of 72 credits at Level 5 or above
- Compulsory standards
- Elective – Balance

### Detailed Requirements

#### Compulsory

The following standards are required

Business > Management > Management - Systems and Resources

ID	Title	Level	Credit
7454	Plan, manage, and review projects	5	7

Engineering and Technology > Mechanical Engineering > Applied Principles of Mechanical Engineering

ID	Title	Level	Credit
11388	Select homogeneous components involving statically determinate force systems	4	10
11389	Produce an analysis of static and dynamic force systems	4	10
11395	Apply principles of electronics relevant to mechanical engineering systems	5	10
11396	Apply electrical principles in mechanical engineering systems	5	10
14141	Describe and apply mechanical technology	4	12

Manufacturing > Plastics Processing Technology > Plastics Materials

ID	Title	Level	Credit
19378	Demonstrate knowledge of property relationships to structure and polymerisation	5	12
19379	Demonstrate knowledge of rheology and calculate output from processing equipment	5	10

Manufacturing > Plastics Processing Technology > Plastics Processing - General

ID	Title	Level	Credit
19380	Perform heat transfer calculations for plastics processing	5	10
19381	Demonstrate knowledge of plastics processing and fabrication technologies	5	8

**Elective**

The balance of credits to achieve

A minimum of 135 credits

- Of which a minimum of 120 credits at Level 4 or above
- Of which a minimum of 72 credits at Level 5 or above

May come from the following

Engineering and Technology > Mechanical Engineering > Applied Principles of Mechanical Engineering

ID	Title	Level	Credit
14866	Gain experience with mechanical engineering materials processing equipment	2	15

Engineering and Technology > Mechanical Engineering > Engineering - Materials

ID	Title	Level	Credit
4800	Identify the characteristics of heat treatment processes used for engineering steels	4	6
4801	Identify the characteristics of heat treatment processes used for engineering non-ferrous metals	4	3

Field	Subfield	Domain
Business	Management	First Line Management
		Management - Developing and Coordinating People
		Management - Organisational Direction and Strategy
		Management - Systems and Resources
		Quality Management

Field	Subfield	Domain
Education	Adult Education and Training	Delivery of Adult Education and Training
	Generic Education and Training	Assessment of Learning

## Credit Transfer Arrangements

Candidates for this diploma may claim exemptions from unit standards on the basis of subject passes from the New Zealand Certificate in Engineering (NZCE) as specified in the tables below.

Credit for			Exempt from
Ref	No.	Title	Standard ID
4142	94443	Heat Transfer and Electrical Machine	11396
4174	94475	Workshop Practice	14866
5204	94730	Plastics Materials	19378
5204	94730	Plastics Materials	19379
5205	94731	Plastics Processing	
5206	94732	Plastics Production Techn	19381
5205	94731	Plastics Processing	
3118	94250	Mechanics	11388, 11389
5203	94729	Control Systems (Power and Plant/Mec	11395, 11396

### A maximum of 44 credits can be claimed as exemptions.

Exemptions will apply only for the purposes of award of the qualification and will not appear on the Record of Learning.

The exemptions must be applied for on the application form in the Appendix and should be reported as part of the normal reporting of results. The current exemption fee of \$1 per credit will apply. That fee must also be paid before the application is processed.

## Transition Arrangements

### Version 2

Version 2 was issued following review to indicate that this qualification is expiring.

This qualification was replaced by the National Diploma in Plastics Processing Technology (Level 5) [Ref: 1597].

For detailed information see [Review Summaries](#) on the NZQA website.

### Previous version of the qualification

Version 1 of this qualification replaced the New Zealand Certificate in Engineering (NZCE) (Plastics).

## NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	February 2003	June 2011
Review	2	November 2010	June 2011

### Standard Setting Body

Plastics and Materials Processing Industry Training Organisation Incorporated  
 PO Box 76 378  
 MANUKAU CITY  
 Auckland

Telephone 09 263 6098  
 Email [info@pampito.org.nz](mailto:info@pampito.org.nz)  
 Website [www.pampito.org.nz](http://www.pampito.org.nz)

### Other standard setting bodies whose standards are included in the qualification

Competenz  
 NZQA

### Certification

This certificate will display the logos of NZQA, the Plastics and Materials Processing Industry Training Organisation Incorporated and the organisation that has been granted consent to assess against standards that meet the requirements of the qualification (accredited).

## Classification

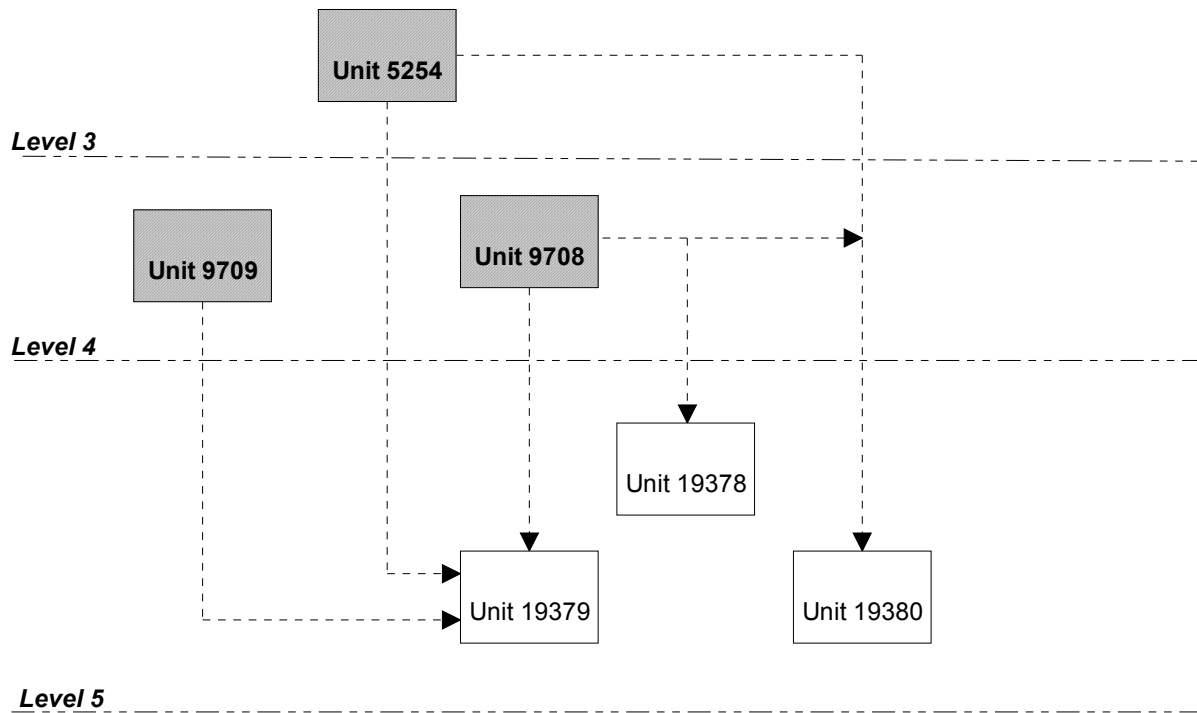
This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		NZSCED	
Code	Description	Code	Description
190	Manufacturing > Plastics Processing Technology	030108	Engineering and Related Technologies > Manufacturing, Engineering and Technology > Plastics Processing Technology

### Quality Management Systems

Providers and Industry Training Organisations must be granted consent to assess by a recognised Quality Assurance Body before they can register credits from assessment against standards. Accredited providers and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Accreditation requirements and the moderation system are outlined in the associated Accreditation and Moderation Action Plan (AMAP) for each standard.

# Prerequisite Diagram



**Key:**

- Unit standards not included in this qualification
- - ► Recommended prerequisites