## Field Planning and Construction

## Review of Surveying unit standards

| Subfield  | Domain                            | ID                        |  |  |  |
|-----------|-----------------------------------|---------------------------|--|--|--|
| Surveying | Geodetic Surveying                | 23859, 23860              |  |  |  |
|           | Geographic Information            | 23863                     |  |  |  |
|           | Systems and Cartography           |                           |  |  |  |
|           | Subdivisional design 29410, 29411 |                           |  |  |  |
|           | Survey - Land Administration      | 8782, 8784, 8785          |  |  |  |
|           | and Applied Resource              |                           |  |  |  |
|           | Management                        |                           |  |  |  |
|           | Survey Practice                   | 8800, 23880, 29400-29409, |  |  |  |
|           |                                   | 29412                     |  |  |  |
|           | Titles and Survey Compliance      | 23885                     |  |  |  |

Connexis has completed the review of the unit standards listed above.

Date new versions published

February 2021

Planned review date

December 2025

## **Summary**

These unit standards were reviewed as part of qualification reviews for the New Zealand Certificate in Surveying (Level 4) [Ref: 2957] and the New Zealand Diploma in Surveying (Level 6) [Ref: 2960] which occurred from June – September 2020. Consultation occurred in June, July and September 2020 with surveying stakeholders, including those holding consent to assess against these unit standards.

## Main changes

- Guidance information was updated in all standards to ensure currency with industry knowledge and practice.
- Unit standards 29402 and 29408 were updated to ensure currency with industry knowledge and practice. Specifically, the term GPS was replaced with GNSS, and two range statements were reworded for clarity.
- Unit standard 29404 was condensed to one outcome with subsequent change in title, to clarify the intent of the unit standard.
- Sixteen unit standards previously used in the diploma programme were designated expiring without replacement because of low usage and confirmation they were not required for providers' programmes.

Category D unit standards will expire at the end of December 2022

The last date for assessment of superseded versions of Category B unit standards is December 2022

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

All changes are in **bold**.

| Ke | Key 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 > Surveying > Geodetic Surveying

| ID    | Title  | Level | Credit | Review<br>Category |
|-------|--|-------|--------|--------------------|
| 23859 | Demonstrate knowledge of geodetic reference systems and describe the New Zealand geodetic datums | 6     | 5      | D                  |
| 23860 | Demonstrate knowledge of, and calculate on, map projections                                      | 6     | 5      | D                  |

Planning and Construction > Surveying > Geographic Information Systems and Cartography

| ID    | Title  | Level Credit Review |   |          |
|-------|--|---------------------|---|----------|
|       |  |                     |   | Category |
| 23863 | Demonstrate knowledge of spatial information systems | 5                   | 6 | D        |

Planning and Construction > Surveying > Subdivisional Design

| ID    | Title   | Level | Credit | Review<br>Category |
|-------|---|-------|--------|--------------------|
| 29410 | Prepare subdivision plans and a resource consent application in a surveying context | 6     | 20     | D                  |
| 29411 | Design infrastructure and services for subdivision construction works approvals     | 6     | 20     | D                  |

Planning and Construction > Surveying > Survey - Land Administration and Applied Resource Management

| ID   | Title  | Level | Credit | Review   |
|------|--|-------|--------|----------|
|      |  |       |        | Category |
| 8782 | Demonstrate knowledge of land legislation and land development in New Zealand in a surveying context | 5     | 10     | D        |
| 8784 | Demonstrate knowledge of the New Zealand surveying system  | 5     | 7      | D        |
| 8785 | Demonstrate knowledge of legislation as it relates to Māori land and survey practice                 | 4     | 3      | D        |

Planning and Construction > Surveying > Survey Practice

| ID    | Title   | Level | Credit | Review<br>Category |
|-------|---|-------|--------|--------------------|
| 8800  | Apply mathematics to surveying  | 4     | 15     | D                  |
| 23880 | Explain and use the Global Positioning System (GPS) for survey practice   | 5     | 10     | D                  |
| 29400 | Demonstrate knowledge of the purpose and application of surveying Identify and explain the purpose and application of surveying | 4     | 3      | В                  |
| 29401 | Demonstrate knowledge of and apply safe work practices when undertaking surveying operations                                    | 4     | 5      | В                  |
| 29402 | Demonstrate knowledge of measurement in surveying   | 4     | 14     | В                  |
| 29403 | Prepare for and undertake a topographical survey  | 5     | 10     | D                  |

| ID    | Title  | Level | Credit | Review<br>Category |
|-------|--|-------|--------|--------------------|
| 29404 | Demonstrate knowledge of surveying technology  Demonstrate knowledge of surveying instruments, software and firmware | 4     | 5      | В                  |
| 29405 | Prepare for and undertake a cadastral survey   | 6     | 20     | D                  |
| 29406 | Set up, check calibration and maintain surveying equipment   | 4     | 15     | В                  |
| 29407 | Prepare for and undertake an engineering survey  | 6     | 20     | D                  |
| 29408 | Undertake survey measurement tasks and checks  | 4     | 30     | В                  |
| 29409 | Demonstrate knowledge of height datums and global navigation satellite system for geodetic surveying                 | 6     | 10     | D                  |
| 29412 | Demonstrate knowledge of surveying mathematical principles   | 3     | 15     | D                  |

Planning and Construction > Surveying > Titles and Survey Compliance

| ID    | Title                                | Level | Credit | Review<br>Category |
|-------|--------------------------------------|-------|--------|--------------------|
| 23885 | Create an e-survey for a subdivision | 5     | 15     | D                  |