March 2011

## Field Planning and Construction

#### Review of *Planning and Construction* unit standards

Subfield	Domain	ID
Architecture	Architectural Technology	10161-10167, 11286
Quantity Surveying	Quantity Surveying Theory	10039-10045
Construction	Construction Health and	14599
	Safety, and Injury	
	Prevention	
	Construction Management	9632, 9633, 9635-9637, 9639,
		9640, 10925
	Construction Technology	9658-9661, 9663-9672

The Building and Construction Industry Training Organisation has completed the review of the unit standards listed above.

Date new versions published

Planned review date December 2015

## **Summary**

These unit standards were reviewed as part of the scheduled review cycle for the Construction Management and Construction Technology domains, and to transfer standard-setting responsibility for the Architecture and Quantity Surveying subfields and associated unit standards and qualifications from InfraTrain NZ to the Building and Construction Industry Training Organisation.

Consultation took place from 2007, and consisted of Industry Working Party meetings comprised of representatives from InfraTrain, industry businesses, industry associations and providers associated with the Construction Management, Quantity Surveying and Architectural Technology industries and endorsed by the National Advisory Group for Design and Construction.

As considerable time had elapsed since the last review, the unit standards were updated to meet industry needs, which required substantial changes to content and credit values for some unit standards. Additionally, twelve unit standards were replaced, five unit standards were designated expiring without replacement and four new unit standards were developed.

# Main changes

- Unit standards 10164-10167 and 11286 were reclassified from the following classification Architecture > Architectural Technology to Construction > Architectural Technology.
- Unit standards 10039 and 10042-10044 were reclassified from the following classification Quantity Surveying > Quantity Surveying Theory to Construction > Quantity Surveying.
- Unit standard 14599 was reclassified from the domain Construction Health and Safety, and Injury Prevention to Construction Management.

- Unit standards 9663, 9664, and 9667-9670 were reclassified from the domain Construction Technology to Core Planning and Construction.
- Twelve unit standards were replaced. Replacement relationships are as follows:

9632-27153

9658-27155

9659-27146

9671-27157

9672-27158

10040-27150

10041-27151

10045-27152

10161-27147

10162-27148

10163-27149

10925-27154

- Unit standards 9660, 9661, 9665, 9666 and 10042 will expire without replacement.
- New unit standards 27159, 27160, 27161 and 27162 were developed.
- The credit values for unit standards 9636, 9664, 9667, 10039, 10043, 10164-10166, and 11286 were adjusted to more accurately reflect learning and assessment time.

### Category C and D unit standards will expire at the end of December 2014.

## Impact on existing accreditations

Current Accreditation for			Accreditation extended to			
Nature of accreditation		Level	Nature of accreditation	Classification or ID	Level	
Subfield	Architecture	6	Subfield	Construction	6	
		7			7	
		8			8	
Subfield	Quantity Surveying	5	Subfield	Construction	5	
		6			6	
Domain	Quantity Surveying	5	Domain	Quantity Surveying	5	
	Theory	6			6	
Domain	Construction Health and Safety, and Injury Prevention	4	Standard	14599	4	
Domain	Construction	5	Domain	Core Planning and	5	
	Technology	6		Construction	6	
		7			7	
Domain	Construction	4	Standard	27155	5	
	Technology				6	
		5		27155, 27156		
Standard	10040	6	Standard	27150	6	
Standard	10161	5	Standard	27147	5	
Standard	10162	5	Standard	27148	5	
Standard	10163	6	Standard	27149	6	
Standard	10925	5	Standard	27154	5	

### Impact on Accreditation and Moderation Action Plan (AMAP)

Unit standards 9658-9661, 10039-10045, 10161-10167, and 11286 have been transferred from AMAP 101 to AMAP 0048.

## Impact on registered qualifications

Key to type of impact	
Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set
	The qualification lists a standard that has changes to level or credits
	The qualification lists a C or D category standard
Not materially affected	The qualification lists a standard that has a new title
	The qualification lists a standard that has a new classification

The following Building and Construction Industry Training Organisation qualifications are impacted by the outcome of this review and will be updated when they are reviewed in 2011. The classifications and/or standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
0356	National Diploma in Construction Management (Level 6)	<b>9632,</b> 9633, 9635,
		<b>9636</b> , 9637, 9639,
		9640, <b>9658, 9659</b> ,
		<b>9661,</b> 9663, <b>9664</b> ,
		9667, 9668-9670,
		9671, 9672, 10925,
		14599, <b>10039,</b>
		10042
1131	National Certificate in Construction (Supervisor) (Level 5)	10925

