

Draft 0.2

This is a draft update to CPPSIS : <https://training.gov.au/Training/Details/CPSSIS4025>.
Expanded acronym 'GNSS' in title to read: 'global navigation satellite system'.

Code changed to CPPSSI4025 Collect spatial data using GNSS.

Changed PCs to active voice.
PC1.3 deleted as replicated in PC1.4.

Minor changes to PCs to improve, clarify or provide context.
PC1.3 removed as it replicated PC1.4

Changed 'person' to 'candidate' in PE.
Range of Conditions added to Knowledge Evidence.

Unit of Competency

CPPSSSI4025 Collect spatial data using global navigation satellite system (GNSS)

Modification history

Release	Comments
1	Replaces superseded equivalent CPPSIS4025A Collect basic GNSS data. This version first released with CPP Property Services Training Package Version 3.
	Replaces superseded equivalent CPPSIS4025 Collect spatial data using GNSS

Application

This unit specifies the skills and knowledge required to collect spatial data using global navigation satellite system (GNSS) equipment for surveying purposes. It involves setting up and operating GNSS equipment to achieve the required accuracy and validating data to identify errors.

This unit is suitable for entry level technicians who will use a broad range of cognitive, technical and communication skills to select and apply a range of methods, tools, materials and information to complete routine and non-routine activities and provide and transmit solutions to a variety of predictable and sometimes unpredictable problems. Surveying and spatial information skills are applied in a range of industry contexts including town planning, civil construction, mining, engineering, health, agriculture and defence.

All work must be carried out to comply with workplace procedures, in accordance with relevant State/Territory regulations that govern surveying work as well as work health and safety, regulations and legislation that apply to the workplace.

Cadastral surveying must be undertaken under the supervision of a registered surveyor. Users must check with the relevant regulatory state/territory authority before delivery.

No licensing, legislative, regulatory, or certification requirements apply to this unit of competency at the time of publication.

Prerequisite Unit

None

Unit Sector

Surveying and Spatial Information Services

Elements and Performance Criteria

1. Prepare for spatial data collection.	1.1 Review task requirements and plan for spatial data collection in consultation with appropriate persons. 1.2 Select and check GNSS equipment according to task requirements. 1.3 Determine conditions for obtaining optimum GNSS positions and apply basic methods to improve accuracy of GNSS point positioning. 1.4 Comply with enterprise and legislative requirements for identifying hazards and working safely.
2. Use GNSS equipment to collect data.	2.1 Set up and operate GNSS equipment according to enterprise and task requirements. 2.2 Set required datum and map projection and other parameters in equipment.

	<p>2.3 Use GNSS software to communicate with GNSS receivers.</p> <p>2.4 Collect, validate and record point positional data and attributes according to task.</p> <p>2.5 View collected positional data spatially, and view collected attributes non-spatially.</p> <p>2.6 Recognise and address possible anomalies in collected data.</p>
3. Finalise spatial data collection	<p>3.1 Verify accuracy of a sample of collected points by recollecting points or other suitable method.</p> <p>3.2 Gather additional data where required for task requirements.</p> <p>3.3 Download collected data in suitable format for task requirements.</p> <p>3.4 Process, report and document complete data according to enterprise requirements.</p>

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to CPPSIS4025 Collect spatial data using GNSS

Links

The Companion Volume Implementation Guide for the CPP Property Services Training Package is available at <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSSI4025 Collect spatial data using global navigation satellite system (GNSS)

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Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by collecting spatial data using global navigation satellite systems (GNSS) for two different projects.

Knowledge Evidence

To be competent in this unit a candidate must demonstrate knowledge of:

- purpose and function of GNSS
- different GNSS techniques
- typical accuracies obtainable with GNSS
- factors that affect accuracy of data collection by GNSS
- methods for checking accuracy of data collected
- surveying calculations relating to distances and coordinates
- spatial data querying techniques using Structured Query Language command
- purpose of and methods for setting designated datum and map projection
- spatial data:
 - features and their attributes
 - 2D and 3D position.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed.

Candidates must have access to:

- GNSS equipment and associated software
- task specifications and plans
- enterprise procedures relating to work health and safety.

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