

FIELD SCIENCE

Review of *Science* qualifications

National Certificate in Science [Ref: 0233]

National Diploma in Science (Level 5) [Ref: 0234]

National Diploma in Science (Level 6) with optional strands in Biology, Chemistry, Food Science, Microbiology, and Molecular Biology/Biochemistry [Ref: 0235]

NZQA National Qualifications Services has completed the review of the qualifications listed above.

New qualifications

National Certificate in Science (Level 4) [Ref: 1669]

National Certificate in Science (Level 5) [Ref: 1670]

Date new versions published

June 2011

The next qualification review is planned to take place during 2015.

Summary of review and consultation process

These qualifications have been reviewed to take account of changes to domains and standards made during the review of the subfield *Science* standards at Levels 4, 5, and 6 in 2009 and 2010. These changes included expiry of standards and domains, and changes to titles, levels and credits of some of the remaining standards.

Consultation discussions and meetings for the qualifications took place during 2010 and involved representatives and their networks from the polytechnics, industry, and moderation. The review of the existing qualifications considered their fitness for purpose, their relationships, and pathways for candidates between the National Certificates in Science and the National Diplomas in Science.

The representatives identified gaps in the Science pathway for candidates wanting to progress in the science industries and sector. Industry and the science sector felt that stronger links between the qualifications were required to meet the needs of candidates both in tertiary education and in the workplace.

Given the wide range of skills and competencies for technical aspects of science that can contribute to the achievement of overall science outcomes, the review found that the Diploma qualifications needed to have a compulsory section that assessed core competencies, as well as elective structures and content that allow recognition of competence in skills and techniques in a variety of specific science contexts.

Final qualification drafts were placed on the NZQA website and all stakeholders, including industry sector organisations, training providers, and other SSBs, were notified of the opportunity to provide feedback.

This further feedback was considered by the SSB and the review panel, and the qualifications were updated accordingly. The final qualifications were then endorsed.

Main changes resulting from the review

- The National Certificate in Science [Ref: 0233] has been designated expiring as it does not meet the needs of the sector.
- The National Certificate in Science (Level 4) [Ref: 1669] and the National Certificate in Science (Level 5) [Ref: 1670] have been developed to provide pathways for people who wish to gain foundation skills and competencies and technical skills.
- The National Diploma in Science (Level 5) [Ref: 0234] and the National Diploma in Science (Level 6) with optional strands in Biology, Chemistry, Food Science, Microbiology, and Molecular Biology/Biochemistry [Ref: 0235] were updated, including changes to the structure and content of the qualifications.

National Certificate in Science [Ref: 0233]

Review category	D	See Key to Qualification Review Categories at the end of report
-----------------	----------	---

The qualification has been designated expiring, as it does not meet the current needs of the sector. The last date for assessments to take place is 31 December 2012.

National Diploma in Science (Level 5) [Ref: 0234]

National Diploma in Science (Technician) (Level 5) with optional strands in Laboratory Practice and Technology, Chemistry, Microbiology, and Applied [Ref: 0234]

Review category	B	See Key to Qualification Review Categories at the end of report
-----------------	----------	---

Changes to structure and content

- Overall credit value was reduced from 240 to 120.
- Credit value of the Core Compulsory section was increased from 4 to 24, and standards 8040, 8466, 9685, and 26341 were added to it.
- Standards 8029 and 8467 were moved from the old Core Elective to the Core Compulsory.
- The compulsory standard 8441 was removed from the qualification.
- The Science Elective was replaced with a new Core Elective which allows credits from the *Science* subfield.
- Optional strands were added in Laboratory Practice and Technology, Chemistry, Microbiology and Applied.
- The Mathematics, Communication, and Information Technology electives were removed from the qualification.

Transition

Candidates may either complete the requirements for version 6 or transfer to version 7.

The last date for assessment of version 6 is 31 December 2016.

Last date for entry leading to version 6 of the qualification is December 2014.

All new candidates in 2015 will be enrolled in programmes leading to version 7 of the qualification.

Programmes leading to the award of version 7 of the qualification can begin upon registration of this version.

This qualification contains standards that replace earlier standards. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

Credit for	Exempt from
8435	26341
8045, 8047	26486

National Diploma in Science (Level 6) with optional strands in Biology, Chemistry, Food Science, Microbiology, and Molecular Biology/Biochemistry [Ref: 0235]

National Diploma in Science (Advanced Technician) (Level 6) with optional strands in Laboratory Practice and Technology, Chemistry, Microbiology, and Applied [Ref: 0235]

Review category	B	See Key to Qualification Review Categories at the end of report
-----------------	----------	---

Changes to structure and content

- Overall credit value was reduced from 240 to 120.
- Credit value of the Core Compulsory section was increased from 4 to 28, and standards 8040, 8466, 9685, and 26341 were added to it.
- Standards 8029 and 8467 were moved from the Core Elective to the Core Compulsory.
- Optional strands in Biology, Food Science, and Molecular Biology/Biochemistry were removed from the qualification.
- The credit requirements for the Chemistry and Microbiology optional strands increased from 30 to 50 and were amended to no longer specify standards and to include additional classifications for selection of credits.
- Optional strands in Laboratory Practice and Technology, Microbiology, Chemistry and Applied were added to the qualification.
- The Mathematics, Communication, and Information Technology electives were removed from the qualification.

Transition

Candidates may either complete the requirements for version 6 or transfer to version 7.

The last date for assessment of version 6 is 31 December 2016.

Last date for entry leading to version 6 of the qualification is December 2014.

All new candidates in 2015 will be enrolled in programmes leading to version 7 of the qualification.

Programmes leading to the award of version 7 of the qualification can begin upon registration of this version.

Credit for	Exempt from
8039	26112
8061, 8062	26493
8068, 8069	26494
8104	26114, 26115
8435	26341

It is not intended that anyone is disadvantaged by this review and the above arrangements have been designed for a smooth transition. Anyone who feels they have been disadvantaged may appeal to:

NZQA National Qualifications Services
PO Box 160
Wellington 6140

Telephone 04 463 3000

Email nqs@nzqa.govt.nz

Key to Qualification Review Categories

Category A The qualification is published as a new version with the same NZQF ID	Changes are made to SSB name, contact details or purpose statement
	No change is made to title, rules or components of the qualification
	No transition arrangements are required
Category B The qualification is published as a new version with the same NZQF ID	Changes are made to title, rules or components
	The new version of the qualification recognises a similar skill set to that recognised by the previous version
	The SSB is confident that people awarded the new or previous version are comparable in terms of competence
	Transition arrangements are required if candidates must gain additional/different credits for the new version
Category C A new (replacement) qualification is published with new NZQF ID	Significant changes are made to the qualification in terms of components, structure, type or level
	The SSB views people with the replacement qualification as being significantly different in terms of competence from those with the replaced qualification
	Transition arrangements are required
	Transition may be limited to phase-out dates
Category D Qualification will expire. There is no replacement qualification	Qualification is no longer required by industry
	The qualification is designated as expiring and a last date for meeting the qualification requirements is set