The following Infratrain qualifications are also impacted by the outcome of this review. The Building and Construction Industry Training Organisation has assumed responsibility for the development of these qualifications, and they are currently under review. The classifications and/or standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
0357	National Diploma in Architectural Technology (Level 6)	<b>9659, 9661,</b> 9663,
		<b>9664</b> , 9667, 9668-
		9670, <b>9671, 9672,</b>
		10161-10166,
		10167, <b>11286</b>
0358	National Diploma in Quantity Surveying (Level 6)	<b>9632,</b> 9633, 9635,
		<b>9636</b> , 9637, <b>9658,</b>
		9663, <b>9664, 9665</b> ,
		<b>9667</b> , 9668-9670,
		9671, 9672, 10039-
		<b>10043</b> , 10044,
		10045

The following table identifies qualifications developed by other SSBs that are impacted by the outcome of this review. The SSBs have been advised that the qualifications require revision. The classifications and/or standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID	SSB Name
1061	National Certificate in General Contracting	Architecture,	InfraTrain NZ
	(Training and Assessment)	Construction,	
		<b>Quantity Surveying</b>	
1264	National Certificate in Roofing (Contract	9639, <b>9664, 9665</b> ,	Plumbing,
	Supervisor)	<b>10039</b> , 14599	Gasfitting and
			Drainlaying
			ITO Ltd

# Detailed list of unit standards - classification, title, level, and credits

All changes are in **bold**.

Ke	ey to review category
Α	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new
	version number
В	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID
	and a new version number
С	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Planning and Construction

ID	Domain	Title	Level	Credit	Review
9632	Construction> Construction Management	Demonstrate the process of bidding for a construction project	6	15	Category C
27153	Construction> Construction Management	Demonstrate the process of contract selection and tendering for a medium building	6	15	
9633	Construction> Construction Management	Develop construction methodology for medium buildings Develop construction methodology for a medium building	6	15	В
9635	Construction> Construction Management	Produce a site specific quality assurance plan for implementation on a construction project	5	5	В
9636	Construction> Construction Management	Develop construction planning for medium buildings  Develop construction planning for a medium building	6	5 <b>15</b>	В

ID	Domain	Title	Level	Credit	Review Category
9637	Construction> Construction Management	Programme construction works for medium buildings Programme construction works for a medium building	6	15	В
9639	Construction> Construction Management	Demonstrate knowledge of construction site procedures  Demonstrate knowledge of construction site procedures for a medium building	6	5	В
9640	Construction> Construction Management	Demonstrate knowledge of principles and processes of construction site management Demonstrate knowledge of principles and processes of construction site management for medium buildings	6	10	В
9658	Construction> Construction Technology	Demonstrate knowledge of cost estimation processes for a building project	4	10	С
27155	Quantity Surveying	Estimate costs for a small building project	5	15	
9659	Construction> Construction Technology	Demonstrate knowledge of tendering processes for a building project	5	5	С
27156	Architectural Technology	Demonstrate the process of tendering and administering a construction project	6	15	
9660	Construction> Construction Technology	Assess expenditure for a building project	5	7	D
9661	Construction> Construction Technology	Demonstrate knowledge of how to administer contracts and value building works	5	10	D
9663	Construction> Construction Technology Construction> Core Planning and Construction	Demonstrate knowledge of a feasibility study of a site  Demonstrate knowledge of a research/feasibility study of a site	5	5	В
9664	Construction> Construction> Technology Construction> Core Planning and Construction	Demonstrate knowledge of building law	5	10 <b>5</b>	В

ID	Domain	Title	Level	Credit	Review Category
9665	Construction> Construction Technology	Monitor a building project	5	5	D
9666	Construction> Construction Technology	Contribute to the design process	4	5	D
9667	Construction> Construction Technology	Apply principles from published data to the provision of services for small buildings	5	10	В
	Construction> Core Planning and Construction	Demonstrate knowledge of principles related to provision of services for small buildings		5	
9668	Construction> Construction Technology Construction> Core Planning and Construction	Apply principles from published data to the provision of services for medium buildings  Demonstrate knowledge of principles related to provision of services for medium and large buildings	5	10	В
9669	Construction> Construction Technology Construction> Core Planning and Construction	Apply principles from published data to evaluate and select materials and finishes for buildings  Evaluate and select materials and finishes for buildings	4	10	В
9670	Construction> Construction Technology Construction> Core Planning and Construction	Identify environmental impacts, design, and construction techniques, on and of the built environment	5	10	В
9671	Construction> Construction Technology	Determine and describe construction methods for small buildings	5	15	С
27157	Construction> Core Planning and Construction	Determine and describe construction of small buildings	5	20	
9672	Construction> Construction Technology	Determine and describe construction methods for medium and large buildings	6	25	С
27158	Construction> Core Planning and Construction	Determine and describe construction of medium and large buildings	6	20	

