



Australian Government

CPPSSI5062 Conduct photogrammetric mapping

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 CPPSIS5062 Conduct photogrammetric mapping.

Application

This unit specifies the skills and knowledge required to interpret information from various types of image data to conduct photogrammetric mapping. It includes assessing the project specifications and survey area to determine the types and potential sources of image data required. The unit also includes visually analysing image data against spatial reference systems and ground controls for photogrammetric mapping.

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 Performance criteria describe what needs to be done to

essential outcomes.	demonstrate achievement of the element.
1 Plan photogrammetric mapping project.	1.1 Develop a project plan to monitor and report on project activities. 1.2 Review project specifications and survey area and analyse and apply photogrammetric data to project plan. 1.3 Identify potential sources of image data suitable for project mapping purposes. 1.4 Identify properties and constraints of different types of image data relevant to project specifications.
2 Obtain image data.	2.1 Apply ground controls for photogrammetric mapping as required. 2.2 Source or capture image data according to project requirements. 2.3 Identify and resolve problems with image acquisition process.
3 Process and analyse image data.	3.1 Access image data and use spatial reference systems to clarify properties according to project specifications. 3.2 Check ground controls targeted for photogrammetric mapping to assist interpretation of image data as required. 3.3 Calculate information and measurements from photogrammetric images. 3.4 Determine and calculate scale of digital image data. 3.5 Manipulate and set out image data to meet project specifications.
4 Finalise project.	4.1 Report on project completion to appropriate persons. 4.2 Store captured data according to organisational requirements. 4.3 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 CPPSIS5062 Conduct photogrammetric mapping.

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>

Assessment Requirements for CPPSSI5062 Conduct photogrammetric mapping

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Performance Evidence

To demonstrate competency a candidate must meet the elements and performance criteria of this unit by conducting photogrammetric mapping for two different projects.

For each mapping the candidate must:

- include data images from at least two of the following sources:
 - aerial survey
 - unmanned aerial vehicle (UAV)
 - remote sensing data
 - light detection and ranging (LiDAR)
 - stereo imagery
 - videogrammetry
 - other forms of digital data in the horizontal or vertical plane
- produce at least two of the following for the photogrammetric project:
 - contours line or topographic maps
 - volumetric calculation
 - orthophoto mosaics
 - stereo models
 - digital elevation model.

Knowledge Evidence

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

- sources of image data
- graphical and technical information from maps and photographs
- properties and characteristics of photogrammetric data used in mapping
- key features of spatial reference systems relating to photogrammetric mapping
- format requirements for image data
- requirements for ground control in photogrammetric mapping

- legislative and administrative requirements for accessing, using, storing and backup of photogrammetric data, including data privacy, copyright and licensing
- relevant industry standards relating to photogrammetric mapping
- work health and safety (WHS) requirements for using screen-based equipment.

Assessment Conditions

Assessors must satisfy 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:

- computer and software applications for conducting photogrammetric mapping
- organisational policies and procedures relating to data privacy, copyright and licensing.

Links

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