



Australian Government

CPPSSI5047 Conduct GNSS surveys

Release: 1

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Modification History

Release 1 This version first released with CPP Property Services Training Package Release 12.0.

This unit supersedes and is equivalent to CPPSIS5047 Conduct GNSS surveys.

Application

This unit specifies the skills and knowledge required to conduct surveys using global navigation satellite system (GNSS) equipment and software suitable for communicating with GNSS receivers for data collection and engineering set-outs. It includes managing data collection and validation activities.

This unit is suitable for skilled surveying technicians and skilled spatial information system (SIS) technicians who use a broad range of cognitive, technical and communication skills to select and apply methods and technologies to analyse information and provide solutions to sometimes complex surveying/spatial information 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 (WHS) legislation and regulations 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 or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Surveying and Spatial Information Services

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

- 1 Prepare for GNSS survey.
 - 1.1 Identify and analyse GNSS survey specifications, plans and technical descriptions of surveying data and their requirements.
 - 1.2 Schedule key activities and timelines according to available resources and organisational requirements.
 - 1.3 Prepare equipment according to survey and organisational requirements.
 - 1.4 Plan survey methodology to meet survey specifications, environmental and organisational requirements.
 - 1.5 Conduct site reconnaissance and validate existing control data for GNSS observation according to organisational requirements.
 - 1.6 Validate positional accuracy of GNSS equipment.
 - 1.7 Collate, validate and manipulate set-out data and upload into GNSS receiver.
- 2 Carry out GNSS surveying tasks.
 - 2.1 Apply work health and safety requirements for tasks.
 - 2.2 Operate GNSS equipment according to manufacturer specifications.
 - 2.3 Relate GNSS instruments to a reference system based on survey specifications.
 - 2.4 Collect GNSS data using planned methodology according to survey specifications and organisational requirements.
 - 2.5 Record GNSS measurements on the reference system according to specifications.
- 3 Finalise GNSS survey.
 - 3.1 Process data according to survey specifications.
 - 3.2 Test accuracy of data and identify errors and discrepancies using industry-accepted validation methods.
 - 3.3 Identify and address discrepancies between specifications and actual data according to survey

specifications and organisational requirements.

- 3.4 Finalise survey and complete documentation according to organisational requirements.

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 CPPSIS5047 Conduct GNSS surveys.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>