ID	Domain	Title	Level	Credit	Review Category
10039	Quantity Surveying > Quantity Surveying Theory Construction > Quantity Surveying	Measure schedules of quantities for selected trade sections for quantity surveying  Measure schedules of quantities for specific trade sections for small buildings	5	15 <b>20</b>	В
10040	Quantity Surveying > Quantity Surveying Theory	Measure schedules of quantities for advanced trade sections for quantity surveying	6	25	С
27150	Construction > Quantity Surveying	Measure schedules of quantities for specialist trade sections for quantity surveying	6	25	
10041	Quantity Surveying > Quantity Surveying Theory	Estimate costs for quantity surveying	5	15	С
27151	Construction > Quantity Surveying	Estimate costs for medium or large building projects	5	10	
10042	Quantity Surveying > Quantity Surveying Theory	Negotiate and apply specified types of contracts to tendering situations for quantity surveying	5	10	D
10043	Quantity Surveying > Quantity Surveying Theory Construction > Quantity Surveying	Complete preliminary estimates and cost plans for a construction project for quantity surveying Complete preliminary estimates and cost plans for medium and large building projects	6	10 <b>15</b>	В
10044	Quantity Surveying > Quantity Surveying Theory Construction > Quantity Surveying	Administer contracts and value building works for quantity surveying Administer contracts and value building works	6	15	В

ID	Domain	Title	Level	Credit	Review Category
10045	Quantity Surveying > Quantity Surveying Theory	Evaluate and prepare a construction programme for quantity surveying	5	5	С
27152	Construction > Quantity Surveying	Prepare and interpret construction programmes for quantity surveying	4	5	
10161	Architecture > Architectural Technology	Establish the conditions for writing a design brief for a building project	5	5	C
27147	Construction >Architectural Technology	Establish the requirements for a design brief, and write a design brief for a building project	5	10	
10162	Architecture > Architectural Technology	Contribute to preparation of, and present, a preliminary architectural design from a given concept	5	10	С
27148	Construction> Architectural Technology	Develop a concept and preliminary architectural design from a given brief	5	15	
10163	Architecture > Architectural Technology	Prepare a developed building design from a given preliminary design	6	10	С
27149	Construction> Architectural Technology	Prepare a developed building design from a preliminary design	6	10	
10164	Architecture > Architectural Technology	Prepare architectural working drawings for small buildings	5	45	В
	Construction> Architectural Technology			30	
10165	Architecture > Architectural Technology	Prepare architectural working drawings for medium buildings	6	40	В
	Construction> Architectural Technology			35	
10166	Architecture > Architectural Technology	Prepare architectural working drawings for large buildings	6	30	В
	Construction> Architectural Technology			35	

ID	Domain	Title	Level	Credit	Review Category
10167	Architecture > Architectural Technology Construction> Architectural Technology	Evaluate the principles of architectural design	6	15	В
10925	Construction > Construction Management	Demonstrate knowledge of survey requirements for the setout of medium buildings	5	5	D
11286	Architecture > Architectural Technology Construction> Architectural Technology	Demonstrate knowledge of the principles of ethics as they apply to the architectural process	6	10 <b>5</b>	В
14599	Construction > Construction Health and Safety, and Injury Prevention Construction> Construction Management	Produce a site specific safety plan and strategy for implementation on construction sites  Produce a site specific safety plan and strategy for its implementation for a medium building	4	5	В
27159	Construction > Architectural Technology	Demonstrate knowledge of and create technical drawings for design and construction	3	15	New
27160	Construction > Core Planning and Construction	Demonstrate knowledge of rolesand documentation, and communicate, within the construction industry	3	10	New
27161	Construction > Core Planning and Construction	Demonstrate knowledge of structural principles for building work	3	3	New
27162	Construction > Core Planning and Construction	Demonstrate knowledge of and create technical sketches for construction	3	3	New