

**40547****Apply basic measurement and calculations to a BCATS project or related tasks**

<b>Kaupae   Level</b>	1
<b>Whiwhinga   Credit</b>	3
<b>Whāinga   Purpose</b>	<p>This skill standard is for people intending to gain an introduction to basic skills relevant to the building, construction, and allied trades sectors.</p> <p>This skill standard recognises the skills to apply basic measurement and calculations to the completion of a basic project or related tasks for building, construction, and allied trades.</p> <p>This skill standard aligns with the New Zealand Certificate in Building, Construction, and Allied Trades Skills (Level 1) [Ref: 3843].</p>

**Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria**

<b>Hua o te ako   Learning outcomes</b>	<b>Paearu aromatawai   Assessment criteria</b>
1. Apply basic measurement and calculations to a BCATS project or related tasks	a. Project measurements are identified from BCATS project documentation.
	b. Basic measurements and calculations are used that are suitable for solving the problem to meet project requirements.
	c. Results are interpreted and recorded appropriately for the project.

**Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria***Assessment specifications:*

Candidates must demonstrate competence for this skill standard while undertaking a project or related tasks. Projects or related tasks at this level should demonstrate basic processes and techniques, using a limited range of tools, focusing on following instructions and plans to achieve the project requirements.

Mathematical methods for assessment may solve geometry, measurement, and/or number problems.

Technologies such as calculators and computers may be used in the assessment of this skill standard.

*Project requirements* may refer to progression of tasks, required quality checks and standard of finishing, project timelines, health and safety, and environmental considerations.

**Ngā momo whiwhinga | Grades available**

Achieved / Merit / Excellence.

<b>Paetae   Achieved</b>	<b>Kaiaka   Merit</b>	<b>Kairangi   Excellence</b>
Apply basic measurement and calculations to a BCATS project or related tasks	Apply basic measurement and calculations effectively to a BCATS project or related tasks	Apply basic measurement and calculations skilfully to a BCATS project or related tasks.

*Kaiaka | Merit: Effectively* refers to consistent selection of measurements and calculation methods for problems related to project requirements.

*Kairangi | Excellence: Skilfully* refers to fluency of applying mathematical concepts with precision for problems related to project requirements.

**Ihirangi waitohu | Indicative content**

## Mathematical concepts

- Different types of measuring equipment.
- Project drawings and measurements.
- Units of measurement.
- Working to appropriate tolerances.
- Basic cost estimates and project costings.
- Cutting lists and ordering processes.
- Good practices when measuring and calculating (for example, checking your measurements, sharpening measuring and marking equipment before use).

## Mathematical methods

- Solve centres and spacings, running measurement, cutting requirements.
- Conversion between measurements (for example, mm to m).
- Finding fractions, decimals, or percentages of amounts.
- Rounding.

**Rauemi | Resources**

BCATS Programme Guidance, available from [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz).

**Pārongo Whakaū Kouna | Quality assurance information**

<b>Ngā rōpū whakatau-paerewa  </b> Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
<b>Whakaritenga Rārangi Paetae Aromatawai  </b> DASS classification	Planning and Construction > Construction Trades > Building, Construction, and Allied Trades Skills
<b>Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga  </b> CMR	0120

<b>Hātepe   Process</b>	<b>Putanga   Version</b>	<b>Rā whakaputa   Review Date</b>	<b>Rā whakamutunga mō te aromatawai   Last date for assessment</b>
<b>Rēhitatanga   Registration</b>	1	29 May 2025	N/A
<b>Kōrero whakakapinga   Replacement information</b>	N/A		
<b>Rā arotake   Planned review date</b>	31 December 2030		

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz) to suggest changes to the content of this skill standard.